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CONSUMER BEHAVIORS OF MEAT WITH TRACEABILITY IN THAILAND: THE PSYCHOLOGICAL MECHANISM

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ABSTRACT

Since the outbreak of mad cow disease and avian flu, consumers have become more concerned about safety issues of meat products. Therefore, meat traceability is now used as a strategic tool to cope with this food safety crisis. In Thailand, traceability is rarely managed as a marketing tool to persuade consumers who are meat end users. Consequently, to explore the possibility and effectiveness of this strategic approach, this study aims to investigate the psychological mechanism in perception of the meat traceability system. The results from the study reveal that product class knowledge and perceived informativeness of traceability system have negative influence on fear for seller opportunism which, in turn, has positive influence on perceived uncertainty of the purchase of meat with traceability system. Although perceived informativeness of traceability also has a direct impact on perceived uncertainty, fear for seller opportunism appears to have a mediating role in this set of relationships. A number of research implications and future study directions are offered at the end of this study report.

KEYWORDS: Meat Traceability, Product Class Knowledge, Perceived Informativeness, Fear for Seller Opportunism, Perceived Uncertainty

1. INTRODUCTION

The emergence of mad cow disease in Europe (Sans, de Fontguyon & Giraud, 2008) and H5N1 bird flu in poultry in Asia (Burgos & Burgos, 2007) engender consumer's concern about meat product safety which possibly causes perceived uncertainty that negatively influences purchase intention and actual purchase (Pavlou, Liang & Xue, 2007). Therefore, the concern for food safety has been particularly pronounced for meat products after the crisis in many parts of the world.

Responding to the circumstance, Thai government has provided the initiative for safety and standard measurement of meat production. For example, the Department of Livestock Development has launched campaigns relating to the meat product safety issue to encourage consumers to buy meat and meat-processed products that have the letter "Q" on the packages. The "Q" label certifies that the products are thoroughly safely controlled throughout the production process from cattle farms to the consumers' baskets (Piemkhoontham & Ruenrom, 2010). Moreover, in some private sections, leading Thai companies which operate a comprehensive meat business have developed the traceability systems to standardize the quality and safety of their meat production (Department of Industry Promotion, Thailand, 2009).

The traceability system is informative technology that records and displays information of every step of meat production processes (Hobbs, 2004). Although the system has been used within the main cycle of manufacturer-wholesaler-retailers in Thailand, its role as a marketing tool assuring target consumers of meat products is still scant. One reason could be attributed to the lack of profound understanding of what psychological factors are involved in meat consumption.

As a result, the present study attempts to fill this gap by examining the meat traceability system as a possible mitigator of perceived uncertainty in meat purchasing process in Thailand. It is expected that the findings from this study will be able to contribute marketing literature by empirically illustrating how the four psychological variables which are (a) product class knowledge, (b) fear for seller opportunism, (c) perceived informativeness, and (d) perceived uncertainty can be relevant to marketers and academics who are interested in using the traceability system as the marketing tool.

2. CONCEPTUAL FRAMEWORK AND HYPOTHESES

Product class knowledge

Product class knowledge refers to personal familiarity and experience with a product accumulated through purchasing and consuming . For example, meat, as all food products, is an experience product, and consumers will only be able to anticipate its quality before the purchase. That is, consumers may evaluate the quality of the products by activating knowledge structures that they have gained from previous experience based on various intrinsic (e.g., color and fat) and extrinsic cues (e.g., brands, prices and origins) (Banovic et al., 2012).

Previous product knowledge does not only enrich the consumers' understanding of the products cues but also leads to more precise and stable expectations (Halstead,

Hartman & Schmidt, 1994). Moreover, consumers with more product knowledge often have greater awareness of available products reducing uncertainty and perceived risks in their mind (Xingyuan, Li & Wei, 2010). In this sense, product knowledge could also decrease consumers' fear for seller opportunism.

The knowledge represents two dimensions that are objective knowledge and subjective knowledge (Park & Lessig, 1981). On one hand, objective knowledge can be characterized as the stored information and its organization in memory or what the consumers actually know about the products. Subjective knowledge, on the other hand, represents consumers' personal perceptions towards what and how much they know about the products (Banovic et al., 2012). Consumers with more objective product knowledge often have more subjective knowledge and stronger confidence in their purchase (Xingyuan, Li & Wei, 2010). In addition, Park & Lessig (1981) suggest that subjective knowledge may be able to better measure consumers' self-confidence than objective knowledge does. Thus, this study would like to focus only on subjective knowledge in meat consumption contexts.

Perceived Informativeness

The perceived informativeness of the traceability system can be differentiated from the actual or objective number of types of informational cues provided by the sellers. In the purchase decisions, consumers may fear that sellers deceive about the quality of products. As a result, consumers usually search for more information relating to those particular products. Consumers can use the information from websites, packaging labels, or signs on the products in order to evaluate the trustworthiness of the sellers as well as the products. When sellers can provide sufficient information in a straight forward manner, consumers can use the relevant information to finalize their purchasing decisions. This perceived informativeness from the sellers' actions could, therefore, show how professional the sellers are, and that could imply the high degree of trustworthiness. Consumers, hence, become more relieved that the sellers will not take advantages from them through deception in product quality; for instance, they are not likely to sell the product with lower quality than that advertised (Pavlou, Liang & Xue, 2007).

This perceived informativeness is particularly critical for food products because consumers often cannot accurately evaluate the product safety only with their physical eyes. In consequence, the provision of detailed product information in various aspects as well as the information regarding the manufacturers or sellers will guarantee consumers that they receive sufficient information to drive their purchase decisions (Aboulnasr, 2006).

Fears for Seller Opportunism

Fears for seller opportunism (Pavlou, Liang & Xue, 2007) often takes place in the situations that consumers do not possess the ability or opportunity to completely check sellers behaviors. Consequently, consumers might be worried that sellers may become opportunistic by purposely omitting some negative information. Deception in product quality and false advertising (Mishra et al., 1998) are examples of this fear which are able to increase perceived uncertainty in purchasing.

When consumers are not certain about the outcome of purchase decisions, they may rely on extensive information search beforehand to gain more knowledge and understanding of the actual product attributes (Fazio & Zanna, 1987 as cited in Xing, Li & Wei, 2010). During the information search process, consumers are likely to have confidence in sellers who can sufficiently provide detailed product information. The confidence in sellers will be even higher if the provided information can be used to trace back the products when problems occur after the purchase. This useful information, thus, is likely to alleviate consumers' fear for seller opportunism (Choe et al., 2009).

Perceived Uncertainty

Perceived uncertainty refers to the extent to which the outcome of a transaction cannot be accurately projected (Pavlou, Liang & Xue, 2007). It also exists when there is no knowledge of a precise probability (Knight, 1948 as cited in Mitchell, 1999). In buyer-seller relationships, perceived uncertainty often occurs when buyers have difficulties in predicting whether the particular sellers will act opportunistically because buyers cannot completely monitor the sellers behaviors (Pavlou & Fygenson, 2006). Previous research indicates that perceived uncertainty has a large impact on purchase intentions and price premium (Choe et al, 2009).

Sources of the uncertainty (Pavlou, Liang & Xue, 2007) include information asymmetry, seller opportunism, privacy concerns, and security concerns. Pavlou et al. (2007) tried to examine uncertainty mitigators based on the agency thoery. Their result revealed that one antecedent of perceived uncertainty was fear for seller opportunism which could be mitigated by perceived informativeness. Besides, Banovic et al. (2012) explained that the higher degree of product class knowledge might also contribute to reduction of consumers' uncertainty in their purchase.

Based on the literature review above, the present study would like to propose the following hypotheses:

H1: Product class knowledge negatively influences fear for seller opportunism.
H2: Product class knowledge negatively influences perceived uncertainty.
H3: Perceived informativeness of meat traceability system negatively influences fear for seller opportunism.
H4: Perceived informativeness of meat traceability system negatively influences perceived uncertainty.
H5: Fear for seller opportunism positively influences perceived uncertainty.
H6a: Fear for seller opportunism mediates the influence of product class knowledge on perceived uncertainty.
H6b: Fear for seller opportunism mediates the influence of perceived informativeness on perceived uncertainty.

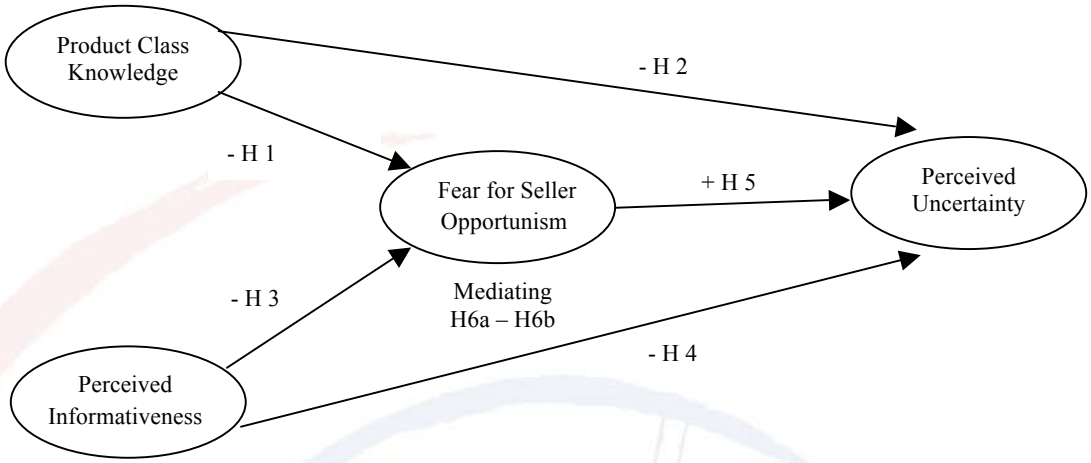


Figure 1. Conceptual model and hypotheses

3. METHOD

Sample characteristics

The surveys were distributed to 210 consumers in the north-east of Thailand via judgmental sampling. The profile of the research participants was: females (68%), between 21 to 30 years old (58%), bachelor's degree graduates (68%), government officials (38%), and with the incomes of 10,001-20,000 baht/month (61%).

The research participants were firstly informed of the study description. Subsequently, they were requested to complete the measures of product class knowledge, fear for seller opportunism, perceived informativeness of traceability system, and perceived uncertainty of meat traceability system. Finally, the participants were asked to provide their personal data.

Measures

The research participants were instructed to indicate the degree to which they agreed or disagreed with each of Likert-type scale items. First, product class knowledge was measured by three items (e.g., "In general, how knowledgeable are you about different types of meat product in the market?") adopted from Mukherjee & Hoyer (2001). Participants rated their knowledge with each statement from 1 (not at all knowledgeable) to 5 (very knowledgeable).

Next, the participants rated the degree to which they agreed or disagreed with each of the scale items of the other three constructs(1= strongly disagree, 5 = strongly agree). Perceived informativeness of traceability system was measured by three items (e.g., "I would learn a lot from using the traceability system.") adapted from Luo (2002). Fear for seller opportunism was measured by three items (e.g.,"The producers of meat products selling through the traceability system will not cheat consumers.") adapted from Pavlou, Liang & Xue (2007). Finally, perceived uncertainty of traceability system was measured by four items (e.g., "Purchasing meat products through the

traceability system will decrease the degree of uncertainty associated with the products.") adapted from Choe et al. (2009).

Procedures

Descriptive statistics including the means and standard deviations were examined first followed by correlations. Next, the latent construct structures were investigated with confirmatory factor analysis (CFA) using AMOS 21. Finally, a structural equation model (SEM) was estimated to explore the relationships among the four latent constructs. The traditional chi-square was reported as a fit measure, although it is quite sensitive to large sample size. Hence, we also report five additional fit measures: root mean square error of approximation (RMSEA), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), and Tucker-Lewis index (TLI). Ideally, the acceptable models should have an insignificant chi-square ($\chi 2$), RMSEA < 0.08, GFI, AGFI, CFI, and TLI greater than 0.90 (Hair et al., 2010).

4. RESULTS

1) Descriptive statistics and correlation analyses

Table 1 presents the means and standard deviations for the four constructs. All constructs are significantly correlated in this study.

Table 1
Descriptive Statistics and Correlations

Constructs	Mean	S.D.	1	2	3	4
1. Product Class Knowledge	3.13	.74	1			
2. Perceived Informativeness	3.80	.70	.209**	1		
3. Fear for Seller Opportunism	2.53	.76	-.243**	-.428**	1	
4. Perceived Uncertainty	3.93	.69	-.126*	-.633**	.523**	1

** significant at the .01 level
* significant at the .05 level

2) Measurement model results

Anderson & Gerbing's (1988) procedure was adopted to assess the convergent and construct validity of the measurement model. A first-order confirmatory factor analysis (CFA) was used to examine the four latent constructs . The results indicated that standardized loadings varied from .79 to .94 which were all highly significant. The composite reliabilities varied from .95 to .97 exceeding the generally accepted criteria of .70. The average variance extracted varied from .72 to .79; thus, the findings reached the criteria of .50 or greater (Hair et al., 2010; Bagozzi & Yi, 1988). A second-order CFA was used to examine the overall fit of the measurement model (see Table 2). The results showed the overall goodness-of-fit assessment for second-order CFA as follows: chi-square = 83.857, df = 59, chi-square/df = 1.421, p = .018,

RMSEA = .045, GFI = .943, AGFI = .912, CFI = .988 and TLI = .984. The chi-square/df was smaller than 3.0 and GFI, AGFI, CFI, and TLI were higher than the suggested criteria of .90 (Hair et al., 2010). The results reveal marked that there was a satisfactory between the proposed model and the data.

Table 2
Results of Confirmatory Factor Analysis (CFA)

Items	Std. Loading	t-value	C.R.	AVE
Product Class Knowledge				
1) Comparing to other people you know, how much are you knowledgeable of different types of meat products in the market?	.92	a		
2) In general, how well are you knowledgeable of different types of meat products in the market?	.93	19.99		
3) Comparing to your friends, how many experiences do you have with different types of meat products?	.81	15.79	.95	.79
Perceived Informativeness				
1) The traceability system will be able to give me quick and easy access to large scales of the in-depth information.	.82	a		
2) I am likely to learn a lot from the traceability system.	.84	13.75		
3) The traceability system could give me extensive information.	.89	14.75	.97	.72
Fear for Seller Opportunism (items reverse-coded)				
1) The producers of meat products who use traceability system will not be able to cheat consumers.	.79	a		
2) The sellers of meat products who sell through the traceability system will not be able counterfeit the circulation period of the goods.	.94	18.00		
3) The traceability system will decrease the possibility of illegal production.	.87	14.28	.97	.75
*Perceived Uncertainty (*items reverse-coded)				
1) Purchasing meat products through the traceability system will possibly decrease uncertainty and hesitation of consumers towards the products.	.91	a		
2) Purchasing meat products through the traceability system could decrease the degree of uncertainty that specifically occurs as a post-purchasing reaction.	.86	17.95		

Items	Std. Loading	t-value	C.R.	AVE
3) Purchasing meat products through the traceability system will increase confidence in the products.	.87	18.21		
4) When I am not confident in purchasing meat products, I will use the traceability system to overcome the hesitation.	.82	16.09	.97	.75
$\chi 2 = 83.857$, df = 59, $\chi 2/df = 1.421$, p = .018, RMSEA= .045, GFI = .943, AGFI = .912, CFI = .988, TLI = .984				

[a] The corresponding parameter is fixed to a value of 1.00 in order to set the scale of measurement.

3) Structural model results

After the measurement model had been approved, the next step was to test the research hypotheses by using SEM (see Figure 2).

Hypothesis 1 examined the negative impact of product class knowledge on fear for seller opportunism. The results indicated that the product class knowledge significantly and negatively influenced fear for seller opportunism ($\beta = -.18$, $t = -2.62$, $p < .01$). Thus, H1 was supported..

Hypothesis 2 examined the negative impact of product class knowledge on perceived uncertainty. The results revealed no significant impact of product class knowledge on perceived uncertainty ($\beta = -.07$, $t = -1.28$, $p > .05$). H2, therefore, was not supported.

Hypothesis 3 examined the negative impact of perceived informativeness on fear for seller opportunism. The results revealed that perceived informativeness had significant and negative influence on the fear for seller opportunism ($\beta = -.40$, $t = -5.32$, $p < .001$). As a result, H3 was supported.

Hypothesis 4 examined the negative impact of perceived informativeness on perceived uncertainty. The results showed that perceived informativeness significantly and negatively affected perceived uncertainty ($\beta = -.57$, $t = -8.04$, $p < .001$). Hence, H4 was also supported.

Hypothesis 5 examined the positive impact of fear for seller opportunism on perceived uncertainty. The results revealed that fear for seller opportunism significantly had a positive effect on perceived uncertainty ($\beta = .31$, $t = 4.69$, $p < .001$). Consequently, H5 was supported, as well.

Sobel's (1982) teststatistic was adopted to test the mediating effects of fear for seller opportunism. *Hypothesis 6a* examined the mediating effect of fear for seller

opportunism on the relationship between product class knowledge and perceived uncertainty. The results showed that the mediating effect of fear for seller opportunism to the influence of product class knowledge on perceived uncertainty was significant (γ = .06, z-test = -2.38, $p < .05$). Therefore, H6a was supported.

Hypothesis 6b examined the mediating effect of fear for seller opportunism on the relationship between perceived informativeness and perceived uncertainty. The results showed that the mediating effect of fear for seller opportunism to the influence of perceived informativeness on perceived uncertainty was significant (γ = .12, z-test = -3.41, $p < .001$). Therefore, H6b was supported.

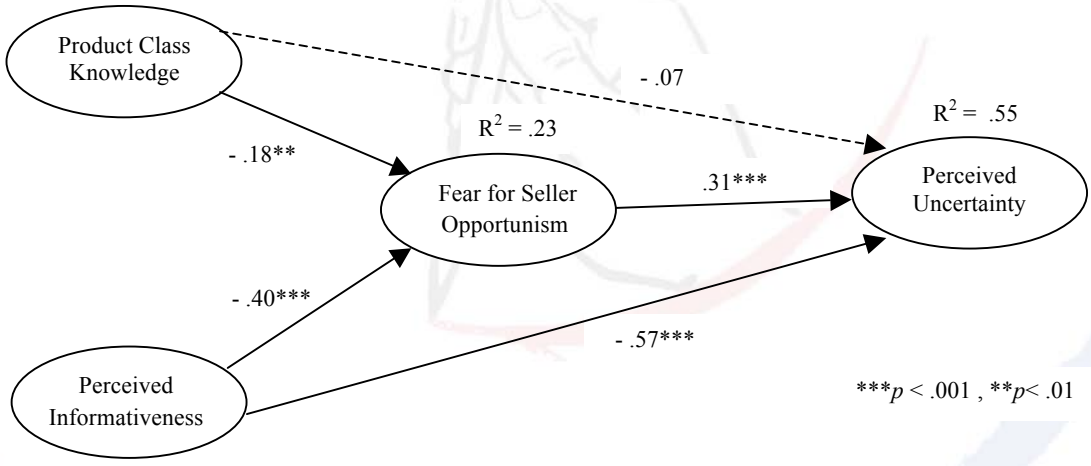
Table 3
Results of Structural Model

Hypotheses / path	Beta	S.E.	t-value	
H1: Product Class Knowledge → Fear for Seller Opportunism	- .18**	.06	- 2.62	supported
H2: Product Class Knowledge → Perceived Uncertainty	- .07	.06	- 1.28	not supported
H3: Perceived Informativeness→ Fear for Seller Opportunism	- .40***	.08	- 5.32	supported
H4: Perceived Informativeness → Perceived Uncertainty	- .57***	.07	- 8.04	supported
H5: Fear for Seller Opportunism → Perceived Uncertainty	.31***	.06	4.69	supported
Mediating effects			z-test [a]	
H6a: Product Class Knowledge → Fear for Seller Opportunism → Perceived Uncertainty	- .06* *(a = -.18 × b = .31) ; SE_a = .07 ; SE_b = .06*		- 2.38*	supported
H6b: Perceived Informativeness →Fear for Seller Opportunism → Perceived Uncertainty	- .12*** *(a = -.40 × b = .31) ; SE_a = .08 ; SE_b = .06*		- 3.41***	supported

Hypotheses / path	Beta	S.E.	t-value

Note : ***p < .001 , **p< .01 , *p< .05

[a] Mediation was tested via a z-test,which calculated using the Sobel's (1982) approach ;
$z = ab/SE_{ab}$, $SE_{ab} = \sqrt{b^2SEa^2 + a^2SEb^2}$ Where *a* is the regression coefficient for the relationship between the independent and the mediator variables; *b* is the regression coefficient for the relationship between the mediator and the dependent variables; SE_a is the standard error of the relationship between the independent and the mediator variables, and
SE_b is the standard error of the relationshipbetween the mediator and the dependent variables



Notes : chi-square = 83.857, df = 59, chi-square /df = 1.421, p = .018, RMSEA= .045, GFI = .943,
AGFI = .912, CFI = .988, TLI = .984

Figure 2. Results of the hypothesized model

5. DISCUSSIONS

1) Summary

The results of our study which was conducted in Thailand revealed that among Thai consumers, roduct class knowledge and perceived informativeness of the traceability system negatively influenced fear for seller opportunism which, in turn, positively influenced perceived uncertainty of the purchase of meat with the traceability system. Perceived informativeness of the traceability system also had a direct impact on perceived uncertainty. Fear for seller opportunism appeared to have a mediating role in these two sets of relationships.

2) Theoretical Implications

This study analyzed the psychological mechanism that could explain consumers' behaviors in the meat traceability system contexts. We modified the uncertainty model of Pavlou, Liang, & Xue (2007) regarding how to mitigate perceived uncertainty. The findings from the present study confirmed that there was a significant negative relationship between uncertainty mitigators (perceived informativeness) and uncertainty antecedent (fear for seller opportunism).

More specifically, we suggested a new strategy, the product class knowledge, which was considered as an uncertainty mitigator. Although the product class knowledge did not directly influence perceived uncertainty, we found its indirect impact via fear for seller opportunism which acted as a mediator in this set of relationships. In this sense, meat product knowledge might help consumers reduce their fear for seller opportunism first and then increase confidence in the purchase process.

Finally, the present study also importantly contributed to the cross-cultural consumer behavior areas by examining the consumers' responses to the traceability system in Thailand as only few studies had been conducted to examine the similar topics in Asia (Choe et al., 2009; Wu et al., 2011).

3) Managerial implications

Based on the results, marketers may consider using the meat traceability system as a marketing tool to provide more information about meat purchase to consumers. As perceived informativeness has been found to reduce fear for seller opportunism and perceived uncertainty in the meat purchase, the traceability system appears to act as a meat purchasing guide which could communicate how much and what aspects of information consumers would be given regarding the meat purchase: for example, sources of origins, production methods, ingredients, manufacturers, warehouses, distributors, selling places, and product movements from the starting points to the endusers (Hobbs et al., 2005). In this regard, marketers could effectively persuade consumers by focusing on the sufficient information which is able to be obtained from the meat traceability system.

Moreover, because the product class knowledge has also been found to lessen fear for seller opportunism and perceived uncertainty, marketers are required to inform consumers who need more knowledge about meat purchasing, and the traceability

system could be helpful for them to learn a lot. As a consequence, they will be able to lessen degrees of fear for seller opportunism and uncertainty in their mind resulting in stronger confidence of meat products with the help from the traceability system.

4) Direction for future research

The present study has a number of limitations which suggest several directions for future research. First of all, the role of demographic variables, such as genders, ages, or incomes may also be explored to achieve a better and deeper understanding of consumer behaviors in response to the meat traceability system. Second, since this study used survey data alone, additional research methods such as in-depth interviews and experiments may be combined to gain a better understanding of consumer behaviors. Finally, future studies may extend this model regarding how perceived uncertainty influences other factors such as purchase intentions actual purchase or word-of-mouth.

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COUNTRY PERSONALITY: THE APPLICATION OF BRAND PERSONALITY CONCEPT TO COUNTRY AS A BRAND

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ABSTRACT

Brand personality refers to human personality traits associated with a brand. Through a series of studies, Aaker (1997) uncovers five dimensions of brand personality: sincerity (down-to-earth, honest, wholesome and cheerful), excitement (daring, spirited, imaginative and up-to-date), competence (reliable, intelligent and successful), sophistication (upper class and charming) and ruggedness (outdoorsy and tough). Although brand personality has attracted interest from marketing researchers for several decades, relatively little work has been conducted to examine how the brand personality construct can be applicable when a country is used as a brand. To fill this gap, a survey research was conducted with Thai consumers to examine how Aaker's five dimensions are replicated and applicable for a country as a brand. The study results from factor analysis reveal that most of the personality items load on the intended dimensions when used as a country. Therefore, it appears that the five brand personality dimensions as uncovered by Aaker (1997) are fairly robust in measuring country personality, although some discrepancies remain. Our findings suggest avenues for future research to refine and develop a scale to specifically measure country personality.

Keywords: Country Personality, Country Personality Scale, Brand Personality Dimensions

Introduction

Brand personality is one component of a brand that has attracted interests from marketing researchers for several decades (Rojas-Mendez, Erenchun-Podlech & Silva-Olave, 2004). Brand personality research is conducted in many areas; for example, there are studies of brand personality dimensions from the perspective of consumers in different countries including Japan (Aaker, Benet-Martinez & Garolera, 2001), Spain (Aaker, Benet-Martinez & Garolera, 2001), Korea (Sung and Tinkham, 2005) and Belgium (Geuens, Weijters & Wulf, 2009). There are also numerous studies that examine variables that influence the brand personality dimensions, such as product type (Ang & Lim, 2006; Polyorat, 2011). In addition, a number of studies deal with the validation of existing brand personality scales such as the study of the validity of Aaker's brand personality scales by Mishra (2011) or the study of new measurement scale to be used in different settings, such as the store personality scale (d'Astous & Levesque, 2003).

Although researchers have revealed an increased interest in brand personality in numerous aspects, the research that examines how the brand personality construct can be applicable when a country is used as a brand is still in its infancy. Therefore, the current study, Thai consumers were conducted by a survey research to examine how country as a brand is replicated and applicable by the Aaker's five dimensions. Specifically, we attempt to examine country personality or the adaptation of the brand personality concept to measure consumer's perceptions of the country. We believe that our study in the application of Aaker's five dimensions of brand personality to measure country personality is one step toward filling the void in brand personality literature.

Theoretical background

Brand personality

Brand personality refers to the group of human traits or attributes that can be used to describe a brand (Aaker, 1997). Brand personality can be formed by two factors: product-related factors, such as the product category itself, packaging, price or physical attributes. The other factor is the one not related to the product itself, such as consumers' past experiences, consumer imagery, symbols, marketing communication, word of mouth, CEO image, celebrity endorsers and culture. (Sung & Tinkham, 2005)

Brand personality often reflects a more self-expressive or symbolic function than a utilitarian function (Keller, 1993). Brand personality can affect consumer preferences and choices. (Swaminathan, Stilley & Ahluwalia, 2009). Moreover, it offers an opportunity to create a good relationship between consumer and brand. (Swaminathan, Stilley & Ahluwalia, 2009) If brand personality is noticeable and unique, it will enable the brand to live longer in the market and help consumers easily recognize the brand (Mishra, 2011).

Aaker (1997) developed a brand personality scale based on the theory from psychology and marketing. Her factor-analytic study finally uncovered 42 personality traits grouped in five dimensions of brand personality: sincerity (down-to-earth,

honest, wholesome and cheerful), excitement (daring, spirited, imaginative and up-to-date), competence (reliable, intelligent and successful), sophistication (upper class and charming) and ruggedness (outdoorsy and tough).

These five dimensions were found to be robust across the several sub- samples: male sub-sample, female sub-sample, younger sub-sample, and older sub-sample. Moreover, the scales of these five dimensions are suggested to possess generalizability because they emerge from different sets of brands and different sets of product categories (Polyorat & Tuntabundit, 2007). Although there are some criticisms, Aaker's brand personality dimensions are used by numerous researchers (e.g., Azoulay & Kapferer, 2003; Milas & Mlacic, 2007; Romero, 2012) who have studied brand personality.

Country personality

The brand personality construct has received interest from many researchers. Numerous studies attempt to develop an instrument to measure brand personality. Nevertheless, most of these studies focused on brand personality with traditional products. More recently, researchers of contemporary marketing attempt to adapt the brand personality concept to study non-products such as place or country (Kaplan, Yurt, Guneri & Kurtulus, 2010). The idea of a country as a brand is playing a more important role in people's lives through mass media, product and brand origin and travel experiences. D'Astous and Boujbel (2007) argued that country personality is a useful instrument for assessing the country image by using the human traits as a guideline. This consumer's perception is very important for global marketers where multinational transactions occur more frequently.

Among the first researchers in country personality, d'Astous and Boujbel (2007) attempted to develop a scale based on human traits to measure country personality in relation to country image in order to position the country. The process of developing their scale leads to the construction of psychometrically sound measuring instruments. A sample of French-speaking Canadian adults was individually interviewed about the adjectives they would use to identify the country personality. After that, these adjectives were included with another group of adjectives that were generated from previous personality scales. Then, the length of the adjective list was reduced and later categorized by an underlying personality factor structure. The result revealed six country personality dimensions: agreeableness, wickedness, snobbism, assiduousness, conformity and unobtrusiveness, which was generated from 37 adjectives. Furthermore, the scales were refined from 37 adjectives to 24 adjectives by another group of French-speaking Canadian adults. The 24 adjectives were tested for their stability, psychometric properties and adequacy in the reduced scale. Both full (37 items) and reduced (24 items) scales demonstrated a stable structure and satisfactory psychometric properties. In sum, the country personality scale from this study appears to be used to position countries. Moreover, it can measure the attitude of the country, the attitude of the product from that country and also the attitude toward countries as travel destinations.

D'Astous & Li (2009) examined how Chinese people perceived the personality of the following 11 countries: Australia, Brazil, Canada, China, France, Japan, Mexico, Russia, Saudi Arabia, South Africa, and the United States. This study applied the 37

items of country personality scale from d'Astous & Boujbel (2007) with some adaptations for the Chinese context. A survey was conducted with a sample of 184 adult Chinese people from Beijing. The result from factor analysis revealed 6 factors: agreeableness, wickedness, unobtrusiveness, assiduousness, conformity and snobbism. The details of the results are as follow;

Agreeableness: Chinese respondents perceived their own country was the highest in this personality trait while Australia, Brazil Canada and France also obtained high scores. On the other hand, Japan obtained the lowest score when compared with others.

Wickedness: The countries with the highest score were the United States and Japan. Interestingly, China did not obtain the lowest score in this personality trait when compared with Canada and Australia.

Assiduousness: China received the highest score, followed by Japan. Their mean scores were, however, not significantly different. This result was surprising because the Chinese apparently have strong negative feelings against Japan, which, was expected to affect their decision making with regards to this personality dimension.

Snobbism: The country obtaining the highest score of this personality trait was the United States. Next were Japan and France, respectively, while China had the lowest score.

Conformity: Saudi Arabia was the country with the highest score on this personality dimension whereas the country with the lowest score was China.

Unobtrusiveness: This personality trait received the lowest of mean scores when compared with other personality traits. The only statistically significant differences were observed between Saudi Arabia and Russia, and also between Saudi Arabia and United States. Saudi Arabia received the highest score, the next was Russia with United States having the lowest score.

This study also revealed that Chinese people's general attitude towards a foreign country was mainly explained by their perception of two factors; agreeableness and wickedness. The most important personality dimension in the product-country attitude model was assiduousness while the personality dimension "agreeableness" was significant for the travel destination model. Moreover, the adapted scale has good psychometric properties and displayed a consistent result similar to those in previous research. Also, it is a possibility that the reason that Chinese people had strong negative feelings towards Japan is from the atrocities of Japan in the Second World War. Klein, Ettenson and Morris (1998) demonstrated that this situation did not affect the evaluation of products which were made in Japan but it may have impacted Chinese people's country personality perceptions. Furthermore, the reason that Chinese people rated their own country with high scores on positive personality traits and low scores on negative personality traits is based on their home-country bias. This result is similar to those found in country of origin literature (eg., Elliott & Cameron, 1994; Ahmed & d'Astous, 2004; Balabanis & Diamantopoulos, 2004; Hsieh, 2004;

d'Astous et al., 2008) where people are found to prefer their own country's products more than those from other countries.

Regarding place personality, Kaplan et al. (2010) studied brand personality of places and examined how it can be applicable when a city is used as a brand. In general, literature approaches the city personality from the perspective of destination and tourism marketing. In this study, however, the researchers focus on "place" branding. This study investigates personality dimensions of the three most populated cities in Turkey: Istanbul, Ankara and Izmir. A survey was conducted among 898 participants. The result from factor analysis revealed 6 factors from 87 personal traits: excitement, malignancy, peacefulness, competence, conservatism and ruggedness. This study showed two new factors of brand personality for cities that have not been found in any research before: malignancy and conservatism. The previous research of brand personality such as Aaker (1997)'s study did not present the malignancy dimension and the conservatism dimension because two dimensions, namely openness and neuroticism from the Big Five model were removed and only positive personal traits were used in her study. In reality, the characteristics of a brand can be presented in negative aspects, as can be found in human characteristics (Kaplan et al., 2010). As a result from eliminating these two dimensions, the study of Aaker (1997) was not completely congruent with the Big Five model. Her results do not show the dimension of malignancy and conservatism probably because these two dimensions are the reflections of neuroticism. Additionally, the finding of Kaplan et al. (2010) demonstrated that the lack of such negative dimensions may affect the accuracy of the measuring instruments.

From the above discussion, it would be fruitful to examine how Aaker's brand personality dimensions can be applicable in studying country personality. Country personality is a relatively new construct and starts to attract interests from marketing researchers. Little work that specifically examines how the brand personality construct can be applicable when a country is used as a brand, however, exists. Therefore, to fill this gap, the current study will examine how the Aaker's five dimensions are replicated and applicable for a country. Based on the foregoing discussion, our research question states:

RQ: How can the five dimensions of brand personality construct be applicable when a country is used as a brand?

Methodology

Because the primary purpose of this study is to examine how the Aaker's five dimensions are replicated and applicable for a country, we adopt the imposed-etic approach where a research instrument is imported in its original form and then translated into the local language.

Brand personality of a country is measured with Aaker's (1997) 42-item Brand Personality Scale. The original scale in English is translated into Thai using a back-translation procedure (Brislin, 1980). Participants were instructed to think of a country (Laos) as if it were a person and to rate on a five-point scale (1 = not at all descriptive, 5 = extremely descriptive) the extent to which each of the 42 brand

personality traits describes the country. There are no reverse-items. The assessment considers the brand as a whole, rather than the people in that country.

Three hundred and fifty-five Thai undergraduate students participated in this study. The age of participants varied from 18 to 29 years with the mean value of 20.10 years. Male participants accounted for 33% of the sample. Subjects were first informed of the study description, then asked to complete the Aaker's (1997) Brand Personality Scale for the country personality of Laos and provide personal data including age and gender.

Result

The 42 brand personality traits were submitted to an exploratory factor analysis with a varimax rotation and a 5-factor solution imposed a priori. Items which had low loadings (<.40) or cross-loaded on two dimensions (over .30) were removed (Nunnally, 1978). The factor loadings, eigenvalues and percentage of variance explained are displayed in table 1.

Thirty-nine out of 42 Aaker's items loaded properly on the intended factors. The results showed five factors when the researchers applied brand personality construct in the context that the country is used as a brand. Factor 1 represents Aaker's original excitement dimension. Factor 2 represents the sincerity dimension. Factor 3 represents the competence dimension. Factor 4 represents the ruggedness dimension while Factor 5 represents the sophistication dimension. Three of Aaker's items did not properly load on the intended factors. The three items "unique", "independent" and "contemporary" from the Aaker's excitement dimension loaded on the other dimensions instead. "Unique" loaded on sincerity dimension whereas "independent" and "contemporary" loaded on competence dimension. In addition, the "wholesome" item has cross-loadings on both the sincerity dimension and the excitement one. The primary loading on the sincerity dimension, however, is as intended. At the same time, the "charming" item also has cross-loadings, it was found on both the sophistication dimension and the competence one. However, sophistication dimension is more proper and similar to the intended factor.

Discussions

Summary

Overall, our study revealed five country personality dimensions similar to Aaker (1997)'s five brand personality dimensions (competence, sincerity, sophistication, excitement, and ruggedness). Most of the personality items loaded on the intended dimensions. Therefore, it appears that the five brand personality dimensions as uncovered by Aaker (1997) are fairly robust and applicable in measuring the country personality although some discrepancies remain.

Nevertheless, the brand personality structures in our study are not completely identical to those of Aaker (1997). Three unexpected items which do not represent of the excitement dimension as in Aaker (1997) are unique, independent and contemporary. The first one is perceived as representatives of sincerity whereas the next two items are perceived as representatives of competence. It could be that in

measuring the country personality, these three personality traits conveyed different meanings from those in the brand personality of traditional products. Moreover, some characteristics and the meaning of the items in excitement, sincerity and competence dimensions may be closely related and can share their common characteristics together.

Theoretical Implications

This study provides both theoretical and managerial contributions to the areas of branding and tourism marketing. In terms of theoretical implications, because research that specifically examines the country personality is still scant, our study is an initial study that examines the country personality construct by focusing on the application of 42 personality traits from Aaker (1997) to evaluate the extent to which these 5 dimensions can be used in the country context. Kaplan et al. (2010) suggested that the personality traits which Aaker (1997) created in her study did not contain the adjectives with negative dimensions: therefore, it may affect the measuring instruments and impact the result of the study as well. However, the result in our study demonstrates that Aaker's (1997) brand personality scale is, to a certain extent, also applicable for a country when it is considered as a brand. Although some items shows small difference from the pattern of factor loadings in the original study, five brand personality dimensions can be used to measuring the country personality. This point thus represent an opportunity of the researchers to extend Aaker (1997)'s brand personality scale to different contexts.

Another noteworthy findings from our study is concerned with the ruggedness dimension. Rojas-Mandez et al. (2004) and Davies et al. (2001) suggests that the ruggedness dimension was neither reliable nor valid. However, the result of current study, as well as that from Polyorat, Khantuwan, Jaratmetakul and Boonnon (2008), demonstrates that all dimensions including "ruggedness" are nicely replicated and reliable. This discrepancy may suggest avenues for future research to study the conditions under which the ruggedness dimension will be psychometrically sound.

Managerial Implications

In today's world, people have known about countries through various channels. Consumers' perception of a country is very important for global marketers as they have to compete with rivals from other countries. Country personality scale presents psychological dimensions that people use to mentally represent countries (d'Astous & Li, 2009). Findings of the current study revealed the consumer's perception of the country (Laos). This can be helped to position the country with the proper direction, that is, not only to conserve the positive dimension of country personality but also improve some dimensions that have low score. In this context, country personality may be involved to determine the strategies for the tourism as well. Tourism organizations will use this data to adjust the tourism strategies for attracting the tourists. In addition, country personality can be used as an instrument to define the appropriate product position strategy and to influence the perception of both product and service from a given country. Because now, people pay attention to the country of origin more than the past and many researches revealed the country of origin has a significant impact on consumer product evaluations (Nagashima, 1970; Chao, 1993; Ahmed & d'Astous, 2004; Pharr, 2006).

Study Limitations and Avenues for Future Research

The current study has a number of limitations. For example, the results of this study are conducted in one country. The replications in different countries are desirable. Furthermore, this study collected data from student samples only; our results may not be able to represent the findings from all the populations. In sum, our findings suggest avenues in future research to conduct additional studies by using more representative samples. Additionally, it would be important to refine and develop a scale to specifically measure country personality.

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Table 1
Factor Loading of Aggregate Data

		Varimax-rotated principal Factors				
	Items	Factor 1 Excitement	Factor 2 Sincerity	Factor 3 Competence	Factor 4 Ruggedness	Factor 5 Sophistication
1	down-to-earth		.569			
2	family-oriented		.630			
3	small-town		.700			
4	honest		.527			
5	sincere		.595			
6	real		.580			
7	wholesome	.405	.469			
8	original		.741			
9	cheerful		.554			

10	sentimental		.561			
11	friendly		.629			
12	daring	.637				
13	trendy	.811				
14	exciting	.617				
15	spirited	.544				
16	cool	.661				
17	young	.727				
18	imaginative	.638				
19	*unique*		*.592*			
20	up-to-date	.666				
21	*independent*			*.432*		
22	*contemporary*			*.469*		
23	reliable			.644		
24	hardworking			.655		
25	secure			.604		
26	intelligent			.573		
27	technical			.532		
28	corporate			.557		
29	successful			.535		
30	leader			.479		
31	confident			.568		
32	upper class					.454
33	glamorous					.640
34	good looking					.688
35	charming			.438		.466
36	feminine					.463
37	smooth					.576
38	outdoorsy				.567	
39	masculine				.678	
40	western				.741	
41	tough				.764	
42	rugged				.743	
	Eigenvalues	9.81	4.32	2.70	2.23	1.45
	% of variance explained	23.36	10.29	6.44	5.31	3.45

- In Aaker's (1997), items#1-11 = Sincerity, items#12-22 = Excitement, items#23-31=Competence, items#32-37 = Sophistication and items#38-42 = Ruggedness.
- Italics= items not loaded on the intended factors.

Cornering the Muses: A Multifaceted Approach to Measuring Creativity

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Abstract

Creativity is far from a straightforward construct within the field of psychology, and this paper attempts to uncover some of the complexity and uncertainty around it. The paper first provides a brief overview of creativity, it's importance in society, various stereotypes and contradictory assumptions attached to it, and the search for a working definition of what the terms actually means. It then focuses on a multi-dimensional approach to measuring creativity in order to grasp the many different aspects of it. Ways to measure the creative process using the highly popular divergent thinking tests, the creative product and subsequent assessment, and the creative personality both from a personality trait perspective, as well as, from a biographical inventory of creative behavior and accomplishments are all examined. Though all the methods are rather standard within the field, they are most often administered in isolation. Bringing them together into one study can broaden the concept of creativity and add understanding to how the different aspects relate to each other. The creative process appears to be one area that can be developed and expanded, especially by utilizing creative metaphors, as a further instrument for measuring how people combine and connect highly dissonant concepts in new and insightful ways.

Introduction

Research into creativity is very much an interdisciplinary endeavor spreading across such diverse fields as business (Amabile, Conti, Coon, Lazenby, & Herron, 1996) (Amabile, 1996) (Andriopoulos, 2001), linguistics and language education (Carter, 2004) (Albert, 2006) (Maybin, 2007), psychology (Eysenck, 1993), and naturally the fine arts (Mace & Ward, 2002) just to name a few. Creativity has also been widely studied from a cross-cultural perspective (Lubart, 1990) (Lubart, 1999) (Lubart, 2010) (Kaufman & Sternberg, 2006) (Morris & Leung, 2010), analyzed historically (Simonton, 1999), and examined to find what kind of relationship it has with intelligence and personality (Barron & Harrington, 1981) (Batey & Furnham, 2006). In addition, creativity has a broad and all-inclusive lure, as something essential to the well being of society. As Toynbee (1964) states, giving "a fair chance to potential creativity is a matter of life and death for a society" (p. 4). Florida (2002) describes it as the most important resource of the 21st century, and this importance is quite visible in the European Commission's declaring 2009 to be the "Year of Creativity and Innovation" (European Commission, 2008). This view is not restricted to the West, as the Singaporean government, too, has described creativity as a necessity for the advancement of the nation's economy, technology, and education (Tan, 2000).

The Many Sides of Creativity

Creativity, though, is bound by numerous stereotypes and misperceptions and often people believe that to be creative one needs to be "mad, weird, neurotic or at least unusual" (Isaken, 1987, p. 2). Many researchers label this the "mad-genius stereotype" (Kaufman, Bromley, & Cole, 2006) or the "lone nut" stereotype (Plucker, Beghetto, & Dow, 2004). Despite those who are trying to disentangle creativity from this lone genius myth (Montuori & Purser, 1995), these stereotypes still seem to be part of the common folk belief in society and popularized by the media, which often writes about linking madness and depression to genius and creativity (Adams, 2014). Most research that looks at the connection between madness and creativity (Andreasen, 1987) (Jamison, 1993), however tends to focus on eminent creators, those whom have made a significant impact in their field. On the other hand, everyday creativity has actually been shown to be an important part of the mental health of the individual for it involves important characteristics such as having a willingness to take risks, being open to new ideas, and being flexible (Cropley, 1990).

Another area with contradicting views towards creativity is its association with a certain naiveté popularized by Picasso's famous quote, "Every child is an artist. The problem is how to remain an artist once we grow up." Gardner (1993) also details the blend of childlike and adultlike characteristics in many of the leading creative minds of this past century noting how Einstein tried to preserve such childlike features as curiosity and defiance of convention. Following in Einstein's proclivity towards childlike features for enhancing creativity, it is believed that "When Richard Feynman faced a problem he was unusually good at going back to being like a child, ignoring what everyone else thinks and saying, 'Now, what have we got here?'" (Feynman, 1995). Yet at the same time creativity requires a certain amount of cognitive complexity. This cognitive complexity enables one "to integrate conflicting, ambiguous or novel information" (Charlton & Bakan, 1988, p. 318), which is also essential to avoiding functional fixedness. Avoiding functional fixedness is the ability

to see multiple responses to a question or alternative solutions to a problem and not being fixed in seeing only one single answer. So the concept of creativity seems to be terribly loaded with contradictions and myths, with science and popular media, viewing it either as a mental process that regresses to some primordial state or a highly evolved process that pushes the boundaries of complexity.

The actual word creativity is commonly used in such broad contexts from describing Picasso's Guernica to a wordplay in a daily tabloid that the critic and historian, Jacques Barzun stated, "… in contemporary culture, no idea is so appealing, no word put to more frequent and varied use, than creativity." He goes on to say that creativity "extends over all of art and science, naturally, and it takes us beyond these to the basic conditions of modern society, to education, to our view of the human mind and what we conceive to be the goal of life itself" (Barzun, 1989, p. 338). To better differentiate this wide-ranging use of the term creativity, researchers distinguish between the magnitude of creativity by calling the work of geniuses on one side of the cline, eminent creativity, and the other side, everyday creativity (Richards, 1990). Often these will be expressed as "Big-C" creativity and "little-c" creativity, respectively. Though helpful in distinguishing the wide contrast that the word creativity can exemplify, it does not clarify what creativity actually is.

Framing Creativity in a Definition

Defining creativity may seem straightforward on the surface, but in reality it has been one of the more difficult and tumultuous undertakings within the field of creativity research. A decade after Guilford (1950) advocated a call to arms for more researchers to look at the neglected subject of creativity, a place where many psychologists "have feared to tread" (p. 444), Rhodes (1961) stated that the "The profusion (of definitions) was enough to give one the impression that creativity is a province for pseudo-intellectuals" (p. 306). This outpouring of definitions for creativity, which some have estimated to number close to 60 that can be found in the psychological literature (Taylor, 1988 in Furnham, Batey, Anand, & Manfield, 2008), has left the term rather ill-defined and unformed. As Sternberg (1988) further states, "Few psychological constructs have proved move elusive to define" (p. 126). Such is the elusiveness of this term that one of the leading scientists of the time, David Bohm, along with the physicist David Peat (2010), reinforces its ambivalent nature by stating that "something relevant may be said about creativity, provided it is realized that whatever we say it is, there is also something more and something different" (p. 226). Though slippery as this construct may appear, recently researchers have narrowed down this medley of definitions and have shown some accord in reaching an agreed upon description of this term. Stein (1953) provides one of the earlier working frameworks for a definition of it, as he states, "The creative work is a novel work that is accepted as tenable or useful or satisfying by a group in some point in time" (p. 311). Novelty without being useful is simply something bizarre and odd, while something useful without being novel is something common, everyday and conventional. These two concepts must come together for something to be considered creative. Later the word "appropriate" and useful" replaced the words "tenable" and "satisfying." Sternberg and Lubart (1995) describe novelty as being statistically unusual, original, unpredictable, with the power to surprise, which Bruner (1962) calls an "effective surprise" and states that it is a distinctive feature of creativity. This element of surprise has also been labeled the "nonobvious" (Simonton, 2011). Boden

(2004) further elaborates on the meaning of surprise, which is either the state of seeing this creative product, such as an innovative idea, as fitting into a way of thinking that you already had, but failed to ever realize or, as seeing the idea as an impossibility and yet contrary to this impossibility someone has come up with it. Others have added one other key element to creativity and that is "adaptability," which is the "ability to respond adaptively to the needs for new approaches and new products" (Barron, 1988, p. 80).

Recently, the definition has emphasized the interaction of domain specific knowledge, the overall creative process, and the importance the environment has on the individual (or group) in the creation of this "creative product." There is also the influence of the social context in determining the novelty and usefulness of this creative product. The following definition is one of the more thorough and all encompassing definitions of creativity and will be used as the working definition of creativity in this paper.

"Creativity is the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (Plucker et al., 2004, p.90).

A Multifaceted Approach

Creative insight into a problem is often said to occur through an "Aha experience" or "eureka effect," something that Poincaré wrote about happening to him while waiting for a bus or for Archimedes while sitting in a bathtub. A new creative idea or thought that has never occurred to one before will metaphorically be compared to some kind of illumination, as can be viewed in the numerous light bulb visual metaphors that are often associated with a creative idea. The thought that one could actually measure such a thing as creativity has often been clouded with doubt and suspicion for how would one go about measuring the "disordering of all the senses"[1] or the "impenetrable aspect of human existence" (Hausman, 1976, p. 3) and from these perceptions of creativity; it was often assumed to be something immeasurable (Khatena, 1982). The early attempts to measure it were often approached with some skepticism, and the complexity of undertaking such a task has been reviewed extensively and critiqued (Hocevar, 1981).

Despite the suspicion surrounding the measurement of creativity, research into this trait continues to grow and thrive in many different academic disciplines. A developing consensus among researchers views creativity as being made up of multiple components (Amabile, 1996) (Batey et al., 2006) and therefore a multi-faceted approach is the best method for trying to measure it. Rhodes (1961) described the four dimensions of creativity to be person, process, product, and press. This has been labeled the four P's of creativity. Using these various dimensions of creativity may provide the researcher a blueprint to better understand what it means to be creative. In the following sections, I will first look at the historically enduring measurement of Divergent Thinking tests, which aim to measure creative potential and part of the creative process; then look at the creative product and ways to measure such products; and finally the creative person.

1.1 Divergent Thinking Tests

Guilford (1968) emphasized the importance of divergent thinking where "the thinker must do much searching around, and often a number of answers will do or are wanted" (p. 8). The divergent thinking tasks he developed in his SOI (structure of intellect) Model (Guilford, 1967) looked to measure ideational fluency or the ability to come up with many different ideas to solve a problem, which is an important part of the creative process. Divergent thinking can be contrasted against the more standard IQ tests or convergent thinking tests, which require the test taker to provide one right answer to the question. Due to the pervasiveness of this latter style of test in the environmental setting, E. Paul Torrance (1970, p. 86) stated, "Children are so accustomed to the one correct or best answer that they may be reluctant to think of other possibilities." Torrance (1966) (2008) developed these divergent thinking tasks into what he called The Torrance Test of Creative Thinking (TTCT), which became one of the most widely used tests to measure creativity (Baer, 1993) (Kim, 2006). Though even Torrance himself was cautious to conflate creativity directly with divergent thinking (Torrance, 1988, p. 46), it became the psychometric template for measuring creativity for many years and still up to the present day seems to be frequently used as the measurement of creativity. Recently, though Runco (2008) reemphasized the point that creativity and divergent thinking are by no means identical terms, and divergent thinking should be seen as just one aspect of a more complex creative process (Runco & Okuda, 1988).

Divergent thinking tasks are usually figural or verbal. Common figural tasks ask the participants to complete an unfinished picture or draw as many pictures as possible from many pairs of circles or lines (for example: "o o" or "x x") on the page. Common verbal tasks ask the participants to list alternative uses to a common everyday objects like a brick, describe possible causes to a situation in a picture, provide possible consequences to an unlikely situation (just suppose everyone in the world only spoke one language), or provide possible improvements to a product like a bicycle (see Kaufman, Plucker, & Baer, 2008 for an outline of such activities). The figural tasks can be scored with such measurements as fluency (the number of pictures), originality (the statistical uniqueness of the picture), elaboration (the amount of detail provided in the picture), and the abstractedness of the title. Verbal tasks can be scored for fluency, originality, and elaboration (Kaufman, et al., 2008). The TTCT, however, recommends training for those who use that test for administrative and scoring purposes, yet many researchers will use their own form of divergent thinking tasks and some have tried to simplify the scoring scales by using a more subjective scoring method (Silvia, et al., 2008).

The model of the creative process, though, is not simply analyzing a problem and then coming up with many ideas, as represented in these divergent thinking tasks. Zeng, Proctor, and Salvendy (2011) show that it also involves evaluation, and thus these types of divergent thinking tests fail to assess the integrated general creative process. Another issue these authors raise concerning these types of tests to measure creativity is the construct validity of them, since divergent thinking tests neglect one important criterion in the working definition of creativity and that is "appropriateness" (Zeng et. al, 2011). Though Kim (2006) provides a detailed review of the TTCT and concludes that if properly administered it has benefits for identifying gifted children, but also encourages everyday creativity, and, most importantly for this paper, she too recommends that any measure of creativity involve multiple measures. Divergent

thinking tests may provide only a small window into a more complex creative process, but can also provide important information about ideational fluency, functional fixedness, and originality seeking, which all are important at some level to creativity. Zeng et al. (2011) bring up another key point concerning these divergent thinking tests and the merits of tailoring them to a specific domain, in their case a professional domain, but also in other educational areas like science or foreign language leaning. Another popular way to look at creativity, which seems rather natural and directly addresses the criticism of the divergent thinking tests and their lack of construct validity, is to focus more on an actual creative product. The next section examines possible ways to get the participants to actually produce such a product and then suggests ways to measure the creativity of the product within a social context.

1.2 Creative Products and Consensual Assessment Technique

There are numerous tasks that one can use to measure a creative product such as writing a story about a picture (Wolfradt & Pretz, 2001), completing a photo essay (Dollinger & Clancy, 1993) (Dollinger, Urban, & James, 2004), designing an invention, making a collage (Baer, 1993), writing a scientific poem (SciFaiku) (Kaufman, Baer, Cole, & Sexton, 2008), and so on. Though creativity, as mentioned earlier, is the production of a "perceivable product" that is defined within some social context as being "novel" and "appropriate" or "useful." The question one might further ask is who determines this social context and decides the novelty and appropriateness of this product? While divergent thinking tests attempt to be more objective in the scoring, the scoring of a creative product tends to be more subjective. The Consensual Assessment Technique, first developed by Amabile (1983) (1996), systematically set forth a way to assess such a creative product by using judges. These judges are to be people "who have at least some formal training and expertise in the target domain" (Amabile, 1996, p. 73). They are not provided any kind of scoring rubrics, but rather are to rely on their own subjective opinions of creativity to rate these products. These judges are supposed to mirror, on a small scale, the group of experts in the real world world who act as gatekeepers, deciding what is considered creative and what is not. Nonetheless, any researcher attempting to study creativity will naturally feel the constraint of finding this group of experts to act as judges for the research.

One will begin to question this rather ambiguous word, "expert." What exactly constitutes an expert? According to Simonton (1997) this would involve over 10 years of purposeful practice in a certain domain. Finding these experts can be a major challenge for the researcher, so Dollinger and Shafran (2005) looked at the reliability of using novice judges and found that novices and experts scored fairly similar to each other. One thing to note about their study is that these novices received some training before they assessed the creative product, so technically it is a little different than using the Consensual Assessment Technique, which rejects the use of such training. Kaufman and Baer (2012) mention the possible use of quasi-experts, an individual that is neither expert nor novice. In one study using psychology graduate students as judges, Kaufman, Lee, Baer, and Lee (2007) found consistency among their scores. So there seems to be a growing amount of data that supports the use of quasi-experts, those who have certain knowledge of the specific domain, but are not considered so-called "experts." Additionally, this will alleviate some of the burden on the researcher in recruiting a group of judges for the study. The following section moves away from

a tangible product and looks more closely at the individual or the creative personality and the importance of the trait labeled "openness to experience."

1.3 ***The Creative Personality***

A commonly used past measurement of the creative personality is the creativity personality scale (Cps) (Gough, 1979), which is a 30-item adjective checklist of personality traits. The respondent checks the items that he/she feels answers the following question, "What kind of person are you?" Eighteen items positively correspond to a creative personality and 12 items negatively correspond to it. Some of the positive items seem rather obvious such as intelligent, wide interests, inventive, original and unconventional while others seem rather dubious such as; informal, sexy, and snobbish. Similarly, a few of the negative traits are also a little puzzling such as; sincere, honest, and suspicious. Many of these positive creative traits, especially the less puzzling ones, are components of one of the broad Big Five personality traits identified as openness to experience (McCrae & Costa, 1985). Current research suggests five high-level traits: openness to experience (O), conscientiousness (C), extraversion (E), agreeableness (A) and neuroticism (N), (McCrae & Costa 1997) which have been found to be prevalent in over 50 different cultures (McCrae & Terracciano, 2005).

Costa and McCrae (1992) developed a 240-item NEO Personality Inventory, Revised (NEO-PI-R) that looks at each of the five personality traits and within each trait further specifies six facets. The six facets for the openness to experience trait are imagination, artistic interests, emotionality, adventurousness, intellect, and liberalism. Utilizing this Big 5 measurement (Costa & McCrae, 1992) to measure individual personality, the trait, openness to experience, is highly related to various measures of creativity such as divergent thinking tests (McCrae, 1987), a life course creativity study spanning 45 years (Soldz & Vaillant, 1999) a creative product based on a photo essay (Dollinger et al., 1993), as well as, a creative product based on the ratings of written stories and creative hobbies (Wolfradt et al., 2001). More recently a public-domain personality measure called the International Personality Item Pool (IPIP) (Goldberg, 1999) (Goldberg, et al., 2006) freely allows researchers to access a personality measure without the constraints of being bound to copyrighted material. Another possible way to look at the creative person is to straightforwardly ask the participants to answer items that correspond to certain creative behaviors and past creative achievements. This sort of self-reflective questionnaire acts as a creative biography for the individual and provides additional insight into one's overall creativity.

1.4 ***The Self-rated Creative Person***

Creative behaviors span quite a wide range of varying domains of experience and there has been much debate as to whether creativity is more specific to these differing domains or if creativity is a more general ability (Baer, 1998) (Plucker & Beghetto, 2004) like Spearman's "g"[2], which could then be called "c" (Kaufman & Baer, 2004). So, for example, if one person were creative in math, like Poincaré, would he also be creative in a completely different discipline like cooking or painting or is his creativity in math specific only to the domain of mathematics? Amabile (1996), in her componential theory of creativity, views it as both general and domain specific, which work together with a third component, task motivation, and it is this convergence that affects the overall creative performance on a specific task. Gardner (2003) divided up

intelligence into multiple intelligences that extend from spatial intelligence to interpersonal intelligence. Could creativity likewise be divided up into multiple creativities? Similar perhaps to Greek mythology, where there were nine muses and each one represented a different form of divine and creative inspiration from epic poetry (Calliope) and tragedy (Melpomene) to astronomy (Urania). Obviously these would not hold in the modern context, but many researchers have attempted to put together a classification of differing domains where one can be creative, which I will go into more detail next, reviewing the development of these self-reported creative inventories.

Hocevar (1980) developed one of the earlier versions of an inventory of creative behavior, which he called the "Creative Behavior Inventory." This inventory is made up of 77 items of creative activities and accomplishments such as "Received an award for acting," "Gave a recital," and "Made jewelry" in which participants respond by using a 6 point scale from "never" to "more than 6 times." These activities and accomplishments range from acting, writing, fine arts, craftwork, science, math, cooking, dance, music, and humor. These differing creative domains, though, are not clearly distinguished, while the Creativity Achievement Questionnaire (CAQ) (Carson, Peterson, & Higgins, 2005), which is also a self-reported measure of creative achievement, clearly distinguishes between 10 differing domains of creativity. These differing domains then are further subsumed into two distinct dimensions. The first dimension, "Arts," has the domains of drama, writing, humor, music, visual arts, and dance, while the other dimension, "Science," has the domains of invention, science, and culinary. The domain of architecture does not fall under either of the two dimensions. In this questionnaire each domain has eight items numbered from "0" to "7" and to score this questionnaire each item is weighed by the corresponding number (the number "0" denotes not having any recognizable talent in this domain). In the domain of "Music," for example, number 1 is "I play one or more musical instruments proficiently" while number 6 is "Recordings of my composition have been sold publicly." From looking at the range of the eight items in each domain, one could naturally assume that this type of measure is more designed for eminently creative people and not very applicable to everyday creativity for use with university students or more adolescent populations. In another study, Kaufman, Cole, and Baer (2009) developed the Creativity Domain Questionnaire (CDQ), consisting of 56 items, which initially was found to have seven factors. A shortened version of this questionnaire, reduced to 21 items revealed four factors namely; 1) Math/ Science (algebra, literature, computer science, biology, logic, mathematical); 2) Drama (acting, literature, blogging, singing, dancing, writing); 3) Interaction (leadership, money, playing with children, selling, problem solving, teaching); and 4) Arts (Craft, decorating, painting) (Kaufman, Waterstreet, Ailabouni, Whitcomb, Roe, & Riggs, 2009). The important point in these questionnaires is to try to capture the broad dimension of creativity in various possible domains rather than restricting it to the typical arts. Batey (2007), specifically investigating everyday creativity, developed his own compact version called "The Biographical Inventory of Creative Behaviors," made up of 34 items. The participants are simply asked to put an "X" in the corresponding box if they have been involved in such an activity in the past 12 months. Some examples of these activities are; "Drawn a cartoon," "Made someone a present," and "Delivered a speech." Most of these inventories rely on the thinking of Hocevar (1981) who stated "Past behavior is generally the best predictor of future behavior" (p. 459).

Another approach to these self-report inventories is not to reflect on past behavior and accomplishments, but to compare oneself to others of the same age on a 5 point scale from "1" "much less creative" to "5" "much more creative" in various creative behaviors. Kaufman (2012) recently designed the Kaufman Domains of Creativity Scale (K-DOCS), which covers a wide range of activities from interpersonal behavior such as , "Helping other people cope with a difficult situation," to computer science, "Figuring out how to fix a frozen or buggy computer," to more traditional domains of creativity like the arts, "Sketching a person or object." (See Silva, Wigert, Reiter-Palmon, & Kaufman, 2012 for a more detailed review of the various self-report scales and their reliability, validity, and structure). Deciding on what measurement to use may be rather troubling to the researcher, for each assessment tool is more specific towards a certain creativity such as; everyday creativity (Batey, 2007) or eminent creativity (Carson et al., 2005), while others expand the domains from the typical arts, math, and sciences to more unconventional creative domains like social relationships and interaction with others (Kaufman et al., 2009). Another issue to consider is the sociocultural environment where these measurements were developed and administered, namely the USA and the UK. Further research is needed to look at their translatability into and applicability to other diverse cultural and linguistic settings.

Conclusion

Utilizing multiple approaches to assess creativity provides the researcher a more holistic representation of what creativity is and the possibility to analyze the relationships between the different components such as process, product, and person. Approaching creativity with a broad array of assessment tools can provide a more complete picture of how individuals differ in respect to creativity, how this trait relates to other variables like intelligence and school achievement, and possible ways to enhance creativity in the classroom or work environment.

Ways to more accurately measure the creative process is the dimension that appears to need the most refinement and development. Divergent thinking tests may have the longest history and perhaps are the most widely used tests, though at the same time they are probably the most misunderstood, in terms of what they are actually measuring (Runco, 2008). This makes it an opportune time to restructure and expand the measurement for assessing creative thinking in order to incorporate a more comprehensive picture of the overall creative process. More research needs to look at ways to measure how individuals are able to form associative elements into new combinations, much like the early work of Mednick (1962) and his remote association tests (Mednick, 1968). In these tests participants are given three words (sore, shoulder, sweat) with seemingly no relationship and are asked to find a fourth word that somehow links them all together (answer: cold). These tests have gone out of fashion in the field of creativity, mostly because they constrain the respondent to come up with only one right answer, relying more on convergent thinking than ideational fluency. One area that could prove to be beneficial is the incorporation of metaphorical thinking and imagery activities into such an assessment, which has begun to be used by some researchers (Silvia & Beaty, 2012). Metaphor, like creativity, combines two seemingly disparate and unrelated concepts in new and innovative ways, providing insight and deeper understanding. Metaphorical imagery is highly prevalent in the field of advertising (Forceville, 2002) and creative marketing and could possibly be incorporated into creative thinking tasks. Such tasks

could ask the respondents to provide interpretations to metaphorical ads or to provide their own metaphors for a product. Then, these metaphors could be consensually assessed for both novelty and aptness. As Albert Einstein mentioned "combinatory play seems to be the essential feature in productive thought" (West, 1997, p. 26) and tapping into this combinatory play may provide greater insight for the researcher into this complex and often thorny human ability called creativity.

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[1] Arthur Rimbaud
[2] g is the measure of general intelligence developed in 1904 by Spearman see (Spearman, 1904)

"Just Eliminate the Illness; Do Not Eliminate Dharmas": A Case Study on the Lived Experience of a Buddhist Surviving Spouse

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Abstract

There are many academic publications, based on Western theories, which investigate suffering from spousal loss, which can threaten an individual's physical health and psychological well-being; however, few studies examine how Buddhists tackle this difficulty. This case study, by in-depth semi-structured interviews, explores the lived experience of a Buddhist surviving spouse who underwent the sudden loss of her husband. Qualitative data was analysed by interpretative phenomenological analysis, with the aid of ATLAS.ti 7, a software package. In order to enhance the trustworthiness, peer analysis (inter-rater reliability=92%) and member-checking were adopted. Findings revealed that the bereaved Buddhist was living with feelings of guilt, but when she applied Buddhist wisdom, including the teaching of the law of interdependent origination and cause-and-effect, hopes of a reunion in future lives due to the cycle of birth and death, impermanence, living in the present moment, self-awareness, and strengthening capabilities to deal with afflictions, this surviving spouse could let the sense of guilt peacefully coexist with her being. This aligns with the doctrine of "just eliminate the illness; do not eliminate dharmas". This case hints at tackling distress through a deeper understanding of the formation of the phenomenal world, and mind management, implying that Buddhist philosophy not only offers alternative views to interpret the continual relationship between survivors and the deceased, but also inspires practitioners of helping professions to extend the horizons of their therapeutic services.

Keywords: bereavement, impermanence, *karma*, spousal loss, suffering

Grief, caused by the indelible loss of a beloved one, and indicating a permanent "loss of relationship" (Nesse, 2005, p. 202), is one of the life's major difficulties (Büchi et al., 2007; Malkinson, 2010), in particular, sudden spousal loss (Kübler-Ross & Kessler, 2005; Khosravan et al., 2010). The death of a spouse is rated as the highest stressful life event (Holmes & Rahe, 1967), yielding disruptive impacts on physical health (Ong et al., 2011), and it is accompanied by various levels of emotional disorder symptoms (Bowlby, 1980; Chan et al., 2012; Chan et al., 2011; Hensley & Clayton, 2013; Iglewicz et al., 2013; Karam et al., 2013; Pies, 2013); for instance, anxiety and depression, especially in the female population (DiGiacomo et al., 2013), whose daily functions are affected (Lund et al., 2010; Richardson, 2010; Schwarzer & Schulz, undated).

Although grief and mourning vary from person to person (Hensley, 2008), these bereaved individuals usually undergo four phases of mourning (Bowlby, 1980): numbness, searching for the deceased, disorganisation, and re-organisation in order to cope with this adversity by "reducing, mastering, and tolerating" (Stroebe, 2010, p. 274) the loss, thus achieving healthy mourning (Hoppes & Segal, 2010). Grief, as part of the healing process (Cholette & Gephart, 2012), engenders disparate psychological reactions, including making sense of the loss (Neimeyer, 2000), personal growth (Carnelley et al., 1991), feelings of guilt, and continuing bonds with the deceased (Malkinson, 2010). The latter two interweave frequently (Paul, undated).

Forming a continuing bond (Bowlby, 1980) in order to maintain an engaged relationship for any "unfinished business" (Kübler-Ross, 1997, p. 187) following the death of a beloved one (Small, 2001) accents a coping strategy of mourning (Baker, 2001) to accept the reality of the loss (Ronen et al., 2009), and its "adaptiveness" (Field et al., 2003, p. 111). However, there is an ongoing debate about continuing or relinquishing such bonds (Stroebe et al., 2005), which is associated with the process and strategy of tackling loss, coping styles (Stroebe, 2010), values, and cultural influences (Ronen et al., 2009).

Religion, a method of healing wounds (Kübler-Ross, 1974; Ozorak, 1996) and reflecting cultural values, offers solace to individuals who suffer from trauma (Seirmarco et al., 2011). This helps to attain better psychological adjustment (Ross et al., 2009), in particular, bereavement rituals (Nwalutu, 2012) benefiting "restoration of functioning" (Shear, 2010, p. 358). While voluminous studies examine how to deal with bereavement in Western religions, such as Coleman, Ivani-Chalian, and Robinson (2004) for the aged, Flatt (1988) for grief counselling, and Pond (2012) for children, research from the perspective of Eastern religions such as Buddhism may have a different view on this issue.

Buddhists possess emotions of grief, such as guilt, regret, and anger, just like most people (Kübler-Ross, 1981), and these can be caused by unresolved issues between the deceased and the survivor (Goss & Klass, 1997), for which caring practitioners have started studying grief and bereavement counselling based on Buddhist resources, involving Japanese, Tibetan, and early Buddhism. Despite the psychological interaction in which the survivor and the deceased hold a symmetrical power through which to benefit or hurt each other (Klass & Goss, 1999), continuing the relationship between the bereaved and the deceased remains a critically cultural concern among

the Japanese, as many of their customs are rooted in Buddhism (Klass, 2001). Moreover, ritual healing (Kwan, 2007) as one of the major tasks of Buddhist priests (Kawamura, 2000; Nakasone, 2000) (for instance, funeral and ancestor rituals) (Klass, 1996) is connected to blessing the deceased and leading the dead to a positive next life. In contrast, Tibetan Buddhism aims to transcend grief (Goss & Klass, 1997), and "deconstruct egocentric grasping" (Goss & Klass, 1997, p. 392).

By comparing Buddhist psychology, and applying it to grief counselling in Western models, aided by a case illustration and a reflection on group intervention, one study discussed the concept of non-dualism (Kaori & Park, 2009) which might potentially be integrated into grief counselling. Moreover, Chen (2000) formulates a grief counselling model, supported by a passage about spousal loss in *Āgama*, one of the important collections of *Theravāda*[1]. The model involves bereavement events, reactions of grief, the counselling process, and effectiveness, as explained by the four noble truths[2]. Although this attempt provides an alternative view for grief counselling, its focus on textual analysis restricts it to a literary theoretical discourse, without support from personal narratives of the bereaved.

Since Buddhism is one of the three embedded religious faiths among the Chinese (Neuberger, 2005), further investigations into how Chinese Buddhists expunge misery towards the death of a beloved one potentially contribute to the Chinese culture, influencing large population. This current research explores a deeper understanding of the lived experience of a Chinese Buddhist relieving the feelings of guilt during the bereavement of spousal loss, through Buddhist wisdom. This has helped the informant to be able to live with the distress. This case study may inspire diverse views for caring professionals who deal with clients affected by grief and bereavement to consider.

Research Design

This exploratory research adopts a single case study, an empirical inquiry (Yin, 1989), which examines real life (Soy, 1997) through a microscopic lens (Hamel, Dufour, & Fortin, 1993), and achieves insight (Yin, 2003) through relatively new topics (Eisenhardt, 1989; Nithsdale et al., 2008; Tellis, 1997; Tsoukas, 1989). The participant, Pureté de Lotus (her *dharma* name), being recruited through electronic mail, fulfilled the selection criteria, which included the following: first, she is a Buddhist; second, she is a bereaved survivor; third, she is willing to share her personal experience; and lastly, she was emotionally stable during the interview process.

In this case study, semi-structured, in-depth interview were conducted in Hong Kong in 2012, which were transcribed verbatim in Chinese. The transcriptions were analysed using interpretative phenomenological analysis that explores the "sense of self" (Shinebourne & Smith, 2009, p. 164), subjective feelings and meaning of life of the insider (Clare et al., 2008; Jackson & Coyle, 2009; Smith, 1996). The unit of analysis was an individual (n=1), and the analysis process was aided by ATLAS.ti 7, a computer-assisted programme. In order to enhance the trustworthiness, this study adopted member-checking to ensure the accuracy of transcriptions and data

[1] *Theravāda* (the doctrine of the elders 上座部佛教)

[2] The four noble truths (*catvāri-ārya-satyāni* 四聖諦): *duḥkha* (suffering 苦諦), *samudaya* (cause of suffering 集諦), *nirodha* (ceasing of suffering 滅諦), and *mārga* (path of ceasing of suffering 道諦).

interpretation, and a co-analysis by two analysts (the principle researcher and a peer analyst) coding separately and comparing the coding results, with a inter-rater reliability of 92%. Two "super-ordinate themes" (Smith et al., 2009, p. 107) ("just eliminate the illness", and "don't eliminate the dharmas") emerged from five "emergent themes" (Smith et al., 2009, p. 91) (easing feelings of guilt, thought transformation towards life and death, mourning rites, living in the present moment and self-awareness, and developing capabilities).

Findings and Analyses

The Bereaved Buddhist

Pureté de Lotus (hereafter simply referred to as Lotus), a Chinese middle-aged social worker, has been living in Hong Kong since her husband passed away in 2009. She met her husband on a European tour and stayed in France after she married. Enjoying a simple life there, she was eager to develop her spirituality and returned to Hong Kong study Buddhism, something her husband also encouraged her to do. The couple stipulated a gradual moving arrangement, in which Lotus went to Hong Kong first following which her husband would take a sabbatical leave and join her later. Lotus settled down smoothly and delighted in her studies until one day when she received a message about her husband's sickness. She immediately returned to France but found her husband doing well. This made her husband agree to her leaving after a few days. However, she subsequently received heart breaking news about her husband's sudden death (due to latent aetiology) after returning to Hong Kong.

Lotus heavily blamed herself for missing her chance to be with her husband in his last days, implicating herself in not keeping her marriage vow to look after him. This made her feel depressed, regretful, and guilty (Kübler-Ross & Kessler, 2005). While she continued her Buddhist studies, Lotus prudently managed her guilty feelings in trying to "eliminate the illness" (where "illness" metaphorically represents negative emotions towards her guilty feelings); but "[did] not eliminate the *dharma*" (where "*dharma*" connotes her guilt due to spousal loss). Being a Buddhist, she invoked insightful reactions towards her pain and regret by using Buddhist teachings along with her coping strategies.

"Just Eliminate the Illness; Do Not Eliminate Dharmas"

Buddhism was developed in India (Suzuki, 1938/1981) 2,500 years ago by the *Buddha*, which title refers to an enlightened person (Gethin, 1998). Its aim is annihilating distress (Conze, 1953), called perfect stillness[3], and attaining inner happiness. *Mahāyāna*, one of the contemporary mainstreams of Buddhism, expounds on the suffering yielded by misperception of the phenomenal world, and on freedom of affliction through mind management (Suzuki, 1938/1981). In particular, the *Vimalakīrti Nirdeśa Sūtra*, a major *Mahāyāna* canon (Watson, 1997), elaborates on this concept summarising the teaching of "just eliminate the illness; do not eliminate dharmas"[4]. This *Mahāyāna* doctrine elicits that sentient beings have to

[3] perfect stillness (*nirvāṇa* 涅槃)

[4] "Just eliminate the illness; do not eliminate dharmas. [Bodhisattvas] teach [sentient beings] so that they eliminate the basis of their illness." (McRae, 2004, p. 111) 「但除其病，而不除法，為斷病本而

manage their emotional reactions (the metaphorical illness) towards life's challenges; collectively termed attachment and vexations (Ng, 1994), from which they transfer challenges as such (referring to the dharmas) to the assets of helping other people, thus becoming a *bodhisattva* (a person who devotes her/himself to altruism) (Ng, 1994). Challenges are neutral, but uncontrollable and non-autonomous. However, sentient beings can manipulate only their emotional and psychological responses; therefore, they should not insistently try to alter their challenges, which more heavily aggravate the frustrations they experience. Instead, they should calmly see reality as it is and find ways to experience challenges positively, resulting in self transformation. The participant in this study underwent this process incurred through her spousal loss, as detailed below.

"Just Eliminate the Illness".

The "illness" for Lotus refers to her emotional responses towards feelings of guilt and grief, for which she adopted the strategies of easing her feelings of guilt, thought transformation towards life and death, and mourning rites. Inspired by Buddhist teachings, such as impermanence[5], and cause-and-effect[6], Lotus was able to tackle her "illness" in a relax manner, by transforming her thoughts, and continuing the relationship with her late husband spiritually through mourning rites.

Easing feelings of guilt. Loss and guilty feelings always intertwine (Lamb, 1988), but guilt implicitly accepts a personal responsibility for the misfortune (Doosje & Branscombe, 1998). Lotus felt a compunction about not fulfilling her wedding pledge to stay beside her late husband when he was sick. Her absence in the last phase of his life insinuated a personal failure in loving him, and became unfinished business that she could never complete. During that time, she was unable to look after herself, remembering:

> "His passing away makes my heart break. … Friends helped me do many things, even very tiny, trivial things. … I am so lucky that many people helped me, my friends in Hong Kong, friends in France, my family. Now, many people are still helping me."

Time goes by but the hurt continues. Lotus was unwilling to return to the institute where she studied Buddhism because the place marked a mental scar underscoring the loss of her beloved husband. Within those years, her guilty feelings occasionally attacked her, provoking painful regrets. Instead of avoiding the pain (Shear, 2010), she faced the bereavement, accepted "the reality of the loss" (Carr & Jeffreys, 2011, p. 87), and frankly admitted her persistent feelings of guilt, revealing:

> "[The feelings of guilt] doesn't increase. It may have reduced a little, at least I feel so. [It] will appear, occasionally. But, … I won't deliberately let the feelings of guilt disappear. It's still there."

Lotus had not considered whether or not she could remove her feelings of guilt, but had instead learned to live with it (de Silva, 2012), coexisting with imperfection. Her disregard for negative emotions towards her guilt pulled her to re-develop herself,

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[5] impermanence (*anitya* 無常)

[6] cause-and-effect (*hetu-phala* 因果)

but this did not interrupt her daily life. Even though her feelings of guilt sometimes arose, for which she would cry and feel upset, she accepted this wound as part of her life, which drove her to manage herself better.

> "I also can let go gradually. Perhaps, [I] can't ever let it go, then I don't let it go. … It (the feelings of guilt) doesn't hinder my life. … Then, you feel this is part of your life. … I think I don't know how to let go. … There is still a scar. … Perhaps, it is difficult to ask myself not to feel guilty when [I] feel guilty. Therefore, it is better to do something positive."

Her acceptance of these guilty feelings made Lotus reduce her resistance to face the distress. When she admitted her misfortune, she was able to manage the feelings, which released her from the emotional reactions towards her guilt; that is, she was putting into practice the principle of "just eliminate the illness". The reasons for this achievement were related to thought transformation and emotional ventilation through mourning rites.

Thought transformation towards life and death. Having experienced her spousal loss, Lotus viewed life and death differently based on Buddhist philosophy, such as impermanence, and cause-and-effect, through which she could cope with bereavement. Such notions of interdependence and inter-affinity, as further explained below, reveal that life and death are unnecessarily antagonistic but may hint at something ahead. With insight into the unity of life and death (death is the inception of the next life), Lotus gradually alleviated her grief and optimistically began creating favourable conditions for her desire to meet her husband again in a future life, relating:

> "Accepting the interconnection of life and death … [There is] no coming, no going. Which is the cause? Which is the consequence? That is, they are intertwined. I won't grieve so much for my husband's leaving. Perhaps, there is a cause missing somewhere. Another factor will create better conditions elsewhere."

Impermanence. Life is powerlessly predicted and controlled (Long, 1975), for which Lotus had a strong feeling of uncertainty, which explains that all beings are transient and temporal, including herself. This allowed her to realise her non-autonomy, regarding which she explained:

> "Impermanence … Something you … you can predict. But, the outcome doesn't appear 100% as your ideal. … That is, that stuff is insubstantial, void. Furthermore, human beings per se are non-self. You can never follow some fixed point – what you are you are."

Despite capriciousness occurring across life that never be predicted, Lotus learned to attain an ordinary mindset in order to accept the consequences as long as she had done her utmost to carry out her own plans. Hence, she was worry-free and lived with success and failure, or gratification and frustration.

Cause-and-effect. Lotus interpreted her situation as being that her marriage had originated from her previous lives in which her husband owed her and thus loved her in this life for compensation, or vice versa, eliciting her understanding of cause-and-effect:

> "[It] may be a previous cause. … This is the cycle of cause-and-effect.

> Maybe, he did something bad to me in the past, and so I do something bad to him now. … Perhaps, he owed me in our previous lives, and so he had to repay me in this life. [He] owed me something. This is the mutual benefit between cause and effect. … Was it that he treated me badly in the past, or I treated him badly? What was it like to be bad or not bad?"

Lotus further perceived cause-and-effect as an opportunity in which the loss prepared them for their reunion in a future life (Conant, 1996), which energised her to look after herself and do something good for her late husband in order to take advantage of this opportunity, accounting for it like this:

> "Perhaps, it's paving a path and planting a cause for the next life. I need to do more for him in my next life. … I think I need to cultivate some good causes. … I hope to plant more positive seeds, and hope that they will help us meet in the future. That is, we believe we have future lives, the cycle of birth and death, recycling. I also hope to meet him."

Lotus optimistically interpreted impermanence and cause-and-effect, according to the Buddhist connotations, embracing the opportunities to continue their marriage in a future life striving to take care of herself better.

Mourning rites. Mourning rites offer mourners the opportunity to alleviate complex emotions after the loss of a loved one and then reintegrate into the community (Bowker, 1997). Using a variety of "mourning aids" (Weinbach, 1989, p. 58), Lotus sensed her inner feelings related to continuing her bonds with the deceased through this ritualistic performance (Aguilar & Wood, 1976). She treasured a spiritual connection with her late husband more than the physical liaison, valuing that spiritual connection as long-lasting without geographical constraints, thus delineating:

> "Our relationship also has its beautiful side. It's also perfectly halted at an appropriate time. I'm not saying it's an end. We stopped at some point in time, and I also feel there is still a certain spiritual connection between us. That is, apart from love, the connection is spiritual."

The spiritual connection was realised through tracing her late husband's past experiences with which Lotus might not be as familiar. She returned to France and visited places her husband had been to before in order to retrieve sweet memories, retain an impression of the days in which they had been united, and discover all his old stories that were new to her, as if she were in fact following him, recalling:

> "Recently, for the stories he told me, I paid a visit, browsed in Paris. This left me with a deep impression. … I felt I wanted to trace his footprints … It was some very romantic feeling – that I could fall in love with him again. … I tried to know him again, locate his footprints. … So I then went to places he had visited. Would he have left any revelation for me?"

Also, Lotus shared her mourning rites with her husband's friends by gathering them to practise Tai-chi in front of his picture, displaying his friends' works of photography, and joining a marathon, illustrating that the more open she was to the memories, the greater opportunities she had to deal with grief and bereavement (Rubin, 1998). This not only showed respect to the deceased, but also converted Lotus's sorrow into energy; and more importantly, touched him spiritually, as she reminisced:

> "He (her late husband) did Tai-chi in France. … On that day, I bought a bunch of flowers and put it in front of his photo in a park. His fellow students did Tai-chi there. … He likes taking photographs. [We] made a memorial party. … We like taking photographs, bringing some photos. This is a kind of return to him. … In memory of him, his friends organised a marathon a year later. Some really ran [the whole thing]. I just ran a short distance. Some were cheerleading. As a result, I also ran intensely."

Although Lotus kept her husband's effects for a long period of time, the possession of them maintained memories about them as a couple (Kübler-Ross & Kessler, 2005), and she finally decided to dispose of them. This process was a ritual for her, in which she struggled with the decision to burn these items. It marked an ambivalence towards spiritual and physical connections that she grasped, remembering:

> "This year (2012), I actually burnt his stuff. … [I brought] his old stuff to a friend's house to burn it. … Reluctant, reluctant! When burning, [I] felt this one piece can't be burnt, so [I] kept it again. It would be pity if it were burnt! ... It is also a small ritual. I feel it's good for him and me."

"Do Not Eliminate Dharmas".

"*Dharma*" for Lotus refers to guilt and regret due to the loss of her husband, an irreversible misfortune. Instead of being encapsulated in a "trauma membrane" (Catherall, 1986, p. 474) to avoid painful memories of the traumatic event, Lotus combated her vulnerability and transformed grief into motivation (Goss & Klass, 1997; Park & Halifax, 2011), resulting in enrichment of her life through adversities by living in the present moments and self-awareness, and by developing other capabilities. This transformation stemmed from her knowing self loving-kindness, by which she experienced Buddhist wisdom in theory, practice, and spirituality, bearing witness that religion contributes to self transformation (Ullman, 1989).

Living in the present moment and self-awareness. Lotus, as a Buddhist devotee, realised the essence of Buddhist wisdom, in particular, the here-and-now, and self-awareness. Concentrating on the present moment, she neither binged on remembering her husband and the loss, nor felt anxious about her single life. Through this practice, she was able to understand *anitya* (impermanence 無常) more deeply, including the uncontainable reality, through which understanding she reduced her grief, and the complaints regarding her doleful experience. Also, she strengthened her sensitivity to her emotional changes and psychological needs. Thus, she did not deny her vulnerability, but instead overcame her sense of helplessness by taking on deep breathing, chanting, reciting canons, or imaging a *bodhisattva*, reiterating that:

> "Learning Buddhism is to live in the present moment, to rely on oneself, to have one's own awareness. … Sometimes I feel upset because our relationship was very good. … When [I] am sad, I will breathe, take deep breaths, and leave sadness to the present moment. This helps me to release the pressure. … But in helpless situations, you still need to … chant scriptures. Sometimes, this helps a little bit. … I recite the Heart Sutra. Do these things. Bring Kuan-yin (a *bodhisattva*) to mind. This is also enhancement, protection."

Developing capabilities. Lotus, as if she had been reborn through "lessons of loss" (Neimeyer, 2002, p. 940), became stronger in coping with her bereavement as well as more independent. She had to rely on herself, declaring that this loss brought her to re-develop her capability of coping with difficulties, looking after herself, and attempting new things (Bennett et al., 2010), for example, riding a bicycle – something she did not know how to do before. A significant reason for her happiness is the good journey she anticipated towards her late husband's next life (Goss & Klass, 1997):

> "In the past, I relied on my husband. But now I can't rely on him, and I find someone else or myself to rely on. … Death has brought me a lot. For instance, it has made me learn some new skills. For example, at that time, I regretted not riding a bicycle with him. … But now I can ride a bicycle in down town, ride a mountain bike, and try many new things …"

Advancing greater personal growth after loss and traumatic distress (Davis & McKearney, 2003; Harms & Talbot, 2007; Joseph, 2009; Pals & McAdams, 2004), often termed post-traumatic growth (Currier et al., 2013; Tallman et al., 2010), particularly in women (Büchi et al., 2009), Lotus treasured suffering and impermanence (Goss & Klass, 1997), from which she felt enlightened, attaining life meaning (Carr & Jeffreys, 2011; Goss & Klass, 1997; Katz, 2001). Her experience is similar to that of the Buddhist story of *Kisā Gotamī* (Kaklauskas & Olson, 2009; Ohnuma, 2007), who understood the true nature of reality after failing to find mustard seeds in households in which people had never experienced the loss of their loved ones. She was capable of "resolving grief [which starts] by accepting the reality of grief" (Goss & Klass, 1997, p. 387).

Discussion and Implications

This study reveals four aspects for discussion and implications for practice, involving first, non-dualism; second, religious coping; third, reunion in a future life; and lastly, limitations and future research directions.

Non-Dualism

In spite of assuaging grief over time (Rubin & Schechter, 1995), working through distress is difficult (Schick, 2011). Psychological, family, and social support for the bereaved are indispensable (Carr, 2010; Davies, 2011) during this process of change (Yalom & Sophia, 1988). However, a continuing relationship with the dead is always desirable to the survivor, which may really disrupt the daily functioning of the bereaved for a longer period of time. Renouncing the "relocation of the deceased" (Stroebe et al., 2005, p. 62) is therefore proposed, through loosening the bonds in order to reduce grief while maintaining the continuation psychologically. In contrast, encouraging the bereaved to "construct new biographies of the living and the dead" (Klass & Goss, 1999, p. 552) enables the survivor to enrich the meaning of his/her future life (Field et al., 2003) and transform grief into self autonomy and personal development (Field, 2010; Khosravan et al., 2010).

In the context of the above debate, this study addresses an alternative, that is, the idea of neither intentionally maintaining nor surrendering the bonds between the bereaved

and the deceased (Kaori & Park, 2009), thus relinquishing this dualistic choice (Wright, 2012). Dualism is a habitual thought model for sentient beings, forming either/or patterns; for instance, the choice to accept/reject, which compels individuals to struggle with the two extremes, thereby creating resistance, disapproval, and the tension of choosing correctly. This pressure invokes anxiety that negatively impacts mental health, especially for survivors who have experienced the loss of a loved one. When Lotus surrendered the choice between "guilt-proneness" (Flynn & Schaumberg, 2012, p. 125) and guilt avoidance, she overcame her emotional responses to the misfortune, and learned to live with her regret. This leaves another option for counsellors who deal with clients struggling with self-blame.

Religious Coping

Previous studies indicate a positive correlation between trauma and religious coping (Gerber et al., 2011). However, religious coping does not necessarily present a lot of rituals, usually utilising only the funeral ceremony. Instead, personal artefacts (Riches & Dawson, 1998) and the continuation of their common social networks are also emotional props, from which Lotus regained a "romanticism" (Katz, 2001, p. 272) and created spiritual companionship (Baker, 2001). This study reports a variety of religious coping strategies originating from the social activities and personal interests of the deceased, also offering references for bereavement counselling.

Reunion in a Future Life

Hope substantiates victims to live on (Kübler-Ross, 1969). Reunion in Heaven is the hope of Christian survivors (for instance, I Thessalonians 4:13-18, KJV/AV [Holy Bible, 1991]), while the hope of reunion in a future life was the result of Lotus's "optimistic explanatory style for negative events" (Ho et al., 2008, p. 473) through the teachings of the law of dependent origination[7] and cause-and-effect, so that she accepted her husband's passing away, and learned to enjoy the present moment (Fawcett, 2013) with self-loving-kindness. This significant idea from the survivor dimension urges counsellors not only to non-judgementally listen to their clients (Wang, 2007) but also to facilitate them to live well without the deceased (Worden, 1991).

Limitations and Future Research Directions

This case study presents the personal experience of a Buddhist survivor, which supplies an in-depth narrative that does not aim for generalisation. However, it reveals insight into tackling self-blame through Buddhist teachings, which may invite further discussions on how to apply these ideas to non-Buddhists. Moreover, "do not eliminate dharmas" involves two levels: first, self healing and transformation; and second, altruism after transformation. This study focuses on the former while future research on the latter is also suggested.

[7] the law of dependent origination (*pratītya-samutpāda* 緣起法)

Concluding Remarks

This single case study explores how a Buddhist survivor can cope with guilt springing from spousal loss, and how the survivor experienced the idea to "just eliminate the illness; do not eliminate dharmas" from the level of self transformation. The participant is able to live peacefully with her regret and retain an interconnectedness with the deceased through various mourning rites, resulting in converting frustration and adversities into energy and motivation, which gives many avenues to explore for grief and bereavement counselling. This research also proposes future directions towards application of Buddhist wisdom to non-Buddhists dealing with spousal loss.

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Applying Culture Bound Theory to Acute Social Withdrawal (Hikikomori)

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Abstract

This paper seeks to identify factors that implicate culture bound theory both in the socio demographic orientation of *hikikomori* and in the physical manifestation of `opting out` by `shutting in` and includes a brief comparison of those factors from a control culture with the related social expectation withdrawal of *runaway*. It uses as a baseline for analysis, Japan`s position in 3 of the culture value indices defined by Hofstede, (G.Hofstede: 1980) namely the dimensions of:

- individualism; IDV,
- power distance; PDI,
- uncertainty avoidance; UAI,

and seeks to analyse how, in conjunction with educational norms, peer behavioural patterns and employment expectations within a society, cultural values can determine how social withdrawal and `opting out` will present. *Hikikomori* is not a social situation that is disappearing in Japan, even though it is no longer the hot topic of the previous decade. As interest wanes and media inevitably moves its attention on to the next cult like phenomenon among young people who behave differently, the growing *hikikomori* population of over one million ( ) should not be forgotten. Educators are in a prime position to facilitate change and question teaching styles that may play a critical role in responsibility for such a huge, national, cultural specific, social epidemic that is not vanishing like its members, but is instead rampant and growing.

Introduction

Culture-bound is a term that indicates the native countries culture is trigger for a certain social behaviour or trend. By naming a trend culture-bound, it is easier to trace cause and therefore perhaps to find solutions or appropriate ways to respond or not. However, this paper does not seek to offer solutions to the issue of *hikikomori* or to propose counsel although it does contain opinion. It looks at possible contributing background societal factors and at a juxtapositional social withdrawal phenomenon classified often as `*runaway*` in an attempt to identify specific enantiomers that lay claim to the theory herein that *hikikomori* is both Japanese specific and culture bound.

Secher in Watts (2002) explains "When you get large numbers of individuals behaving in similar ways, it is generally a cultural expression of some kind".

Hikikomori is now a well known term. The translation alternatives (apathy syndrome, shut-ins, voluntary seclusion or acute social withdrawal) never caught on for a reason; the Japanese word *hikikomori* is the term that settled and is most widely used around the world for the phenomenon and this indicates implicitly that it is considered to be either Japanese specific or at least found mainly in Japan.

It is interesting to note the leading specialist on hikikomori psychologist Dr.Tamaki Saito coined the buzzword originally as *shakaiteki hikikomori* in 1998 (Saito:1998) acknowledging the intrinsic social (社会) or cultural roots.

Originally considered an extension of truancy (不燈侯) it was first treated as a medical ailment with copious quantities of drugs (Zielenziger:2006) but is now widely accepted as a pattern of behaviour of young people who have jumped off the train of expected educational and social norms, as happens in many countries but have confined themselves inside their rooms as an escape from that pressure.

The IDV component.

Individualism.

To isolate oneself is a natural escape strategy reaction for a collectivist low IDV society member. In high collectivist cultures like Japan, **context =identity**. A person will feel safe and comfortable belonging to a group. Indeed, without answers from a stranger to establish context with questions like; `What is your name? ` `How old are you? ` and `Where are you from?` it is difficult to establish a baseline connection with another person. Even on television interviewing random strangers in the street, Japanese television will give a person`s age and job details, where in an individualistic culture this would be considered rude, an invasion of privacy or in some cases a human rights issue.

This can be seen in statistics of how trusting people in both culture types are of complete strangers. In a collectivist culture a stranger is not part of a group and so difficult to place or *identify*. They are met with unease because there is no context. This unease is incidentally often misinterpreted as shyness by those from collectivist cultures who interpret how this unease would be identified in their own self oriented

culture. Ignoring outsiders or non members is acceptable because the group must maintain its loyalty above all else and strangers will be met with unease.
In an individualist society, a person relates to a stranger as a `self`, valuing their individual and independent status. A whole group however may conversely be met with distrust.

In an individualist culture like America, Australia and the UK, a person feels most comfortable when they are able to make an individual expression of self because **self= identity.** There will be hints and comments pertaining to the self which may appear self centered but are culturally ingrained communicative habits in individualistic societies where people choose what to share and are taught that to be assertive with self-needs and opinions is a highly desirable quality.

Zielenziger (ibid) reports on an experiment with photography where a group of Japanese students (low IDV culture) and a group of American students (high IDV culture) were told to photograph a friend. The Japanese students all photographed their friend in an environment of some kind with the background taking more than 60% of the photograph frame. The American students all took closer up shots of their friend, the person took up most of the `canvas` and the background was blurred or inconsequential. This could denote the importance of **people in context** (typical in Japanese culture) contrasting the importance of **people as self** (typical in American culture).

Ignoring outsiders or non members is acceptable in a collectivist culture because the group must maintain its loyalty to each other first and foremost like a mother cat guards her kittens. A complete stranger represents a person that cannot immediately be placed in context or group. The Daily Yomiuri (June 13th :2004) conducted a survey on trust in strangers and 47% of Americans responded saying other people can be trusted despite the far higher crime rate, where only 26% of Japanese responded that they would trust a complete stranger. The implication for hikikomori here is that once the person removes themselves from the group for an extended period they will be shut out and ignored because they no longer belong. Likewise, if an individual within the group behaves in a way contrary to group unwritten rules but accepted behavioural patterns for that group, they will be ignored and shut out to the point where they may voluntarily leave the group. This passive aggressive style of bullying is more common in group-oriented cultures and differs from the more violent and verbally abusive style bullying in self-oriented cultures.

A glimpse at historically rooted traditional collectivist culture

In traditional village society in the Tokugawa period, the government divided each village into 5 units of mutual surveillance to create smaller groups within the village in order to promote mutual dependency and loyalty (⑤人国). The community was divided into these groups and if one person within the group disobeyed rules or rebelled the whole group would be punished or chastised. In this way, it was taught through the generations that responsibility was for one`s own group (only), and that the individual has little power but as a group things can be achieved well.

By relying on this style of group dependency an individual`s ability to think critically ***without*** consulting others, and the opportunities and incentive to create change (which

happens when one person thinks or does differently; others see, discuss, adopt and accommodate) and the practice of doing so have diminished.

Closed networks known as shigarami within society bind the groups strongly together so that those at the top, treated with utmost respect born from recognition of the huge responsibility they have over the group`s well being, must forfeit as much as their lives if one member of their group steps out of line and shames the network. This close knit structure can be compared with Amish societies `Ordnung` where rules down to exactly what members can wear, and other some religious cult groups in other countries too, but in Japan (and other highly collectivist group cultures too) this sense of responsibility to the group is so intense that any party not within the network or connected to a group cannot possibly get anywhere in life; where in contrast the option to leave the cult or group is a viable one and often first choice escape route in more individual-oriented countries with higher IDV scores.

While there is nothing new in this theory, the role that this imbedded cultural way is intrinsically implicated in the main isolation feature of social withdrawal/hikikomori is clear. Only by completely withdrawing from ***all*** groups can the individual salvage their desire to be different or to behave differently from ***any*** group.

By withdrawing from the group they are in turn ignored and outcast and can never again enter a new group in fear of the social stigma trailing and attached to having left one. The final irony however is that the world itself then clumps these individuals into a group and gives them the name `*hikikomori*`.

PDI component (Power Distance Indice).

Dependence V Independence.

The fact that hikikomori choose to retreat to their own rooms is a curious one from a Western high power distance country perspective. A young person`s room is where we are punished and forced to remain when we have done wrong. It is a punishment `to be grounded`. Yet, if we look at this choice with Hofstede`s cultural dimension of power indice in mind regarding a high PD culture with no similar traditional confining punishment in childhood, it is easily comprehensible.

PDI rating is a country`s score for how it values dependency. This is connected closely to the other two components of collectivist and uncertainty avoidance but the focus is on hierarchy of a society and how extensive equality is in terms of power. In a low power distance country people will respect independence and demand it. In a high power distance culture (like Japan) people at the top will have great power and positions and rank will be controlled carefully with leaders consistently treated with great respect and obedience. In low power distance cultures there will be more rebellion for equality and change from those who feel powerless and less resistance to that rebellion from those who have the power.

In both cultures, parents teach differing values to their children. In Japan, traditionally although times are changing, parents have taught children to obey the teacher and all rules. An important mantra is not to cause problems for other people and to fall in line

to save face for the family. In America and lower PD cultures, children are taught to question the teacher, to question everything and to answer back with an opinion when they disagree, to be a `hero` by protecting a stranger and to `think outside the box`. These are basic differences in the way parents bring up their children and as such, reflect how a society shapes its power distance.

So, it is not surprising that opting out for Japanese young people should be to stay at home. Here, their own room is a private sanctuary away from the peer group and world outside that imposes restrictions on them. Here, they can be semi safe from criticism from superiors` or society`s judgement, in a womb like existence with Mother nearby. The core value of power distance is rejected but the symbiotic relationship with Mother is very strong and offers a tiny thread of that instinctive culture born expectancy that is hard to shake- that of dependency.

In low power distant countries, we have the opposite culture reactive phenomenon in young people; that of `runaway`. It is directly related to power distance because it is chooses to run from all dependents and strives for complete independence even if that means homelessness. As James Lehman, a Canadian behavioural therapist for teens and young adults writes; "*kids run away from problems they cannot handle. It`s in our culture. Adolescents often see running away as a way to achieve a sense of power and independence.*" (Lehman: 2009).

While both social phenomena are rooted in rebellion or reaction against authority, *hikikomori* is unique because it chooses to place the family as a safer haven than the peer group. This in turn, suggests that bullying and school pressure play a **larger** part in retreat than in the counterpart phenomena of *runaway*, where perhaps young people are fleeing the pressure from family pressure.

Finally, let us take a look at the uncertainty avoidance indice and how it relates to *hikikomori*.

UAI component

Rituals of performance.

Japan`s high value of employment stability and lifetime employment is a mental programming statistic, not necessarily found within individuals but a composite factor within the construct described and researched by Hofstede (Hofstede, 1983: 118-119) under the name of `**Uncertainty Avoidance**`.

The longitudinal (25 years) research that supports culture bound hypothesis in connection with employment avoidance and social withdrawal is documented in approx. 118 articles published in the `Journal of International Business Studies`between 1983 to 2008 (Au,K.Y, 1999;799-812).

UAI is a cultural dimension of toleration concerning uncertainty about the future. At the high end of the scale are cultures in which people feel comfortable with rituals and routines that reduce uncertainty in daily life and in the workplace. Low end UAI cultures are those in which people are happier with fewer routines and rituals and are open to much wider individual variation. In countries where UAI is high, and **Japan ranks 92nd out of 100** countries surveyed (Hofstede, 1980) people will demonstrate extreme loyalty to the company or their employer and feel extreme social obligation to participate in group activity.

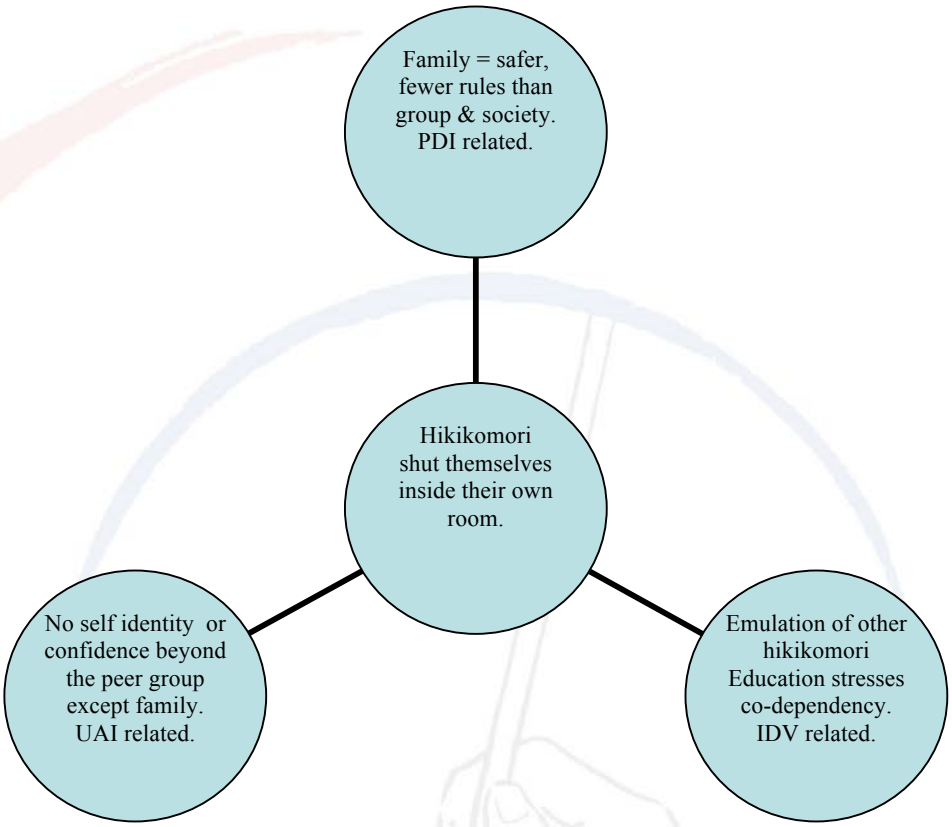
A high UAI score relates to *hikikomori* because 100% of *hikikomori* young adults have opted out of both *work and group* social activity. They are therefore reacting in a culturally adverse mode, mitigating the relevance of the claim `culture bound`.

The pressure on young people within the typical *hikikomori* age range of 14 to 30 -to find work ***and to stay in that work*** - or to find a club activity ***and stay in that activity*** and to co-operate correctly within a rigid peer group hierarchical system (侯輩・先輩) within Japanese society are factors that go towards creating pressure to isolate. As unemployment rates rise and the social stigma attached to any kind of so named ***drop out*** continues to prevail, this has created in natural turn a world of *internet cafe hermits*, *parasites, neats* and *hikikomori*..

Summary

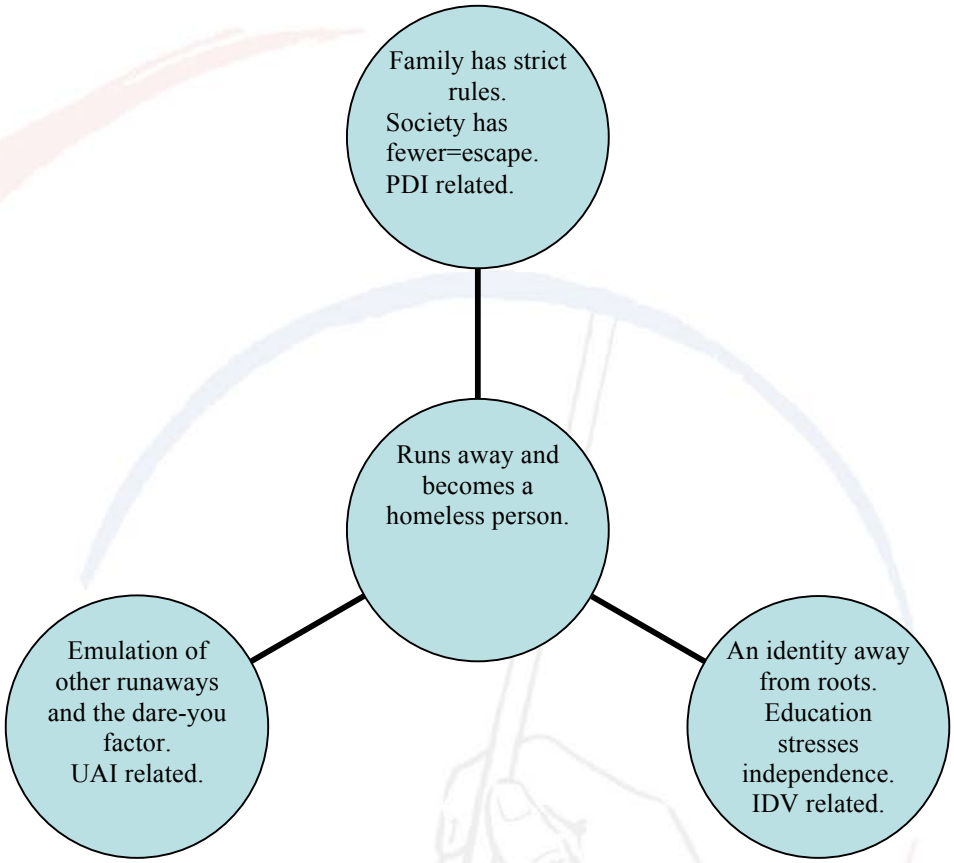
In the diagrams 1 and 2 below, we can see how the 3 paradigms discussed in this paper centralize themselves in real terms. The polar cultural diversions expressed in the manifestation of opting out in the central circle.

Diagram 1.



Japan: Retreat is inside. ***Sugai:2013***

Diagram 2.



Retreat is outside: America, U.K, Australia, New Zealand. Sugai 2013

While both social phenomena are rooted in rebellion or reaction against authority, *hikikomori* is unique because it chooses to place the family as a safer haven than the peer group. This in turn, suggests that bullying and school or work pressure play a **larger** part in retreat than in the counterpart phenomena of *runaway*, where perhaps young people are fleeing the pressure from family pressure. Parents in Western cultures usually encourage their children to leave home by 18 where in Japan *"parents are happy to allow their children to remain at home and live from their parents` income until their thirties"* (Suwa et al. 2003).

Conclusion

In America and England, New Zealand, Australia and other individualistic cultures the trend for opting out sees `*runaways*` leaving the home and seeking an alternative place to be. In this paper I have tried to analyze why Japanese *hikikomori* choose to confine themselves in their rooms within the context of 3 cultural indices as defined by the world famous cultural expert Geert Hofstede. I have tried to confirm my theory that the exact way `opting out` of society manifests itself in Japan is clearly culture reactive. It is beyond the scope of this paper to develop further the enormous implications that this theory has on education and where change could be sought, but it is the foundation for further research into such considerations.

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Factors associated with Attention Deficit/Hyperactivity Disorders in school-age children In Thailand

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Abstract

This cross-sectional study examined relationship between risk factors and Attention Deficit/ Hyperactivity Disorders (ADHD) among school-age children. Samples were 7,188 Thai students in grade 1-5 in primary schools by using three-stages stratified cluster sampling and classified by regions, provinces and school types. Participants and their parents were screened by SNAP-IV Thai (parent version) and then interviewed by child and adolescent psychiatrists following DSM-IV criteria which there were 521 ADHD and 1,750 non-ADHD children for this study. Descriptive statistic, Chi-square test and multiple logistic regressions were used. Results suggested that factors associated with ADHD among school-age children were male, grade 1-3, living with relatives, class repetition or punishment of teacher. Also, family and parental factors which were widow, divorced or separated parent, low educated parents, family with insufficient income and debt, father who had history of inattention/hyperactivity, drug addicted, or disruptive behavior, and parent with lack of knowledge about ADHD. This study illustrated that ADHD relates to not only personal factors of the children themselves but also parental and family factors. The stakeholders of child health care should concern on those factors with regards to early screening and getting appropriate treatment.

Keywords: ADHD, associated factors, school-age children

Background

Attention Deficit/Hyperactivity Disorder (ADHD) is one of the most common behavioral and neurodevelopment pediatric disorders, with symptoms of inattention, hyperactivity and impulsivity, associated with dysfunctional school performance and social behavior, persists into adulthood up to 60% of case and usually associated with the presence of one or more major comorbid psychiatric disorders (APA, 2000)

The prevalence of ADHD is higher in the Arab region than that in the other parts of the world (Bener et al., 2006). ADHD have been found approximately 9% of school-age children worldwide (Halperin& Healey, 2011). In Thailand, the prevalence of ADHD in Thai students is 8.1%which boys(12%) was substantially higher than girls (4.2%) (Visanuyothin et al., 2013).

Researches of factors related to ADHD focused on various fields including genetic and biological factors, personality traits, social and personal factors (Strine et al., 2006).Also, environmental factors, which are financial status, marital status, violent parenting, parents' history of psychiatric illness, children with low intelligence, academic failure and social rejection, lead to associated with ADHD(Miller et al., 2006). However, only a few studies in these areas have been found in Thailand.

Early diagnosis of ADHD children and discovery of factors leading to ADHD would be helpful for developing suitable treatment plan for specific symptoms and further complications from treatment (Rosenberg et al., 2013). Accordingly, this study aimed to examine factors associated with ADHD among primary school students. The results from this study would be useful for treatment planning together with other medical teams in order to improve the life quality of the children and their family

Objective

This cross-sectional analytical study examined relationship between risk factors and ADHD among school-age children.

Methods

Sample and population

Participants were 7,188 students in primary school from grade 1 to 5 in four regions of Thailand and Bangkok. Regarding inclusion and exclusion criterias, 521 ADHD children from the study of prevalence of ADHD in Thailand (Visanuyothinet al.,2013) were selected by using random three-stage stratified sampling method. For the control group, non-ADHD participants were matched the ADHD by years of age.

Research Tools

A set of questionnaires about personal factors including sex, age, religion, educational level and background; along with parents information consisting of marital status, educational background, occupation, sufficiency of income, knowledge on ADHD and past behavioral problems such as hyperactivity, drug addiction, lying, stealing, and disruptive behaviors.

There were two steps of diagnostic process. The first step was screening by using SNAP-IV Thai version which has the sensitivity 82% and specificity 60% (Buransuksakul&Pityratsatian, 2008). Afterwards, participants and their parents were interviewed by child and adolescent psychiatrists following DSM-IV criteria.

Statistical methods

Collected data were analyzed by the Statistical Package for the Social Sciences (SPSS) version 17. Descriptive statistics chi-square test and univariate analysis, odds ratio, and 95% confidence interval were run. The variables with $p < 0.25$ was chosen for multiple logistic regressions.

Results

In ADHD group, there were 134 (25.7%) girls and 387 (74.3%) boys. The control group were 902 (51.8%) girls and 840 (48.2%) boys. The results from the chi-square test and univariate analysis showed that factors associated with ADHD among school-age children were male, the grade 1-3 students, children who were living with relatives, children who were repeatedly in class and punished by teacher. Also, having parents who were widow, divorced, or separated, parents graduated from high school and under, family with insufficient income, having father who had history of inattention/hyperactivity, drug abuse, disruptive behaviors, and parents who did not have knowledge of ADHD (Table 1 and 2).

From table 3, the relevant risk factors of ADHD are illustrated. Boys with ADHD has 3.7 times higher than girls. Children who stay with relatives has 1.6 times higher risk than that those with parents. Student who had the history of repeating educational level or getting punishment from teacherhas 1.9 and 2.8 times higher risk than those who has no history. Divorced or separatedparents and family with insufficient income were at risk by 1.7 and 1.4 times. Having father withhistory of behavioral problem(hyperactivity/drug abuse/disruptive) and lacking knowledge on ADHDincrease the risk by 2.0, 2.0, 1.7 and 2.3 times, respectively.

Table 1 Comparison of child factors between Non-ADHD and ADHD students

Child factors	N (%)		p-value
	Non-ADHD (n=1750)	ADHD (n=521)	
Sex			
-Female	902 (51.8)	134 (25.7)	
-Male	840 (48.2)	387 (74.3)	< 0.01*
Level			
-Upper Primary	729 (41.7)	163 (31.3)	
-Lower Primary	1,020 (58.3)	358 (68.7)	< 0.01*
Number of children			
-More than 1	1,333 (77.6)	391 (76.7)	
-Only 1	384 (22.4)	119 (23.3)	0.64
Caretakers			
-Both father and mother	1,033 (60.2)	250 (48.4)	
-Father or mother	332 (19.3)	132 (25.5)	< 0.01*
-Relatives	352 (20.5)	135 (26.1)	< 0.01*
History of changing school			
-No	1,290 (76.3)	382 (74.9)	
-Yes	401 (23.7)	128 (25.1)	0.52
History of retention			
-No	1,658 (97.0)	477 (92.6)	
-Yes	51 (3.0)	38 (7.4)	< 0.01*
History of getting punished			
-No	1,606 (95.0)	420 (82.5)	
-Yes	84 (5.0)	89 (17.5)	< 0.01*

Table 2 Comparison of parental and family factors in non-ADHD and ADHD students

Parental Factors	N (%) Non-ADHD (n=1750)	N (%) ADHD (n=521)	p-value
Marital status			< 0.01
-Married	1,230 (73.0)	311 (61.1)	
-Divorced/Separated	455 (27.0)	198 (38.9)	
Education level			< 0.01
-High School	250 (15.8)	46 (9.7)	
-lower than high school	1,328 (84.2)	427 (90.3)	
Sufficiency of income			0.02
-Suffiecient	482 (29.2)	120 (24.0)	
-Insufficient	1,168 (70.8)	381 (76.0)	
Knowledge on ADHD			< 0.01
-Have	277 (15.8)	43 (8.3)	
-No have	1,473 (84.2)	478 (91.7)	
History of hyperactivity (Father)			< 0.01
-No	1,313 (84.3)	294 (64.6)	
-Yes	245 (15.7)	161 (35.4)	
Drug abuse (Father)			< 0.01
-No	1,470 (94.5)	388 (85.1)	
-Yes	86 (5.5)	68 (14.9)	
Disruptive behavior (Father)			< 0.01
-No	1,333 (86.1)	308 (68.1)	
-Yes	215 (13.9)	144 (31.9)	

Table 3 Results of binary logistic regression

Risk Factors	Adjusted OR (95%CI)	p-value
-Sex : Male	3.7 (2.3, 4.2)	< 0.01
-Child caretaker : Parents	1.5 (1.2, 2.0)	< 0.01
: Relative	1.6 (1.2, 2.1)	< 0.01
-History of repeating: Yes	1.9 (1.1, 3.2)	< 0.01
-History of getting punished: Yes	2.8 (2.1, 3.7)	< 0.01
-Marital Status: Divorced/Separated	1.7 (1.2, 2.3)	< 0.01
-Education Level (Father) : Lower than high school	1.6 (1.1, 2.6)	0.01
-Income suffieciency:Insufficient/on debts	1.4 (1.0, 1.8)	0.04
-Parents' knowledge on ADHD: No	2.3 (1.4, 3.7)	< 0.01
-Father's history of hyperactivity	2.0 (1.5, 2.7)	< 0.01
-Father's drug abuse	2.0 (1.2, 3.1)	< 0.01
-Father's disruptive behaviour	1.5 (1.1, 2.3)	0.01
-Mother's disruptive behviour	1.7 (1.2, 2.6)	0.01

Discussion

This study found that chances of boys having ADHD symptoms were higher than girls by 3.7 times, which was consistent with many previous studies (Larry, 2004; Sukanich&Lotrakul, 1998; Trangkasombat, 1998). Especially for those who are in elementary school (grade 1-3), the result corresponded to many studies both in local and overseas. The study also found that children with poor academic record and have history of repeating level of education were 1.9 times at risk which is supported by Hanna's study (2009) which found that most children with ADHD had difficulty learning (i.e. poor academic record). Moreover, 30% of children with ADHD also have learning disabilities (LD). Poor academic record is caused by the impact of the disease (Russell, 2011; Molina, Marshal, &Pelham, 2005). If teachers and parents work together to support the child, learning difficulty will be reduced. For children with aggressive behavior who were prone to punishment, the risk is as high as 2.8 times. Similarly, the study of Unnever& Cornell (2003) showed that children with ADHD were likely to have aggressive behaviors. Children are abused and like hurting others. Also, Ignorance and punishment of teachers blocked recovery of students' conditions. For ADHD children, severe punishment does not help them to behave better. On the other hand, the ways to reduce inappropriate behaviors are to provide supports, teach the right behavior clearly and provide opportunities to learn repeatedly. For parenting factors, children staying with divorced/separeated parents were 1.7 times riskier comparingwith staying with normal family. Correspondingly, Brookes et al. (2006) discovered that the dysfunction of ADHD family led to development of aggressive behaviour in children with ADHD and could even lead to drug abuse during adolescent age. For parents who have poorly educated, insufficient

income or on debtsand lackof knowledge on ADHD, the risk is 2.3 times, which is consistent with the study of Masamani Veeranarong (2003),which demonstrated that most parents were lack of knowledge on ADHD, misconceptions, poor awareness and alsono compliance to the treatment process. As such, parents should be provided information of ADHD, so that they can help preventing the problem at early stage. Government should also provide financial aid to lower burden of parents.

Furthermore, the research findings discovered that parents with the history of hyperactivity were at risk of having ADHD children. This genetic characteristic has major influence on children (Hudziak et al., 2005). Parents with the history of drug usage and disruptive behaviour has high chance of bearing ADHD children, which also found in other studies (Wacharasindhu&Panyayong, 2002; Johnstone&Mash, 2001) that external factors, such as income suffiiency, marital status, violent parenting, lack of discipline influence, history of parent's psychosis and large family, contribute to the children aggressive behaviour. With low intellectual level and academic failure, children tended to below socially accepted leading to association with delinquent friends together with aggressive and inappropriate acts, eventually.

Conclusion

Students with factors associated with ADHD in school-age children- both personal factors, parenting, and environmental influences on students -should be identified for the future treatment process.

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Compulsive Buying among Late Adolescents as an Identity-related Compensatory Behaviour: Big Five Personality, Identity Motives and Self-construal as Predictors

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ABSTRACT

Compulsive buying is dysfunctional consumer behaviour with harmful personal, social, psychological, and financial problems. Social psychological perspectives define compulsive buying as an extreme form of ordinary buying motivated by mood regulation and identity seeking (Dittmar, 2004). The present research aims to predict compulsive buying tendency by identity-related factors: big five personality, identity motives, and self-construal through a questionnaire study, which sampled 460 undergraduate students. In terms of big five personality, results show that neuroticism emerged as the strongest positive predictor of compulsive buying tendency, followed by extraversion, whereas agreeableness was a negative predictor. In terms of identity motives, need for self-esteem which is relevant to identity-related affect positively predicted compulsive buying, followed by need for distinctiveness which is relevant to identity enactment, whereas need for efficacy which is relevant to identity enactment was negative predictor. In terms of self-construal, consistency and self-reliance negatively predicted compulsive buying tendency, whereas inclusion of others in the self was positive predictor. Furthermore, inclusion of others in the self was a partial mediator between two personality traits: extraversion and agreeableness, and compulsive buying.

Keywords: compulsive buying; big five personality; identity motives; self-construal; consumer behaviour; identity

Introduction

Compulsive buying is considered to be a problematic consumer behaviour which consists of the following core features: the impulse to buy is experienced as irresistible, individuals lose control over their buying behaviour, and they continue with excessive buying despite adverse consequences in forms of personal, social, occupational, and financial problems (Dittmar, 2004). According to clinical diagnostic DSM-IV-TR (American Psychiatric Association, 2000), compulsive buying is a kind of psychiatric disorder categorized in "Disorders of Impulse Control Not Otherwise Specified". However, it is not yet resolved whether compulsive buying behaviour is in the category of compulsive-obsessive, impulse control or mood disorders. On the other hand, social psychological perspectives suggest that compulsive buying is an extreme form of ordinary purchasing behaviour dealing with mood and identity problems (Dittmar, 2004).

Social psychological model of compulsive buying as identity seeking

In modern consumer culture, people's buying behaviour is motivated by psychological fulfillment, whereas people in traditional culture concern about utility maximization and rational belief. Dittmar (2005a) found that among compulsive buyers, psychological buying motives played a bigger role than economic-rational motives. Apart from emotional buying motive, ideal-self buying motive is dominant the other identity-related buying motives.

Dittmar (2005a) proposed a two-factor model of compulsive buying mainly focusing on identity-related perspectives. Symbolic self-completion theory by Wicklund and Gollwitzer (1982) was the starting point of this model, which states that when people perceive that they lack important indicators of accomplishment in their self-concept, people will produce a motivation to compensate. This can refer to acquiring and using material goods as symbolic of fulfilling the self. For example, a skirt is symbolic to feminine clothes. A young girl who feels that she lacks femininity, will wear a skirt instead of jean trousers to compensate her feeling.

The first factor is self-discrepencies which concerns of self-concept dynamics which alter people's motivation to strive for an ideal self. Buying as compensatory behaviour may increase as a function of discrepancies between how people perceive themselves (actual self) and how they would like to be (ideal self). This factor starts from self-discrepancy theory (Higgins, 1987) highlighting negative affective outcomes of discrepancies in the form of dejection and depression. However, "possible selves" representing individuals' idea of who they would like to be, can function as incentives for future behaviour (Markus & Nurius, 1986). As a result, people buying consumer goods allows people to reduce the perceived gaps between ideal self and actual self, according to buying consumer goods as an identity-repair strategy (Dittmar, 2005a).

The second factor is materialism which is defined as "a set of centrally held beliefs about the importance of (material) possessions in one's life" (Richins & Dawson, 1992, p.308). People who have high materialistic values believe that acquiring material goods is a central life goal, a prime indicator of success, and the key to happiness and self-definition (Richins, 2004). From this factor, people will construct

their identities through buying consumer goods as an identity-seeking strategy (Dittmar, 2005a).

In addition, materialistic values predict compulsive buying behaviour in both gender and different age groups (Dittmar, 2005b; Dittmar, 2005a). Moreover, materialistic values predicts ideal-self buying motive, except in middle-aged men. On the contrary, self-discrepancies predicts ideal-self buying motive and compulsive buying behaviour in women only. Therefore, ideal-self buying motive predicts compulsive buying behaviour (Dittmar, 2005a). Identity-seeking buying motives were also a mediating variable between materialistic values and compulsive buying online (Dittmar, Long, & Bond, 2007).

Big Five Personality

Costa & McCrae (1989) proposed that individual differences in traits called the *"Big Five" factors* or *Five Factor Model* of personality were five broad dimensions of personality which are *Neuroticism*, *Extraversion*, *Openness to Experience*, *Agreeableness*, and *Conscientiousness*.

Neuroticism – (sensitive/ nervous vs. secure/ confident) refers to individual differences in emotion in response to any stimuli in the forms of anxiety, angry hostility, depression, self-consciousness, impulsiveness and vulnerability.

Extraversion – (outgoing/ energetic vs. shy/ reserved) refers to individual differences in interpersonal relations in the forms of warmth, gregariousness, assertiveness, activity, excitement seeking and positive emotions.

Openness to Experience – (inventive/ curious vs. consistent/ cautious) refers to individual differences in response to any stimuli around oneself interest for new experience in forms of fantasy, aesthetics, feelings, actions, ideas, and values.

Agreeableness – (friendly/ compassionate vs. competitive/ outspoken) refers to individual differences in norm and model determination to live in one's life in the forms of trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness.

Conscientiousness – (efficient/ organized vs. easy-going/ careless) refers to individual differences in goal achievement in the forms of competence, order, dutifulness, achievement striving, self-discipline, and deliberation.

Personality and buying tendency

There are many previous researches addressing compulsive buying in America, Europe and some Asian countries such as South Korea (Lyi, Lee, & Kwak, 1997). However, there are a few studies focusing on compulsive buying in Thailand. Various prior studies examined the effects of big five personality on buying (e.g. Balabanis, 2006; Chobthamkit, 2010, 2012; Mikołajczak-Degrauwe, Brengman, Wauters, & Rossi, 2012; Mowen & Spears, 1999; Mueller, Claes, Mitchell, Wonderlich, Crosby, & de Zwann, 2010; N & Raveendran, 2007; Shahjehan, Qureshi, Zeb, & Saifullah,

2012; Sun, Wu, and Youn, 2004; Wang & Yang, 2008), but there is no consistent pattern of personality that can predict compulsive buying.

Identity Motives

Identity motives are defined as pressure toward certain identity states and away from others, guiding the processes of identity construction. Not only do identity motives play an important role to form one's self-concept, but they also affect a variety of aspects in life including consumerism (e.g. Lynn & Snyder, 2002).

Vignoles, Regalia, Manzi, Golledge, & Scabini (2006) reviewed some literature about the individual self-concept, social identity, and identity threat to identify six conceptually distinct motivational goals affecting identity construction characterized by feeling of *self-esteem*, *continuity*, *distinctiveness*, *belonging*, *efficacy* and *meaning*.

The *self-esteem motive* refers to "the motivation to maintain and enhance a positive conception of oneself" (Gecas, 1982, p.20).

The *continuity motive* refers to the motivation to maintain a sense of "continuity across time and situation" within identity (Breakwell, 1986, p. 24).

The *distinctiveness motive* pushes toward the establishment and maintenance of a sense of differentiation from others (Vignoles, Chryssochoou, & Breakwell, 2000).

The *belonging motive* refers to the need to maintain or enhance feelings of closeness to, or acceptance by, other people, whether in dyadic relationships or within in-groups (Baumeister & Leary, 1995).

The *efficacy motive* is oriented toward maintaining and enhancing feelings of "competence and control" (Breakwell, 1993, p. 205).
The *meaning motive* refers to the need to find significance or purpose in one's own existence (Baumeister, 1991).

Identity motives and buying tendency

The author's previous study on Thai samples with a full-time job found that need for belongingness positively predicted compulsive buying (Chobthamkit, 2010, 2012). There are indications which support the proposal that relevant factors play a role in buying, although there is no previous research addressing multiple identity motives and buying tendency. O'Guinn and Faber (1989) found that compulsive buyers had significantly lower self-esteem than general consumers. Furthermore, Baumeister (2002) proposed that self-control failure affected impulsive purchasing behaviour. Additionally, Asamoah, Chovancová, De Alwis, Kumara, & Guo (2012) conducted research in Czech Republic, China, Ghana, and Sri Lanka and found that risk reduction and social demonstrance were the motives affected consumers' brandname buying behaviour. In addition, Mowen and Spears (1999) found that need for arousal was the mediator between some traits of big five personality and materialism linking to compulsive buying.

Self-construal

Markus and Kitayama (1991) focused on variation in which people in different cultures could come to believe about themselves concerning the relationship between the self and others. The theory assumes that people tend to construct the self in two different construals of the self; the *independent view of self*, which involves being autonomous, self-contained, unique, individualist, egocentric, idiocentric and separate from others is more common in Western cultures while in non-Western cultures, where an *interdependent view of self* is promoted, people tend to see themselves to a greater extent as sociocentric, holistic, collective, allocentric, ensemble, constitutive, contextualist, relational, and closely interconnected with others.

Self-construal and buying tendency

The author's previous study with Thai samples with a full-time job found that self-reliance negatively predicted compulsive buying tendency (Chobthamkit, 2010, 2012). There are indications which support the idea that culture differences play a role in buying tendency, although there has not been previous research addressing multiple dimensions of self-construal and buying behaviour. Due to trait buying impulsiveness, Caucasians engage in more impulse buying behavior compared to Asians. In addition, independence did not impact Asians' impulsive buying, although it affected impulsive buying among Caucasians. For Caucasians, the more independent their self-concept, the more impulsive buying they are likely to engage in (Kacen & Lee, 2002). On the contrary, most impulsive buyers were from collectivist cultures (Sun, Horn, & Merritt, 2004). Moreover, Mandel (2003) found that consumers were more risk-seeking in their financial choices and less risk-seeking in their social choices when their interdependent selves were activated, compared to independent selves activated consumers.

There are not many previous studies addressing the effect of identity-related factors on compulsive buying in Thailand. Moreover, the present research was conducted due to future direction of the author's previous study. Therefore, the purpose of the present research is to examine the role of identity related factors: big five personality, identity motives, and self-construal predicting compulsive buying in late adolescents who are at a risky ages for adopting this problematic consumer behaviour. Moreover, this study will test that identity motives and self-construal may mediate the effects of big five personality dimensions on compulsive buying.

Method

Participants

The sample consisted of 460 undergraduate students.

Procedure

The paper-based questionnaires were distributed to collect data from undergraduate students. The sampling was based on convenience. Respondents were informed that the study was about beliefs, thoughts and feelings about themselves and other people. Demographic details are shown in Table 1.

Table 1
Demographic details

	Overall
N	460
Mean Age	20.11
SD	1.3
Range	18-24
Percentage Female	71.3

Materials

Big Five Personality Scale

Thai version of NEO Five Factor Inventory (NEO-FFI) which was a shortened version of Revised NEO Personality Inventory (NEO-PI-R) (Costa and McCrae, 1992), was translated by Sabaiying (1992). Big five personality consists of five main traits: *neuroticism* (e.g. "I often feel inferior to others"), *extraversion* (e.g. "I prefer to be with people all around"), *openness to experience* (e.g. "I often like to try new styles of international food"), *agreeableness* (e.g. "I usually care about what other people feel"), and *conscientiousness* (e.g. "I can determine how my work progresses and whether it has been done punctually") using a five point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) which had a clear middle point (3 = *cannot make a decision*). According to the author's undergraduate research projects in Thailand, most participants were likely to rate on the middle point on average (Chobthamkit, 2008; Chobthamkit et al, 2007). Therefore, the new version of NEO-FFI was revised to use a six point Likert-type scale which had no clear middle point to indirectly force participants to rate in one way or another (3 = *disagree a little* and 4 = *agree a little*). Some items were excluded to improve the alpha. The alpha values of big five personality in actual study after improvement were .82 for *neuroticism*, .73 for *extraversion*, .68 for *openness to experience*, .69 for *agreeableness*, and .76 for *conscientiousness*.

Identity Motives Scale

Identity motives were measured using an adapted version of the method described by Vignoles and Moncaster (2007). Participants were asked to freely specify eight elements of identity content using an adapted version of the classic Twenty Statement Test or 'Who am I?' test (Kuhn & McPartland, 1954). Next, participants rated each of their identity elements on eight dimensions. Each dimension was presented as a question with a block of eight 11 point Likert-type scales, ranging from 0 to 10. Three questions measured associations of each element with *identity structure*: *perceived centrality* ("How important is each of these things in defining who you are?" scales: 0 = *not at all important*; 5 = *intermediate*; 10 = *extremely important*), *identity-related affect* ("How happy or unhappy do you feel about each of these things?" scales: 0 = *extremely unhappy*; 5 = *neutral*; 10 = *extremely happy*), and *identity enactment* ("How much do you show people that you are each of these things in your everyday actions?" scales: 0 = *don't show this at all*; 5 = *show this to some extent*; 10 = *very definitely show this*). The other six questions measured associations of each element

with *motive satisfaction* (scales: 0 = *not at all*; 5 = *moderately*; 10 = *extremely)*: feelings of *self-esteem* ("How much does each of these things make you see yourself positively?"), *continuity* ("To what extent does each of these things make you feel that your past, present, and future are connected?"), *distinctiveness* ("How much do you feel that each of these things distinguishes you—in any sense—from other people?"), *belonging* ("How much does each of these things make you feel you "belong"—that you are included among or accepted by people who matter to you?"), *efficacy* ("How much does each of these things make you feel competent and capable?"), and *meaning* ("How much does each of these things give you a sense that your life is "meaningful?").

Following the rationale described above, motives for self-esteem, continuity, distinctiveness, belonging, efficacy and meaning were measured as the correlation of each individual's ratings of their identity elements on each of these respective dimensions with the mean of their ratings for identity structure, adjusted for normality using Fishers *r* to *z'* transformation (see Vignoles & Moncaster. 2007; Vignoles et al., 2002).

Self-construal Scale

A fifty-eight item scale was based on existing self-construal scale (Owe, 2012). The items were rated on a nine-point Likert-type scale ranging from 1 (*not at all*) to 9 (*exactly*). Owe's self-construal consists of seven dimensions: *self-direction* (e.g. "You make decisions about your life on your own"), *self-reliance* (e.g. "You try to avoid being reliant on others"), *uniqueness* (e.g. "You like being different from other people"), *consistency* (e.g. "You behave in the same way even when you are with different groups of people"), *inclusion of others in the self* (e.g. "If someone in your family is sad, you feel the sadness as if it were your own"), *harmony* (e.g. "You try to adapt to people around you, even if it means hiding your inner feelings"), and *commitment to others* (e.g. "You value good relations with the people close you to more than your personal achievements"). Some items were excluded to improve the alpha. The alpha values of self-construal in actual study after improvement were .72 for *self-direction*, .85 for *self-reliance*, .81 for *uniqueness*, .74 for *consistency*, .76 for *inclusion of others in the self*, .72 for *harmony* and .71 for *commitment to others*.

Compulsive Buying Scale

Compulsive buying were measured by the revised CBS scale (D'Astous, Maltais, & Roberge, 1990). It consists of eleven items referring to core features of compulsive buying: "*the impulse to buy is experienced as irresistible*" (e.g. "As soon as I enter a shopping centre, I want to go in a shop and buy something"), "*individuals lose control over their buying behaviour*" (e.g. "I sometimes feel that something inside pushes me to go shopping"), and "*they continue with excessive buying despite adverse consequences*" (e.g. "I have often bought a product that I did not need even when I knew I had very little money left") (Dittmar, 2004). Participants were asked to rate on a six-point Likert-type scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The alpha value of compulsive buying in actual study was .89.

These scales were translated from English into Thai language. They were then independently back-translated, as described by Brislin (1970). The two English

versions were compared for any inaccuracies, which were resolved through discussion with scales designers, translators and Psychology lecturer.

Results

Predictors of Compulsive Buying Tendency

There was some overlap between identity-related variables. Thus, compulsive buying scores were examined in a hierarchical multiple regression analysis, where three groups of predictors: five dimensions of big five personality, six dimensions of identity motives, and seven dimensions of self-construal were separately entered.

Big Five Personality as Predictors of Compulsive Buying Tendency

Compulsive buying scores were examined in a multiple regression analysis, where all dimensions of Big Five personality were entered.

The regression coefficients and statistics after all dimensions of Big Five personality were added, explaining 18% of the variance in compulsive buying; $\Delta F(5, 452) = 21.56$; $p < .01$. Neuroticism significantly predicted compulsive buying tendency and was also the strongest predictors ($\beta = .37$; $p < .01$), followed by extraversion and agreeableness ($\beta = .32$; $p < .01$, $\beta = -.13$; $p < .01$, respectively).

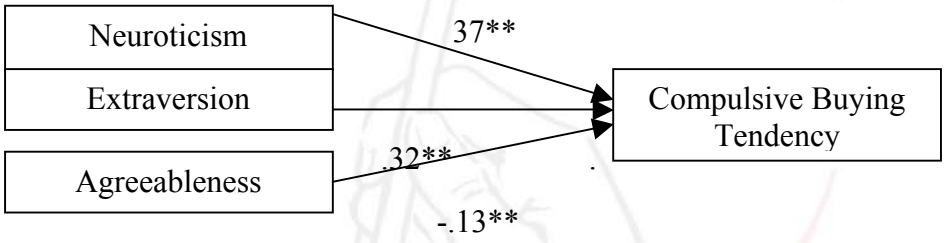

Figure 1. Neuroticism, extraversion, and agreeableness as predictors of compulsive buying tendency

Note. $R^2 = .18$ ($p < .01$), $^{**}p < .01$

Identity Motives as Predictors of Compulsive Buying Tendency

According to the result, any identity motives which are relevant to identity structure could not predict compulsive buying tendency significantly. Therefore, identity structure was split into three aspects which are *perceived centrality*: importance of identity elements in self-definition (cognitive component), *identity-related affect*: feeling happy or unhappy toward identity elements (affective component), and *identity enactment*: to show the identity in daily actions (behavioural component). After that, the scores were recalculated based on new identity aspects.

The regression coefficients and statistics after all dimensions of identity motives which are relevant to identity-related affect were added, explaining 1% of the variance in compulsive buying; $\Delta F(6, 378) = 3.71$; *ns*. Need for self-esteem predicted compulsive buying tendency ($\beta = .12$; $p < .05$).

The results from ΔF and regression model were contrast to each other which indicated that there was *multicollinearity* which refers to strong correlation between predictors in a regression model (Field, 2009). Therefore, stepwise multiple regression analysis was used for solution. The results explained 1% of the variance in compulsive buying; $\Delta F(1, 384) = 5.39$; $p < .05$. Need for self-esteem still predicted compulsive buying tendency ($\beta = .12$; $p < .05$).

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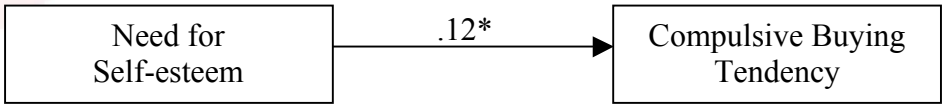

Figure 2. Need for self-esteem which is relevant to identity-related affect as predictor of compulsive buying tendency

Note. $R^2 = .01$ (*ns*), $^*p < .05$

The regression coefficients and statistics after all dimensions of identity motives which are relevant to identity enactment were added, explaining 2% of the variance in compulsive buying; $\Delta F(6, 378) = 2.42$; $p < .05$. Need for distinctiveness and need for efficacy predicted compulsive buying tendency ($\beta = .14$; $p < .05$, $\beta = -.18$; $p < .05$, respectively). When accounted for all dimensions of big five personality to test the possible mediation effect, adding 19% to the explained variance in the prediction of compulsive buying; $\Delta F(11, 373) = 10.17$; $p < .01$. Neuroticism, extraversion, and agreeableness were still significant predictor of compulsive buying ($\beta = .36$; $p < .01$, $\beta = .33$; $p < .01$, $\beta = -.13$; $p < .01$, respectively), whereas need for distinctiveness and need for efficacy became non-significant ($\beta = .09$; *ns,* $\beta = .12$; *ns,* respectively).

The regression coefficients and statistics after all dimensions of big five personality were added, explaining 3% of the variance in need for distinctiveness; $\Delta F(5, 383) = 3.23$; $p < .01$. Extraversion significantly predicted need for distinctiveness which is relevant to identity enactment ($\beta = .20$; $p < .01$).

The reduction in strength of need for distinctiveness from $\beta = .14$ to $\beta = .09$ and the significant value change indicate full mediation. The Sobel test provides a standard, conservative test of mediation (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002) and the result shows that the effect of extraversion on compulsive buying tendency is not significantly mediated by need for distinctiveness ($z = 1.92$; *ns*).

The regression coefficients and statistics after all dimensions of big five personality were added, explaining 3% of the variance in need for efficacy; $\Delta F(5, 383) = 2.59$; $p < .05$. No dimension of big five personality significantly predicted need for efficacy which is relevant to identity enactment.

The results from ΔF and regression model were contrast to each other which indicated that there was *multicollinearity* which refers to strong correlation between predictors in a regression model (Field, 2009). Therefore, stepwise multiple regression analysis was used for solution. The results explained 2% of the variance in need for efficacy which is relevant to identity enactment; $\Delta F(1, 387) = 6.24$; $p < .05$. Neuroticism predicted need for efficacy which is relevant to identity enactment ($\beta = -.13$; $p < .05$).

The reduction in strength of need for efficacy from β = -.18 to β = -.12 and the significant value change indicate full mediation. The Sobel test provides a standard, conservative test of mediation (MacKinnon et al, 2002) and the result shows that the effect of neuroticism on compulsive buying tendency is not significantly mediated by need for efficacy (z = 1.52; *ns*).

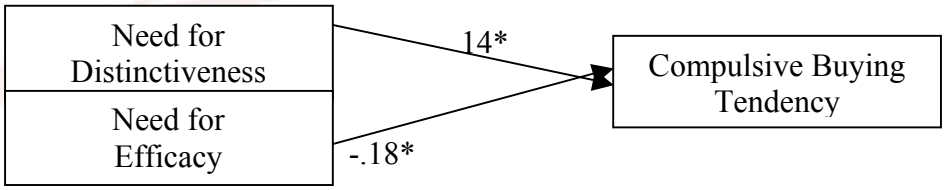

Figure 3. Need for distinctiveness and need for efficacy which are relevant to identity enactment as predictors of compulsive buying tendency

Note. R^2 = .02 (p < .05), *p < .05

Self-construal as Predictors of Compulsive Buying Tendency

Compulsive buying scores were examined in a hierarchical multiple regression analysis, where all dimensions of self-construal were entered first (Step 1), followed by all dimensions of big five personality to test the possible mediation effect (Step 2).

The regression coefficients and statistics after all dimensions of self-construal were added in Step 1, explaining 4% of the variance in compulsive buying; $\Delta F(7, 449) = 3.71$; $p < .01$. Self-reliance, consistency and inclusion of others in self predicted compulsive buying tendency (β = -.11; $p < .05$, β = -.14; $p < .01$, β = .12; $p < .05$, respectively). When accounted for all dimensions of big five personality to test the possible mediation effect, adding 16% to the explained variance in the prediction of compulsive buying; $\Delta F(12, 444) = 10.46$; $p < .01$. Neuroticism, extraversion, and agreeableness were still significant predictor of compulsive buying (β = .38; $p < .01$, β = .28; $p < .01$, β = -.14; $p < .01$, respectively), whereas self-reliance became non-significant (β = -.02; *ns*). The strength of consistency and inclusion of others in the self reduced (β = -.11; $p < .05$, β = .12; $p < .05$, respectively), although they were still significant predictor of compulsive buying tendency.

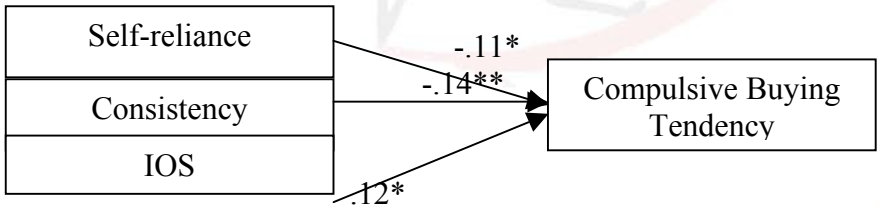

Figure 4. Self-reliance, consistency, and inclusion of others in the self as predictors of compulsive buying tendency

Note. R^2 = .04 (p < .01), *p < .05, **p < .01

The regression coefficients and statistics after all dimensions of big five personality were added, explaining 16% of the variance in self-reliance; $\Delta F(5, 455) = 18.17$; $p < .01$. Neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness significantly predicted self-reliance (β = -.30; $p < .01$, β = -.18; $p < .01$, β = .17; $p < .01$, β = -.13; $p < .01$, β = .18; $p < .01$, respectively).

The reduction in strength of self-reliance from β = -.11 to β = -.02 and the significant value change indicate full mediation. The Sobel test provides a standard, conservative test of mediation (MacKinnon et al, 2002) and the result shows that the effects of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness on compulsive buying were not significantly mediated by self-reliance (z = .50; *ns*, z = .50; *ns*, z = -.50; *ns*, z = .49; *ns*, z = -.50; *ns*, respectively).

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The regression coefficients and statistics after all dimensions of big five personality were added, explaining 2% of the variance in consistency; $\Delta F(5, 455) = 2.56$; $p < .05$. Conscientiousness significantly predicted consistency (β = .13; $p < .05$).

The reduction in strength of consistency indicates partial mediation. The Sobel test provides a standard, conservative test of mediation (MacKinnon et al, 2002) and the result shows that the effect of conscientiousness on compulsive buying was not significantly mediated by consistency (z = -1.81; *ns*).

The regression coefficients and statistics after all dimensions of big five personality were added, explaining 15% of the variance in inclusion of others in the self; $\Delta F(5, 455) = 17.71$; $p < .05$. Neuroticism, extraversion, agreeableness, and conscientiousness significantly predicted inclusion of others in the self (β = .12; $p < .05$, β = .22; $p < .01$, β = .26; $p < .01$, β = .13; $p < .01$, respectively).

The reduction in strength of consistency indicates partial mediation. The Sobel test provides a standard, conservative test of mediation (MacKinnon et al, 2002) and the result shows that the effects of extraversion and agreeableness on compulsive buying were significantly mediated by inclusion of others in the self (z = 1.97; $p < .05$, z = 2.07; $p < .05$, respectively).

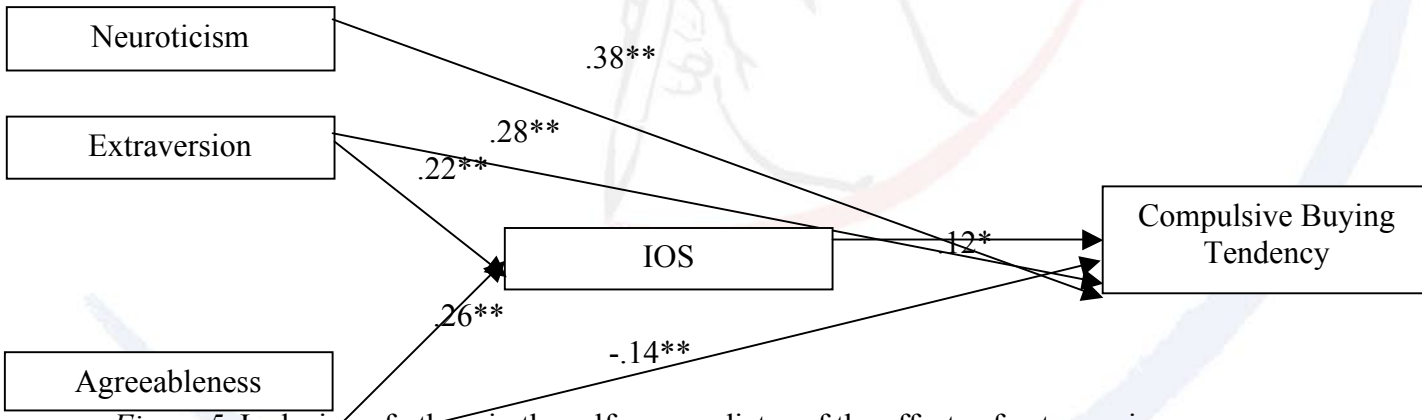

Figure 5. Inclusion of others in the self as a mediator of the effects of extraversion and agreeableness on compulsive buying tendency (with neuroticism, extraversion, and agreeableness as direct predictors of compulsive buying tendency)

Note. ΔR^2 = .16 (p < .01),
*$p < .05$, **$p < .01$

Discussion

The present research focused on social psychological perspectives of compulsive buying behaviour proposing that it is an extreme form of buying behaviour motivated by psychological factors especially mood regulation and identity seeking (Dittmar, 2004). Identity motives, big five personality traits, and self-construal were examined as predictors of this kind of dysfunctional consumer behaviour. The previous researches found inconsistent pattern of personality predict compulsive buying. However, the results supported many prior studies including the author's previous research that neuroticism positively played a powerful role on compulsive buying behaviour (e.g. Chobthamkit, 2010, 2012; Mikołajczak-Degrauwe et al, 2012; Mowen, 2000; Mowen & Spears, 1999; Mueller et al, 2010; N & Raveendran, 2007; Shahjehan et al, 2012; Wang & Yang, 2008). This could be due to the fact that because neuroticism refers to individual differences in emotional stability (Costa & McCrae, 1989), linked to social psychological perspective of compulsive buying as emotional compensatory behaviour (Dittmar, 2005a).

Moreover, the results illustrate extraversion positively predicted compulsive buying tendency which were consistent with many previous researches (e.g. Balabanis, 2006; Mikołajczak-Degrauwe et al, 2012; N & Raveendran, 2007; Shahjehan et al, 2012; Verplanken & Herabadi, 2001). Extraversion refers to individual differences in interpersonal relations (Costa & McCrae, 1989), which may enable consumers to believe that buying for acquiring material goods which are popular among peers or fashion trends, will influence people to gain acceptance from others. Additionally, going shopping and buying consumer goods as a leisure activity spending time and having social interaction with friends or acquaintances allows people to develop and maintain relationship with others. In addition, there is evidence which indicates that peer influence was associated with compulsive buying behaviour (Guo & Cai, 2011).

Furthermore, the results illustrate that agreeableness negatively predicted compulsive buying tendency which supported some prior studies (e.g. Balabanis, 2006; Bonsjak, 2007; N & Raveendran, 2007). Agreeableness refers to individual differences in norm and model determination to live in one's life in the forms of trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness (Costa & McCrae, 1989). People who have low level of agreeableness, may prefer personal needs and norms to the others' needs. This kind of trait may lead to compulsive buying as compensatory behaviour which aims to achieve identity-related benefits by using identity-repair and identity-seeking strategies as social psychological model of compulsive buying as identity seeking (Dittmar, 2005a).

Moreover, need for self-esteem which is relevant to identity-related affect positively predicted compulsive buying. There is the evidence indicating that compulsive buyers had lower self-esteem than normal consumers (O'Guinn & Faber, 1989). The self-esteem motive refers to "the motivation to maintain and enhance a positive conception of oneself" (Gecas, 1982, p.20), which may lead to happiness. This result is consistent with social psychological perspective of compulsive buying motivated by emotional and identity-related motives.

In addition, need for distinctiveness which is relevant to identity enactment refers to the establishment and maintenance of a sense of differentiation from others (Vignoles

et al, 2002), which is relvant to *"unique"*. Unique is an identity-related buying motive among compulsive buyers, following emotional and ideal-self buying motives, respectively, (Dittmar, 2005a). Additionally, unique is also a buying motive among impulse buyers spending on clothes being also a type of goods whose compulsive buyers frequently acquire (D'Astous et al, 1990). Therefore, consumers tend to use goods as symbols to express themselves as distinct, different, and unique to other people in their daily lives.

Additionally, need for efficacy which is relevant to identity enactment which refers to maintaining and enhancing the feelings of competence and control (Breakwell, 1993, p. 205), negatively predicted compulsive buying. The previous study indicates that self-control failure leads to impulse buying (Baumeister, 2002). Thus, people who want to show that they can control their lives, tend to control and monitor their behaviour including buying behaviour. Therefore, these consumers may rarely buy compulsively.

Furthermore, self-reliance, which refers to reliance on one's own capabilities, judgment or resources; independence (Answer.com), negatively predicted compulsive buying tendency. The results were consistent with the present author's prior study (Chobthamkit, 2010, 2012). People who are independent and rely on themselves, may not need symbolic meanings from material goods to reflect or portray their identities. In other word, extrinsic factors may not influence people who possess high self-reliance. These people have less tendencies to acquire identity seeking and identity repair strategies motivating buying behaviour. In addition, they may enable people to have good management skills, including expense. People will themselves plan what to buy, how much to pay, and also how much to save. Therefore, economic-rational motive, which refers to rationality and utility maximization, plays an important role for this group of buyers.

Moreover, consistency also negatively predicted compulsive buying tendency. Consistency, referring to similar pattern of behaviour or actions in a variety of situations, environments, or contexts, is the important dimension of Owe's self-construal concept, although it cannot be classified into independent or interdependent (Owe, 2012; Owe, 2009; Owe et al, 2012). A prior study indicated that cognitive inconsistency occurred when consumers made a rushed decision without elaborative information search (Awa & Nwuche, 2010). This is consistent with the core features of compulsive buying: the impulse to buy is experienced as irresistible, individuals lose control over their buying behaviour, and they continue with excessive buying despite adverse consequences in forms of personal, social, occupational, and financial problems (Dittmar, 2004), considered to be irrational consumer behaviour, which may lead to cognitive inconsistency. In addition, most consistency theories explain in common that inconsistency of attitudes, beliefs, and behaviour leads to discomfort and therefore motivates people to restore consistency (e.g. Festinger, 1957; Heider, 1946). As a result, compulsive buying may be the way to cope with inconsistency and also to regulate unfavourable feelings.

In addition, inclusion of others in the self directly predicted compulsive buying and was also a mediator of the effects of extraversion and agreeableness on compulsive buying. Previous research indicated that most impulse buyers were from collectivistic cultural groups (Sun, Horn, & Meritt, 2004). Inclusion of others in self which refers to

being dependent on other people's feelings toward other people's stories as if it was your own, is classified into the interdependent view of self. Moreover, extraversion refers to interpersonal relations and agreeableness refers to individual differences in norm and model determination to live in one's life (Costa & McCrae, 1989). People with these type of characteristics may focus on interaction with other people, other people's feelings and needs including fashion trends and popularity about consumer goods among acquaintances. Therefore, compulsive buying may stem from conformity and normative influence.

Implications

This study enhances the knowledge on compulsive buying among undergraduate students as late adolescents. Additionally, this study deepens the understanding about the effect of identity-related factors on compulsive buying tendency. Moreover, this study expands the knowledge on social psychological perspective of compulsive buying in Thailand.

Practically, the present research may be fruitful to clinical psychologists and therapists. According to the results, 50.1% of the samples scored above the cut-off point in compulsive buying scale. This indicates that there are many compulsive buyers among non-patients in Thailand which may not be diagnosed yet due to non-extreme symptoms. Furthermore, the results can be applied for compulsive buying screening and surveillance, and contribute to therapeutic techniques or programmes aiming to reduce compulsive buying based on some identity-related behaviour modification.

Limitations and Future Directions

A limitation of the present research is the reliability values of NEO-FFI (big five personality scale). Many items in some traits need to be removed due to alpha improvement. Alpha values in some dimensions were .6 which proved to be the best improvement.

A further direction for future research is to add more relevant factors. Future studies could develop new models and also provide new perspectives of compulsive buying, which include sampling different ages of populations from this present research, for example, high school students considered as early adolescents. Moreover, sampling of future populations can be based on environmental contexts, for instance, undergraduate students from other universities located in both urban areas and suburb areas. New population groups are likely to provide more intriguing findings on compulsive buying.

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Crime, Conflict and Control in Bangkok

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Abstract

As there were considerable crime and conflict in Bangkok, the researcher studied and analyzed such problems compared with crime problems throughout Thailand. The researcher did documentary research using data on crime statistics in Bangkok and crime statistics throughout the country during 2000 - 2010 from Ministry of Social Development and Human Security and Royal Thai Police. According to the study of statistics of reported criminal cases in Bangkok compared with statistics of reported criminal cases throughout the country, the researcher found that there were crimes against the person in Bangkok by 1/6 of number of reported criminal cases throughout the country. Moreover, there were property crimes in Bangkok by 1/3 of number of property crimes throughout Thailand. This caused by rapidly social change which made Bangkok grew with disorganization, causing imbalance of social structures and extreme competition, led to conflicts among various groups, criminal behavior and crime problems. Social Disorganization Theory and Conflict Theory could explain causes of conflict and crime problems in Bangkok and Social Control Theory could be applied for solving such problems. All problem-solving guidelines proposed by the researcher aim to solve conflicts among various groups, crime problems and enable people with authority or people concerned to determine policy to solve the mentioned problems.

***Keywords*:** Crime, Conflict, Control, Criminal, Criminology, Sociology, Bangkok,

1. Introduction

There was continuous change in every society. Social change aimed to meet people's need to enable people to have better living. For example, humans wanted cultural improvement, natural resources, and development of knowledge and technology. Those changes slowly or quickly occurred, were organized or disorganized, depending on several factors such as education level and culture of people in the society, changes of natural resources, or discovery of new inventions. These factors accelerated or decelerated social changes. Social changes were often mentioned in two aspects consisting of social progress and social deterioration. Evolutionary theorists said that social change was systematical change process with more development and progress. The simple society was changed as more complicated society with continuous progress, bringing about perfect society. On the contrary, conflict theorists said that social change caused negative impacts. They assumed that social behavior could be understood through conflict between various groups and various people caused by competition to own valuable and rare resources. Various conflicts of people group in the society would lead to social deterioration or worsening social change. Better and worsening social change impacted on human's living such as change of food, dressing, relation of people in the society, constructing accommodations. There were positive and negative impacts of social change. As for positive impact, discovery of new inventions caused better change and development such as road, electricity, airplane, and computer. In the meantime, social change negatively impacted on the society. For example, rapid progress of technology and industry caused difference between urban society and rural society, causing a lot of social problems such as social inequality, poverty, unemployment and leading to criminal problems which there were considerable in this research.

2. Objectives

2.1 To analyze causes of crime and conflict in Bangkok.

2.2 To determine policy to solve crime and conflict in Bangkok

3. Methods

This was documentary research which was survey research by studying problems for surveying data on reality or general characteristics of researched issue, aiming to know problems which would be guidelines of solving problems in the present time and future. Documentary research aimed to seek answers or create body of knowledge by using text and document including other media both printed material or electronic media (Scott, 2006). Documentary research was done by surveying reality of events in the past and present time through analysis of data from document, printed materials and data in various forms recorded or published by other people. Researchers did not have to go to research area but had to collect data from knowledge center which compiled various data. Documentary research was directly associated with study of data from various documents which had been already published. As for research, documentary research was social research. The researcher collected data from text, document, report or other media and presented research results by data analysis and

synthesis (Mogalakwe, 2006). Document or data source of this research was public document which meant document written or published by public agencies of the government sector and private sector for presenting data, policy, guidelines, or knowledge. Examples of public document consisted of Act, royal decree, ministerial regulations, annual report or document which showed statistics which were analyzed. These public documents were always published according to term of state agencies (Scott, 1990).Main data used in this research were data on criminal statistics in Bangkok and criminal statistics throughout the country during 2000 – 2010 from Ministry of Social Development and Human Security and Royal Thai Police.

4. Literature Review

4.1 Theory of Human Ecology

This theory was tested by sociologists of University of Chicago who studied deteriorated society of the city at that time, which subsequently caused criminal problems. Robert Park (1925) said "Human society was not different from other living things in the nature. Each person had to struggle for survival". Park had compared plant dispersion in the nature with growth of various organizations of people in the society. Park's concept occurred by observing rapid change of Chicago during the end of 18th Century – 19th Century. During 1860 – 1910, registered and non-registered populations of the city doubled in every ten years because a lot of Europeans migrated to Chicago. Park said that this change was geographical phenomenon and social change on structures or institutes. Robert Park compared human society consisting of several types of people having different race, complexion, occupation, incomes with plant communities. Both plants and people wanted to live and survive. Each kind of plants or each person had to be interdependent for survival. When each community changed so quickly that each people group could not be interdependent due to extreme difference in race or culture, there were conflicts and criminal problems. Park said that a lot of foreigners migrated to Chicago until Chicago consisted of several communities such as China Town Community, Little Italy Community, Black Belt Community. These communities indicated cultural conflicts, were cut off from the main society, lacked self-adjustment capability, and aimed to achieve social goals consisting of wealth and strength of group without thinking of criminal problems. Park had compared interaction process of plants and animals with social change. A community would invade, seize, occupy, and change other community as their dwellings. The community who used to live in that area would migrate to stay in other community and might cause change in other community. Park called this change process as "Invasion, Dominance, and succession" (Park, 1925).

4.2 Burgess's Concentric Zone Model

Burgess (1925), a criminologist, who jointly developed Theory of Human Ecology with Robert Park had used said theory for explaining growth of Chicago as follows;

"The society of Chicago grew by extending from the center in circle radius and each community would also extend from the center in the same way, causing change process in that zone or community" (Burgess, 1925).

Burgess's Concentric Zone Model could be shown in the following diagram;

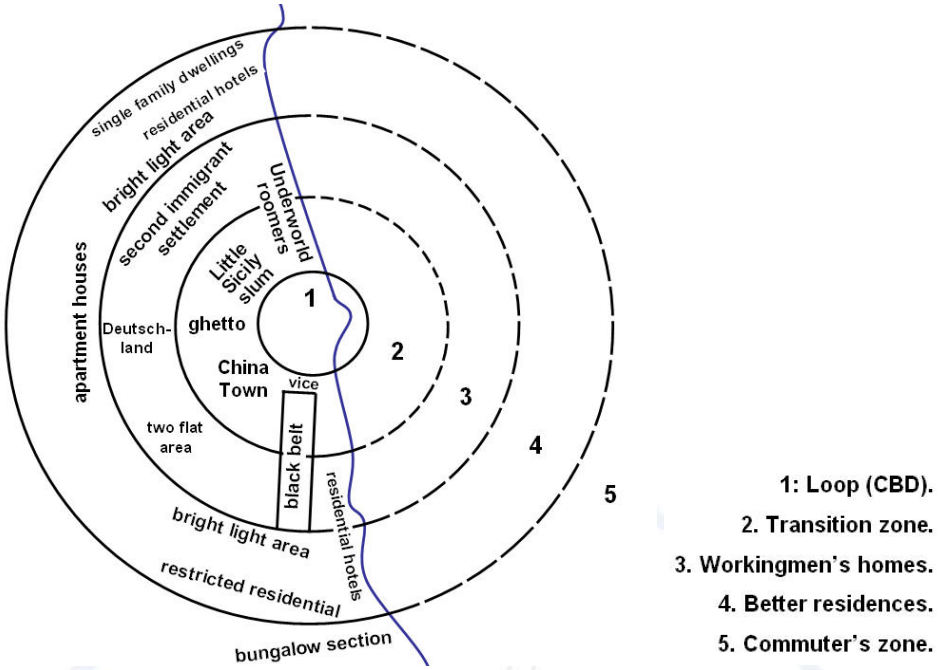


Figure 1 Burgess's Concentric Zone Model

Burgess divided Chicago into five zones classified by area use with details as follows;

Zone 1 was Loop which was the center of trading and business and was situated at the center of the city. This zone specifically had shops and business center without dwellings of urban people.

Zone 2 was Zone in Transition which was the oldest area of the city and was dwellings of workers in industrial factories situated in Zone 1. For example, aliens migrating from other countries and black people migrating from the south divided dwellings zone by races or economic status. This zone was affected by change process of Theory of Human Ecology (Invasion, Dominance, and Succession), causing more deterioration at all times. Therefore, Zone 2 had the highest rate of crimes in Chicago.

Zone 3 was Zone of Workingmen's Homes. As these workmen migrated from Zone 2, this zone was full of accommodations or rented houses with moderate price. Most dwellers had more incomes than people in Zone 2.

Zone 4 was Residential Zone which was residence of people with higher economic and social status. Residences here were rather expensive and residents were rich. Some residents here used to stay in Zone 2 or Zone 3.

Zone 5 was Commuters Zone which was adjacent to the rural area. Few houses were situated in this zone because this zone was very far from the city (Burgess, 1925).

Burgess, sociologists, and other criminologists of University of Chicago specifically attached importance to areas of Zone 2. As said areas were invaded by workers and aliens migrating, people with moderate or high economic status migrated to live in the next zone. Thus, areas in this zone were deserted and had dwellings with very cheap

price, attracting aliens or rural people who had just stayed in Chicago to live in this zone. Therefore, there were changes in Zone 2 at all times. Relation among people in the community was very low, causing low social mechanism or customs which controlled behavior of people in that community. Therefore, Zone 2 was changed as the community with more social disorganization, causing deviant behavior and criminal problems.

4.3 Social Disorganization Theory

Shaw and McKay (1942), sociologists of University of Chicago had jointly developed Theory of Human Ecology and Theory of Concentric Zone Model for use as guidelines of studying criminal problems. Finally, both theories were developed as Social Disorganization Theory as follows;

"Social condition of the community had changed at all times due to urbanization, weakening social control mechanism of the community and leading to considerable crimes" (Shaw & MacKay, 1942).

Therefore, criminal behavior according to this theory was caused by growth of the city, causing disorganization and change of community at all times and making that community face more crimes than other communities as shown in the following chart;

Figure 2 Shaw and McKay's Social Disorganization Model

Social Disorganization Theory explained that social disorganization of the community stemmed from growth of household which led to change in the community as follows;

Loss or reduction of social control mechanism: Due to more migration of people to stay in the community, dwellers did not know each other. Finally, this would lead to weakness of control mechanism of that community.

Cultural inheritance: New people group received bad and good cultures of original people group. Sometimes, adaptation to new culture caused deviant behavior.

Cultural conflicts: New migrants brought values, belief, and culture. Different cultures of these migrants unavoidably caused cultural conflicts.

Poverty: Most migrants were aliens or rural people finding new jobs in the big city. These people had low economic and social status.

Robert Park's Theory of Human Ecology (Park, 1925), Burgess's Concentric Zone Model (Burgess, 1925), and Social Disorganization Theory of Shaw and McKay (1942) were classified as Sociological Criminology of University of Chicago recognized and continuously used for explanation, especially use of said theory to explain characteristics of crimes in the big cities around the world. Yet, nobody in Bangkok, a capital of Thailand used to use and study said theory. And specific theory of characteristics of criminal problems in Bangkok was not created for explaining characteristics of criminal problems in the new city without planning.

4.4 Conflict Theory

Conflict theory emphasizes the role of coercion and power in producing social order. This perspective is derived from the works of Karl Marx, who saw society as fragmented into groups that compete for social and economic resources. Social order is maintained by domination, with power in the hands of those with the greatest political, economic, and social resources. When consensus exists, it is attributable to people being united around common interests, often in opposition to other groups. According to conflict theory, inequality exists because those in control of a disproportionate share of society's resources actively defend their advantages. The masses are not bound to society by their shared values, but by coercion at the hands of those in power. This perspective emphasizes social control, not consensus and conformity. Groups and individuals advance their own interests, struggling over control of societal resources. Those with the most resources exercise power over others with inequality and power struggles resulting. There is great attention paid to class, race, and gender in this perspective because they are seen as the grounds of the most pertinent and enduring struggles in society. Whereas most other sociological theories focus on the positive aspects of society, conflict perspective focuses on the negative, conflicted, and ever-changing nature of society. Unlike functionalists who defend the status quo, avoid social change, and believe people cooperate to effect social order, conflict theorists challenge the status quo, encourage social change (even when this means social revolution), and believe rich and powerful people force social order on the poor and the weak.

Conflict theorists, for example, may interpret an "elite" board of regents raising tuition to pay for esoteric new programs that raise the prestige of a local college as self-serving rather than as beneficial for students. Whereas American sociologists in the 1940s and 1950s generally ignored the conflict perspective in favor of the functionalist, the tumultuous 1960s saw American sociologists gain considerable interest in conflict theory. They also expanded Marx's idea that the key conflict in society was strictly economic. Today, conflict theorists find social conflict between any groups in which the potential for inequality exists: racial, gender, religious, political, economic, and so on. Conflict theorists note that unequal groups usually have conflicting values and agendas, causing them to compete against one another. This constant competition between groups forms the basis for the ever-changing nature of society. Critics of the conflict perspective point to its overly negative view of society. The theory ultimately attributes humanitarian efforts, altruism, democracy, civil rights, and other positive aspects of society to capitalistic designs to control the masses, not to inherent interests in preserving society and social order. (Anderson and Taylor, 2009)

4.5 Social Control Theory

Social Control Theory or Social Bond Theory was written and proposed by Travis Hirschi in 1969. Social Bond theory, that later developed into the Social Control Theory, has historically been an interesting way of approaching social problems and how we in turn explain them. Before one can apply the Social Bond theory, they must first have a firm understanding of its definition, which can be accurately described by Hirschi (1969) as, "Elements of social bonding include attachment to families, commitment to social norms and institutions (school, employment), involvement in activities, and the belief that these things are important". This theory is rooted and derived from the General Theory of Crime.

Hirschi's (1969) social bond theory emphasizes the fact that there is an absence of social attachments among juvenile delinquents. Since family, friends, and other members of our social networks affect our lives in many ways, we in turn are direct descendants of their actions. One of the most critical times in our lives is our adolescence. During this critical time we need strong positive social ties to represent society in the best way possible. On the other hand, if the ties we share in our lives are negative and criminal-like habits, it most likely that negative results will occur. The basic difference between the General Theory of Crime and Hirschi's (1969) Social Bond Theory is the focus on peers and peer groups of individuals. The four basic elements of social bond theory are attachment, commitment, involvement in conventional versus deviant or criminal activities, and lastly the common value system within an individual's society or subgroup. Attachment is described as the level of values and or norms that an individual holds in society. Attachment is especially important when it come to the person's parental figures. This theory suggests that conventional figures, such as parents, when bonded make a huge impact in the deterrent of criminal acts. Attachment to other peers tend to be just as supportive as parental ties, just as long as these ties are positive and do not deviate from the social norms of society.

According to Hirschi (1969) other attachments, such as school, play a tremendous role in conventional society. School has tended to be a middle to upper class involvement since it was first created. The middle class children tend to make fun of or demoralize the lower class children. This treatment also does not just come from the child it also comes directly from the institution, through the teacher. In combination with each other the person starts to resent school at the earliest point. This resentment also hinders the continuation of further education. This comes full circle to the lower class standard of living for generations to come (Hirschi, 1969). Next is commitment, this can be described as the level of commitment that an individual has to abide by legal behavior. The norms and values taught to us as an adolescent should be to obey how society works in normal terms. From very early in our lives we hopefully learn the difference between "right" and "wrong". This understanding has an enormous effect on how we turn out and set our place in normal society. For example, if a child is raised in a home where drugs are bought, sold, and used regularly, then that child has a greater chance of having involvement with drugs in the future. Also, the "bond" between mother, father, and child in a normal nuclear family, is very strong, this in turn has made a blue print of an entire adult life on the child. Third, is a person's choice to get involved in conventional versus deviant behavior. This choice is formed not far after basic rules of life are taught. If no "right and wrong" basis are formed or provided the adolescent will make the decision that tends to make the most sense.

This also ties into family involvement in the person's life. Lastly, is simply stated that if a person shares common values/norms as others in their subgroup then the motivation to deviate will be hard to overcome. This in many ways senses directly correlates many factors or aspects of the four main parts of Hirschi's (1969) theory. Together they form the backbone of the everlasting "bond" theory. Social Bond Theory has long been a widely accepted among many sociologists for a variety of reasons. The fact that bonds exist in all aspects of society means that the relation of these bonds can be readily discussed. Hirschi (1969) bases his theory on the means that social bonds do exist and when a bond is weakened or broken then unusual behavior for that individual may occur. This brings me to a profound quote by Hirschi (1969):

5. Discussion

5.1 General features of Bangkok

Bangkok's land mass comprises 1,568.737 square kilometers on the Chao Phraya river basin, adjacent to Nonthaburi and Pathum Thani provinces to the north, Chachoengsao province to the east, Samut Prakarn province to the south, and Samut Sakhon and Nakhon Pathom provinces to the west. Bangkok is a special administrative district according to Bangkok Metropolitan Administration Act. B.E. 2528, an administrative agency with an elected governor and deputy governor responsible for administration.

Bangkok comprises 50 districts in three zones according to the concept of crime control:

The inner zone districts are Dusit, Khlong Toei, Pomprap Sattru Phai, Phra Nakhon, Wattana, Pathumwan, Samphanthawong, Phrakhanong, Bangrak, Phyathai, Bangna, Yannawa, Ratchathewi, Bangkhorlaem District, Huay Khwang, Sathorn and Din Daeng.

The middle zone districts are Bang Sue, Lat Phrao, Thonburi, Jatujak, Wang Thong Lang, Khlong San, Lak Si, Bueng Kum, Ratburana, Don Muang, Bangkapi, Thung Khru, Bangkhen, Suan Luang, Jom Thong, Sai Mai, Praves, Saphan Soong and Khan Na Yao.

The outer zone districts are Min Buri, Bang Phlad, Phasi Charoen, Nong Jork, Bangkok Noi, Bang Khae, Lat Kra Bang, Bangkok Yai, Thawi Wattana, Khlong Sam Wa, Ta Ling Chan, Nong Khaem, Bang Bon and Bang Khun Thian.

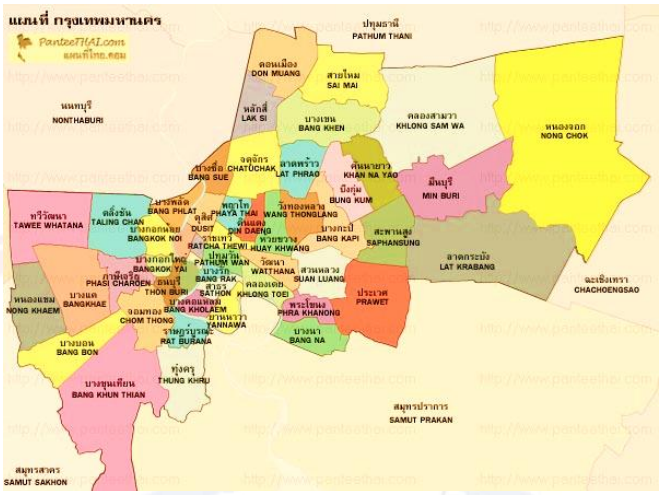


Figure 3 Bangkok map

There are 8.2 million people in Bangkok, an important capital that is the center of progress in every respect, including investment, trade, education, employment, services and international culture. Every year people from every region of Thailand continuously enter and leave Bangkok, including informal residents who come to study and work, as well as domestic and foreign short-term and long-stay tourists. (National Statistic Office, 2011).

5.2 Crime in Bangkok (metropolitan area) compared with that in other provinces

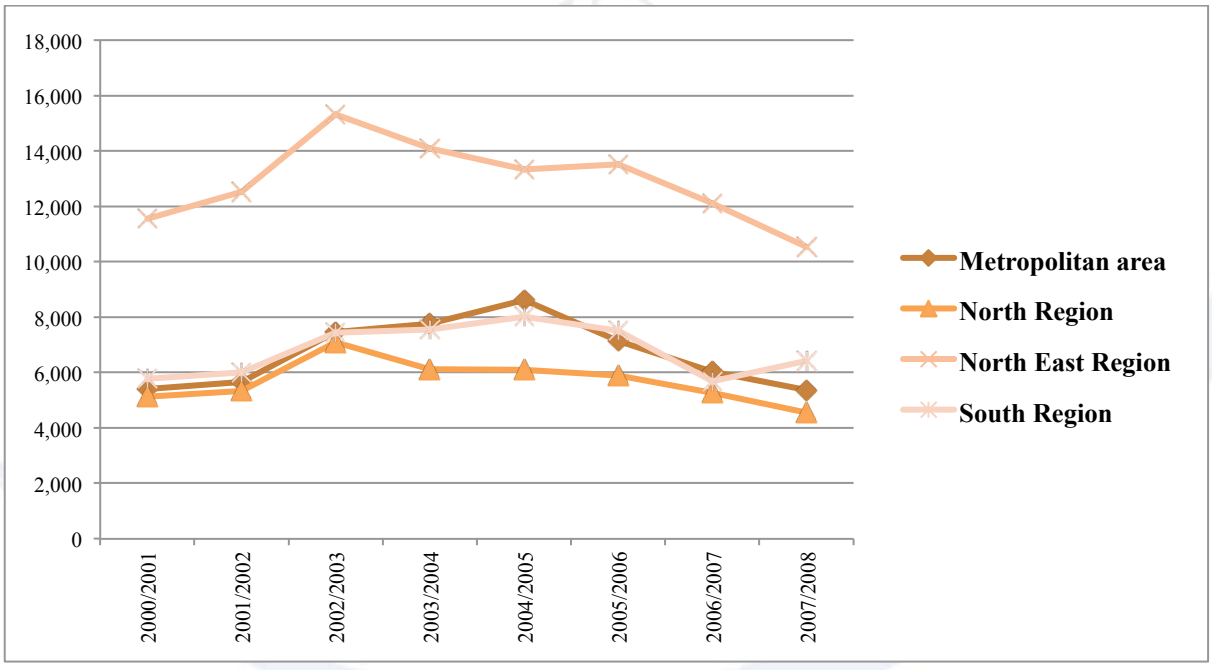


Figure 4 Crimes against persons across regions, FY 2000/2001 to FY 2007/2008

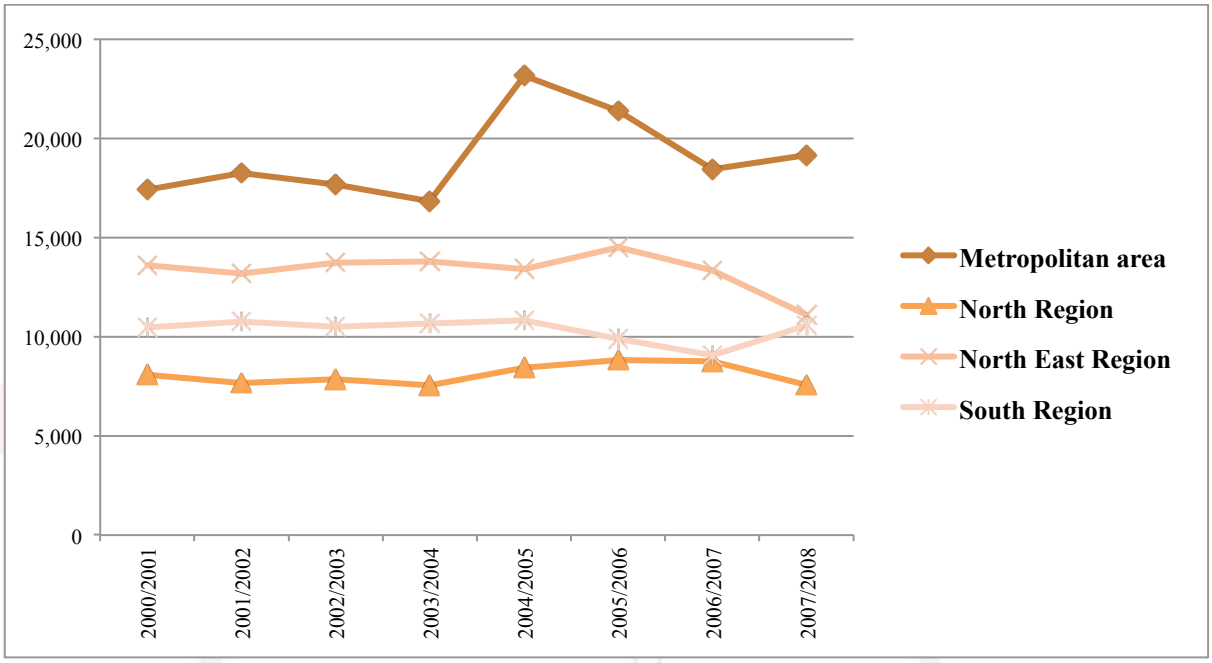


Figure 5 Overall crimes against property across regions, FY 2000/2001 to FY 2007/2008

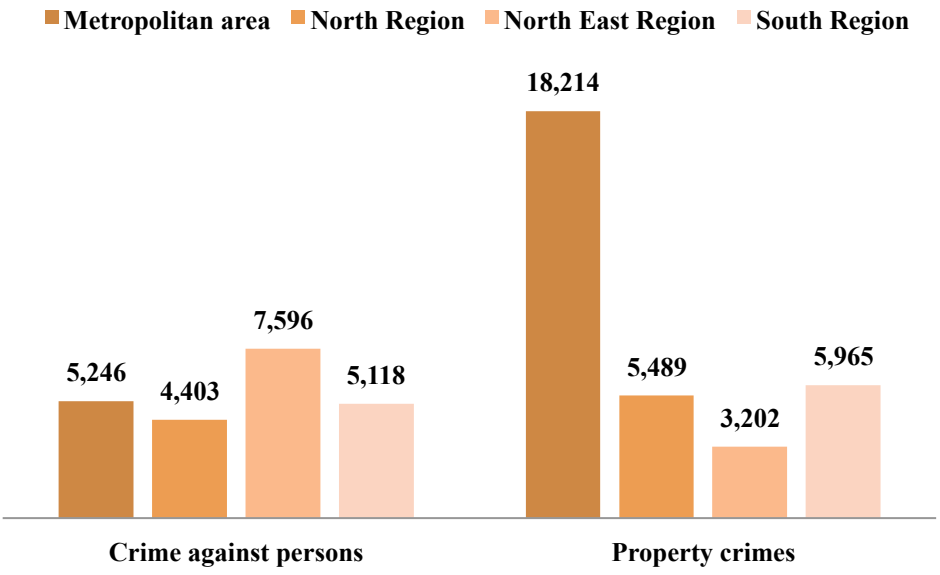


Figure 6 Statistics of reported criminal cases in Bangkok and each region (2009)

The Royal Thai Police classify crimes into five categories: 1) serious crimes, 2) crime against persons, 3) property crimes, 4) interesting crimes, and 5) victimless crimes. According to the above chart of reported criminal cases in Bangkok and other regions durin2009, little difference in crimes against persons between Bangkok and other regions was seen. In contrast, crimes against property in Bangkok were three to four times higher than in other regions.

Table 1 Statistics of reported crime against persons in Bangkok compared with reported criminal cases throughout the country (during 2008 – 2010)

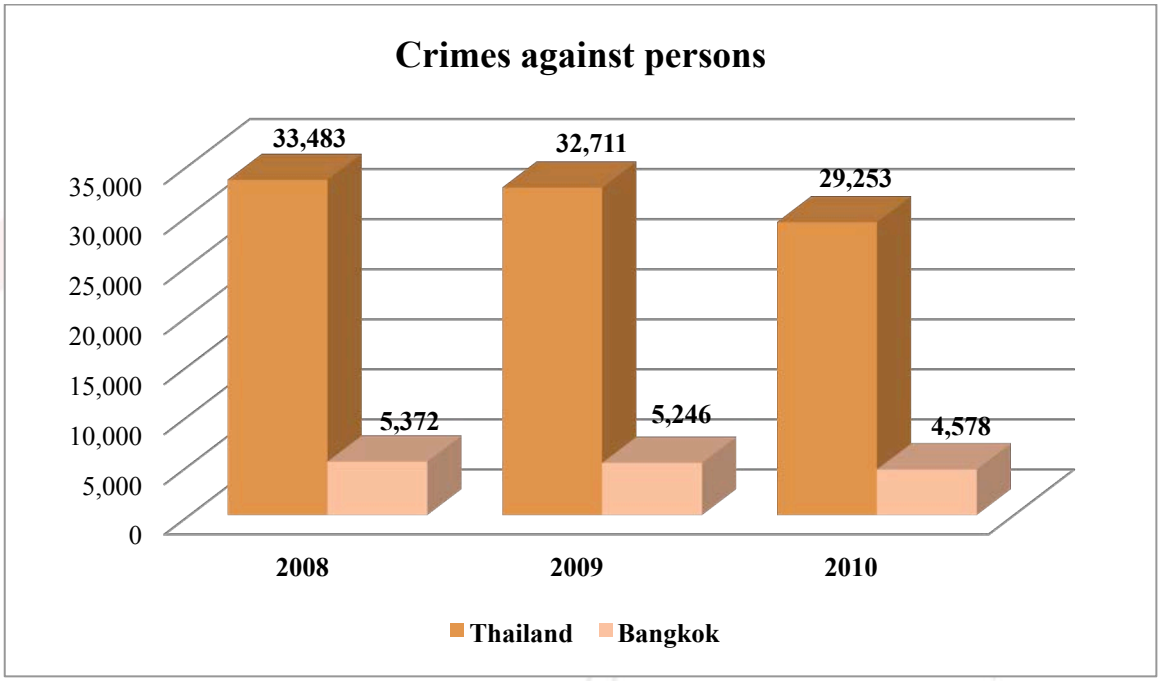
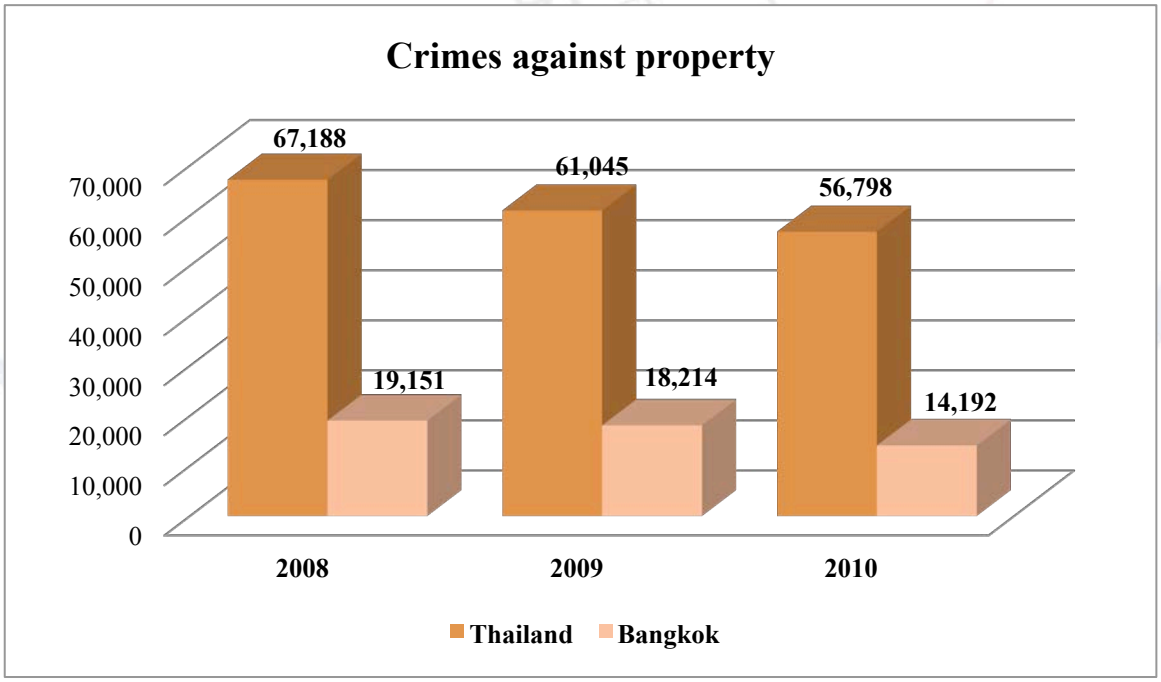


Table 2 Statistics of reported property crimes in Bangkok compared with reported criminal cases throughout the country (during 2008 – 2010)



After comparing crime statistics throughout three years in Bangkok with statistics throughout the country, the researcher found that, as for the two categories of offence shown in the above chart, criminal cases in Bangkok accounted for one-sixth the

number of crimes against persons and one-third the number of crimes against property throughout the country. Bangkok experienced more crime than in other provinces, which might stem from several factors.

5.3 Criminal causes in Bangkok

Social problems in Bangkok have increased rapidly. Most problems stem from the migration of people to work, study and operate businesses in the city despite the government offering little support to migrants. The resultant crowded communities and inadequate infrastructure have created many social problems. According to Park's Theory of Human Ecology related to the community change process called "Invasion, Dominance, and Succession" (Park, 1925) that fosters crime, Bangkok is a city of rural migrants and immigrants whose situations cause social problems. The change process in Bangkok encompasses factors from the Theory of Human Ecology that lead to many social and criminal problems.

Bangkok grew and developed with no organized direction, patterns or urban/environmental planning. As rural people continued to migrate to Bangkok, the city extended continuously to the point of fully urbanizing the suburbs. General problems in Bangkok are overcrowding, child labor, swindling, unemployment, prostitution, drug abuse, pollution and traffic jams: all leading to a deteriorated quality of life. The causes of crime can be analyzed from two perspectives:

In the macro perspective, crime in Bangkok is caused by rapid social change that made Bangkok grow in a disorganized fashion, causing an imbalance among social and physical structures and much crime.

In the micro perspective, crime in Bangkok is caused by extreme competition. As everyone struggles to survive, individuals do everything needed to enable survival in the city, resulting in criminal acts.

Moreover, the Social Disorganization Theory, which states that "Social condition of community and dwellers had changed at all times due to urbanization which weakened social control mechanism of community and led to considerable crimes" (Shaw & MacKay, 1942), can explain characteristics of Bangkok's chaos. Bangkok is a norm-less city; its social mechanism have become more fragile over the past 20 years. More dwellings such as condominiums, apartments and rental homes that house migrants have weakened the social control mechanism: people seldom know each other. Moreover, Bangkok residents do not abide by laws that traditionally have controlled social order, such as the Building Control Act, Cleanliness Act and Traffic Act. Law-breaking by the general public has diminished their conscience, resulting in further violations of the law.

However, characteristics of crimes in Bangkok differed with those in other cities because Bangkok's development did not extend from the center as in other cities. Though its role is to solve crime in Thailand, the Metropolitan Police Bureau, Royal Thai Police has never made criminal maps of Bangkok; hence, characteristics of crimes in Bangkok cannot be clearly analyzed. However, after using Burgess's Concentric Zone Model (Burgess, 1925) to explain crimes in Bangkok, the researcher found that residential patterns in Bangkok are different from those in Western cities. People with high status desire dwellings in the center of Bangkok, while people with lower status prefer living in outside areas where costs are lower than in the city's

center. Moreover, dispersion of progress in Bangkok was unlike that in cities around the world. Department stores were built in each city corner. People illegally migrated to build dwellings and live in every district of Bangkok. According to Burgess's Concentric Zone Model, a district in Bangkok most similar to Zone 2 was Khlong Toei, with the highest rate of violent crime, crimes against property and drug-related crime. This resulted from district land being illegally seized and occupied by poorer people, causing the "Invasion, Dominance, and Succession" change process in Park's Theory of Human Ecology (1925).

5.4 Problem-solving guidelines

According to Social Control theorists, people do not commit offence due to mechanism consisting of various social institutes such as family, school, religion which prevents people from committing offences. Therefore, Social Control Theories study criminal problem-solving guidelines focusing on social relationship capable to prevent people from committing criminal offences rather than factors or influence of government mechanism. These Social Control Theorists do not explain perspective of law enforcement or justice process but consider awareness of public benefits which is an important element bringing peace to the society.

According to analysis results, the problems are caused by the followings; as Bangkok is a big city, people do not have mutual relationship and there is high unemployment. People in Bangkok do not have any social regulations to make them be good people and prevent them from committing any criminal offences. As Bangkok rapidly becomes an urban society, people living in Bangkok have less belief and less good traditions, weakening social norm and making these people tend to increasingly violate social regulations and commit criminal offences. As for the family problem of people in Bangkok where parents have to work outside to have enough incomes, children are less controlled by their family so they tend to increasingly commit offences in the future.

As for problem-solving guidelines, the researcher had proposed Community Relations Approach linking with Social Control Theories. The Community Relations Approach aims to solve criminal problems by creating interpersonal relationship to enable community members to know each other and mutually help keep a close watch on crimes. Moreover, community members are encouraged to participate in preventing themselves from facing crimes on their body and property. However, police's roles related to criminal problems are not ignored. It was suggested that local police should adjust their roles according to Community Relations Approach. Police have to plan, support, and give advice on criminal prevention to the community. Police under this approach are not the main responsible for criminal prevention.

6. Conclusion

Criminal problems in Bangkok stemmed from deteriorated society and weakness of social bond due to migration of people from other provinces to stay in Bangkok. There was rapid increase in number of rented houses, single houses, and large condominiums for supporting excessive populations. One thing which could be clearly seen in Bangkok was no relation among neighbors or people living in the nearby places. After analyzing problems with Theories of Sociological Criminology,

the researcher found that Bangkok was associated and was not associated with conclusion of said theory.

As for Bangkok associated with conclusion of said theory, Bangkok was a city where people from other provinces and foreign countries migrated to live, causing social and criminal problems. Social mechanism in Bangkok was weaker due to fast social change. Urban society caused Bangkok to face social and criminal problems. However, after comparing Burgess's Concentric Zone Model which could be used for explaining characteristics of crimes and characteristics of crimes in other cities, the researcher found that said theory could not be used for explaining characteristics of crimes in Bangkok because Bangkok was the city without growth extending from the center like other cities. Residing values of people with high and low social status were different from those of western people.

Criminal problem-solving guidelines indicated that problem situations and problem-solving guidelines completely link with Control Theories. Social Control Theories can completely be applied for solving criminal problems in Bangkok. All problem-solving guidelines proposed by the researcher aim to solve criminal problems, especially Street Crime in Bangkok and enable people with authority or people concerned to determine policy to solve the mentioned problems.

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Correlations among Peer Relations, Learning Activities with Friends, and University Adjustment

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Abstract

The purpose of this study was to examine the relations among peer relations, learning activities with friends, and university adjustment. A questionnaire was distributed to 148 female university students in Japan. The participants responded to three scales that measured their peer relations at the university, learning activities with friends, and university adjustment. It was hypothesized that good peer relations promote a higher rate of learning activities with friends, which in turn predicts higher rates of successful university adjustment. Results of a structural equation model showed that peer relations significantly predicted four factors of learning activities with friends, and that mutual peer encouragement in academic settings contributed to an improved sense of university adjustment. Overall, the results indicate that students with good peer relationships have opportunities to learn and help their friends in learning activities, and such students feel comfortable in their university lives. On the other hand, learning activities such as depending on friends for support can adversely impact university adjustment. Therefore, this study's results partially supported its hypothesis.

Key words: peer relations, learning activities with friends, university adjustment

Introduction

According to Astin (1993), peers are the most important influence on college student development. A growing body of research has recognized and established that peers contribute to students' academic motivation and school adjustment (Berndt, 1999; Birch & Ladd, 1996). The literature on the benefits or role of friends during emerging adulthood is not as extensive, but does indicate that peers often take the place of family members as primary attachment figures (Fraley & Davis, 1997) and play a role in need fulfillment (Carbery & Buhrmester, 1998).

However, the reason good peer relations should positively predict academic motivation or university adjustment has not yet been closely examined. According to Anderman (1999), we need to consider not only academic goals and academic motivation but also social motivation when we examine the factors affecting learning behaviors. In addition, Okada (2008) suggests that learning and solving problems cooperatively with friends have a strong influence on positive attitudes toward students' learning. Okada (2008) also indicates that students generally interact with their friends in academic settings on the basis of good relationships, and these experiences promote students' academic motivation or academic achievement. Furthermore, a large body of research has found evidence of an association between academic adjustment and university adjustment or university satisfaction (Matsushima & Ozaki, 2012; Mizokami, 2004). This suggests that students who have more opportunities to learn with their friends feel a sense of fulfillment in their studies and also adapt well to university life.

From the results of earlier research, we can assume that cooperative and supportive learning activities with friends are among the mediators between peer relations and university adjustment. Thus, this study examined the relations among peer relations, learning activities with friends, and university adjustment. The hypothesized model is presented Fig. 1.

Earlier research also suggests that good peer relations promote a higher rate of learning activities with friends, which in turn predicts higher rates of successful university adjustment. In the first procedure of the study, the correlation among these three factors was examined. In the second procedure, a structural equation model was conducted to investigate the predictors (peer relationships and learning activities with friends) of university adjustment.

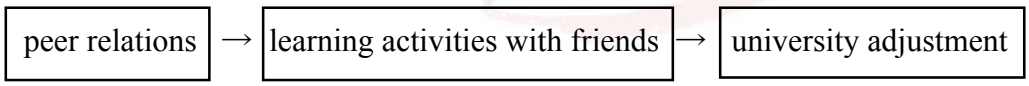


Fig. 1 Hypothesized model

Method

Participants

The participants of this study included a total of 148 female university students enrolled in psychology and education courses in the Kansai region of Japan. Their ages ranged from 18 to 25 (M = 19.66, SD = 1.10). Originally, 152 students took part in the study, but of these, four were dropped because of missing data. The participants responded to three scales designed to measure peer relations at the university, learning activities with friends, and university adjustment.

Measures

Peer relations at the university. This 4-item section was adopted from Cemalcilar's (2009) study. When responding to the scale, participants were asked to think about their peer relations in their university life. A five-point response scale was used for the ratings, with anchors *not at all* (1) to *very strongly* (5).
Learning activities with friends. In a pilot study, 140 students completed open-ended questionnaires, in which they were requested to describe their learning activities with friends. From this pilot study, 31 items were adopted. When responding to the scale, participants were asked to think about their academic activities with friends at the university. A five-point response scale was used for the ratings, with anchors *not at all* (1) to *very strongly* (5).
University adjustment. This 29-item section was adopted from Okubo and Aoyagi (2003) with four scales (sense of comfort, sense of being trusted and accepted, existence of interest and purpose of studying, and no sense of rejection). The high internal consistency of this scale has been confirmed and its construct validity has also been assessed (Okubo and Aoyagi, 2003). When responding to the scale, participants were asked to reflect on their university lives. A five-point response scale was used for the ratings, with anchors *not at all* (1) to *very strongly* (5).

Procedure

Data were collected from 148 female Japanese university students in September 2013 in the Kansai Region of Japan. Confidentiality procedures and anonymity were carefully explained in the written consent form as well as verbally. The SPSS software (ver. 20) and AMOS (ver. 19) were used to analyze the data.

Results

Factor analysis of learning activities with friends

To confirm the factor structure of the learning activities with friends, an unweighted least-squares procedure was conducted on the 31 items. After promax rotation, five items with a factor loading of less than 0.35 were excluded from subsequent analyses. The remaining 26 items were examined using an unweighted least-squares procedure with promax rotation. After promax rotation, items with factor loadings greater than 0.35 were considered (Table 1).

The first factor was labeled mutual cooperation in report and homework preparation, since it comprised items related to these activities, such as "I have my friends' help for my report and homework" and "I help my friends with their reports and homework." The second factor was labeled mutual cooperation in class and exam preparation, since it comprised items related to these matters, such as "I have my friends show me their notebooks and handouts when I am absent from classes" and "I have my friends teach me the scope of exams." The third factor was labeled encouraging each other, since it comprised items related to encouragement, such as "My friends and I motivate each other to learn" and "My friends and I support each other to motivate our learning." The fourth factor was labeled cooperation with club members in exam and

report preparation, since it comprised items such as "I ask senior club members about test contents and different methods of studying" and "I teach test contents and methods of studying to my junior club members."
These four factors accounted for 55.08% of the total variance. To examine the internal consistency of each factor, Chronbach alpha reliability coefficients were calculated to be .908, .894, .789, and .822 respectively.

Table 1 Results of factor analysis for learning activities with friends

	Factor			
	1	2	3	4
28. I have my friends' help for my report and homework.	**1.095**	−.019	−.299	−.063
24. I help my friends with their report and homework.	**.834**	.065	−.273	.213
25. My friends and I share our homework with each other and discuss it.	**.752**	.070	−.076	.085
27. My friends and I ask teachers questions when we can't understand something in classes.	**.649**	−.088	.169	.013
15. I study with my friends at a café or coffee shop.	**.574**	−.091	.291	−.034
21. I write reports and conduct research with my friends.	**.513**	.026	.282	.045
26. I exchange information about classes with my friends during breaks.	**.461**	.079	.326	−.224
8. I study with my friends at my or friends' house.	**.447**	−.248	.273	.291
29. My friends and I share information with my friends by crosschecking our notebooks.	**.399**	.328	.114	.014
1. I study with my friends at the university library or cafeteria.	**.390**	−.044	.309	−.184
30. I have my friends show me their notebooks and handouts when I am absent from classes.	−.063	**.934**	−.331	−.005
23. I have my friends teach me the scope of the exam.	.158	**.763**	−.144	−.074
19. I check the scope and contents of the exam with my friends before exam.	−.206	**.609**	.265	.096
11. I show my notebooks and resumes to my friends when they are absent from classes.	−.193	**.603**	.138	.004
12. I discuss and check the assignment with my friends.	.142	**.603**	.075	.052
3. I have my friends teach me what I can't understand in classes.	.036	**.562**	.246	−.040
2. My friends and I teach each other when we can't understand something in classes.	.121	**.496**	.277	−.064
22. My friends and I try to solve each other's problems when we can't understand something in classe	.249	**.458**	.245	−.052
10. I communicate with my friends by using e-mail or Skype when I understand about classes.	.156	**.445**	.065	.161
14. My friends and I motivate each other to learn.	.046	.015	**.729**	.028
7. My friends and I support each other to motivate our learning.	.022	.132	**.712**	.025
18. I participate in experiments and questionnaires of senior students for their thesis.	−.201	−.067	**.597**	.169
4. I teach my friends when they can't understand in classes.	.009	.188	**.399**	.042
20. My friends and I recommend useful books and references to each other for learning.	.329	−.020	**.395**	.123
17. I ask senior club members about test contents and different methods of studying.	−.047	.109	.121	**.842**
31. I teach test contents and methods of studying to my junior club members.	.085	−.064	.074	**.718**
Factor Correlation				
2	.625			
3	.690	.652		
4	.426	.184	.404	

Correlations among subscale factors

Table 2 shows the mean, SD, and Chronbach α values for all scales. The correlation of these factors is also shown in Table 5.
Peer relations correlated positively with the four factors of learning activities with friends (r = .412, p < .001; r = .541, p < .001; r = .494, p < .001; r = .282, p < .001), which in turn correlated positively with the four factors of university adjustment (r = .744, p < .001; r = .580, p < .001; r =.465, p < .001; r =.192, p < .021). In addition, the correlations show that the four factors of learning activities with friends are significantly correlated with "sense of comfort" (r = .421, p < .001; r = .453, p < .001; r = .560, p < .001; r = .317, p < .001), and "sense of being trusted and accepted" (r = .510, p < .001; r = .466, p < .001; r = .658, p < .001; r = .479, p < .001). "Mutual cooperation in report and homework preparation," "encouraging each other," and "cooperation with club members for exam and report preparation" are all significantly correlated with "existence of interest and purpose of studying" (r = .216, p < .009; r = .389, p < .001; r = .296, p < .001).

Table 2 Correlations between subscale scores (n = 148)

	1	2	3	4	5	6	7	8	M	SD	α
1. peer relations									3.85	0.82	.92
2. mutual cooperation in report and homework preparation	.412**								2.80	0.93	.91
3. mutual cooperation in class and exam preparation	.541**	.679**							3.72	0.75	.89
4. encouraging each other	.494**	.692**	.661**						3.30	0.88	.79
5. cooperating with club members for exam and report preparation	.282**	.499**	.325**	.509**					2.45	1.29	.82
6. sense of comfort	.744**	.421**	.453**	.560**	.317**				3.43	0.67	.83
7.sense of being trusted and accepted	.580**	.510**	.466**	.658**	.479**	.767**			3.15	0.75	.89
8. existence of interest and purpose of studying	.465**	.216**	.161	.389**	.296**	.678**	.560**		3.47	0.74	.81
9. no sense of rejection	.192*	-.156	-.065	.065	-.084	.404**	.190*	.415**	3.27	0.71	.80

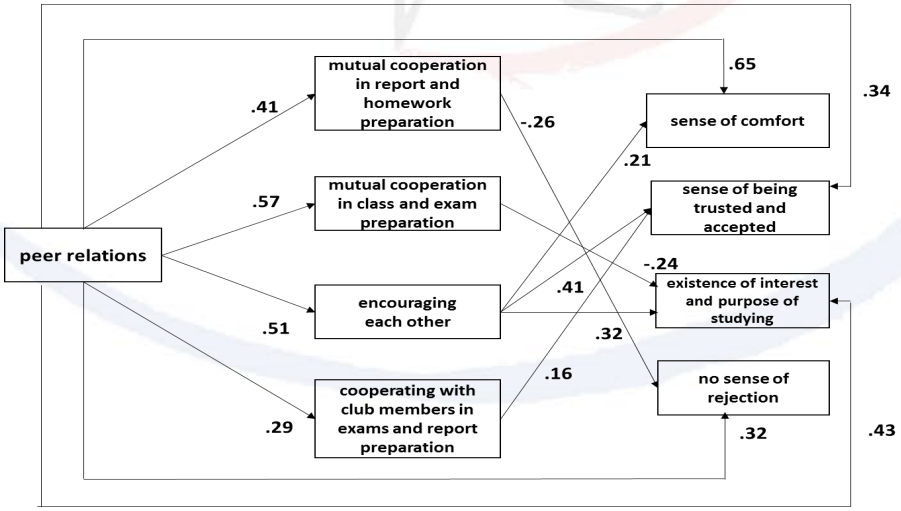
Testing the hypothesized model

A structural equation model (SEM) was used to test Fig. 1. Results showed that peer relations significantly predicted the four factors of learning activities with friends (β = .41, p < .001; β = .57, p < .001; β = .51, p < .001; β = .29, p < .001). In addition, "encouraging each other" significantly predicted a "sense of comfort" (β = .21, p < .001), a "sense of being trusted and accepted" (β = .41, p < .001), and the "existence of interest and purpose of studying" (β = .32, p < .001). Furthermore, "cooperating with club members for exams and report preparation" significantly predicted a "sense of being trusted and accepted" (β = .16, p < .004), "mutual cooperation in report and homework preparation" predicted the "no sense of rejection" (β = −.26, p < .002), and "mutual cooperation in class and exam preparation" predicted the "existence of interest and purpose of studying" (β = −.24, p < .006). This model fit the data well with GFI = .982, AGFI = .921, CFI = .998, and RMSEA = .030.

Fig. 2 Standardized beta coefficients for the hypothesized SEM. All parameters significant at p < .01.

Discussion

The purpose of this study was to examine relations among peer relations, learning



activities with friends, and university adjustment. Overall, the results of SEM (Fig. 2) demonstrated that students with good peer relationships have opportunities to learn and help their friends in learning activities. Furthermore, learning behaviors with

friends, such as motivating and encouraging each other, contribute to better university adjustment. These findings generally show that the impact of friends on university adjustment is based on their mutual support and encouragement in learning. In addition, emotional support, such as encouraging each other in learning settings, was the most important among the four factors of learning activities for university adjustment.

Although the results showed that a significant link exists between peer relationships and adjustment to university life, not all the factors related to learning activities positively influenced university adjustment. The results showed that a significant link exists between peer relationships and adjustment to university life, not all the factors related to learning activities positively influenced university adjustment. The results of the SEM show that depending on friends for support (among other activities) can adversely affect university adjustment.

A possible contributor to this finding might have been the difference in quality of the four leaning activities with friends, because not all learning activities with friends necessarily contribute to successful university adjustment. It is necessary for us to explore further the details of the relationship between learning activities and university adjustment. In sum, the result of the analyses partially supported the hypothesis of this study, as two factors of learning activities with friends negatively predicted university adjustment.

The results of this study have the following practical implication: University education should focus on encouraging students to build good social relations and not depend solely on friends for support, both as part of the regular curriculum and through extracurricular programs. However, several limitations to this study require consideration: First, the number of participants was relatively small, limiting the generalizability of the current findings. Second, this study examined only female students, and results of earlier studies have confirmed gender differences in learning and study strategies (Marrs & Sigler, 2011). Therefore, we also need to administer the questionnaire to male students in the future to examine any gender differences.

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A First-attack Urticaira Increased Risk of Following Depression in Adolescence – National Study

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Objective:

Urticaria is a common ailment in adolescents. Its symptoms (e.g., unusual looking rash, limited daily activities, and recurrent itching) might contribute to the development of depression in adolescents, but this potential link has not been well studied. This study aimed to firstly investigate the risk of depression after urticaria using a nationwide population-based study.

Methods:

This study used the Taiwan Longitudinal Health Insurance Database. A total of 5,755 adolescents (aged 13 to 18 years) hospitalized for a first-attack urticaria episode from 2005 to 2009 were recruited as a study group, together with 17,265 matched non-urticaria enrollees as a control group. Patients who had histories of urticaria or depression before the study period were not included. Each patient was prospectively traced for one year to identify the occurrence of depression. Cox proportional hazards models were generated to compute the risk of depression between the study and control groups, making adjustments for the subjects' place of residence and sociodemographic characteristics. Depression-free survival curves were also analyzed. Finally, the risks of depression were analyzed between different age groups.

Results:

Thirty-four (0.6%) adolescents with urticaria and 59 (0.3%) non-urticarial control subjects suffered a new-onset episode of depression during this period. The stratified Cox proportional analysis showed that the crude hazard ratio of depression among adolescents with urticaria was 1.73 times (95% CI, 1.13-2.64) that of the control subjects without urticaria. Patients who aged 16 to 18 years, with history of asthma were more likely to suffer from depression (both $p<0.05$). Finally, urticaria was determined to be a risk factor for depression only in adolescence and not in patients aged <13 years (n=6,745) or those aged between 19 and 24 years (n=7,185).

Conclusion: Individuals who have a first-attack of urticaria during adolescence are at high risk of developing depression.

Table 1 Characteristics and personal histories of the adolescents with urticaria and the control patients.

	Adolescents with urticaria (n=5,755)		Control patients (n=17,265)		
	No.	%	No.	%	*p*-value
Gender					1.000
Male	2,657	46.2	7,971	46.2	
Female	3,098	53.8	9,294	53.8	
Mean age(y/o) (Mean±SD)	16.2±1.7		16.2±1.7		1.000
Age group (y/o)					1.000
13-15	2,645	46	7,935	46	
16-18	3,110	54	9,330	54	
Economic level of family (monthly income) (USD$)					0.246
<600	1,622	28.2	4,737	27.4	
601~1,000	3,125	54.3	9,349	54.2	
>1,000	1,008	17.5	3,179	18.4	
Urbanization					0.622
1 (most)	1,313	22.8	4,068	23.6	
2	703	12.2	2,102	12.2	
3	1,783	31	5,225	30.3	
4	1,956	34	5,870	34	
Geographic regions of Taiwan*					0.036
Northern	2,659	46.2	8,105	46.9	
Central	1,371	23.8	4,306	24.9	
Southern	1,553	27	4,401	25.5	
Eastern	172	3	453	2.6	
Asthma history*					0.004
Yes	2,144	37.3	6,093	35.3	
No	3,611	62.7	11,172	64.7	
Atopic dermatitis history*					<0.001
Yes	394	6.8	771	4.5	
No	5,361	93.2	16,494	95.5	
Allergic rhinitis*					<0.001
Yes	2,886	50.1	8,068	46.7	
No	2,869	49.9	9,197	53.3	

*Significant differences

Table 2 Crude HR for the presence of new-onset depression among adolescents with urticaria and the control patients.

Presence of depression	Total sample (n=23,020)		Adolescents with urticaria (n=5,755)		Control patients (n=17,265)	
One-year follow-up	No.	%	No.	%	No.	%
Yes	93	0.4	34	0.6	59	0.3
No	22,927	99.6	5,721	99.4	17,206	99.7
Crude hazard ratio[a] (95% CI)	-		1.73* (1.13-2.64)		-	

*p- value <0.05

[a] Crude hazard ratio was calculated by stratified Cox's proportional hazards model (stratified by age, gender, and the year of index hospitalization);

Table 3 Covariate HR adjusted for depression during the 1-year follow-up period for the total patient sample (n=23,020).

	Occurrence of new-onset depression		
Variables	HR	95% CI	*p*-value
Groups			
Adolescents with urticaria	1.70	1.11-2.59	0.015
Control*	1.00	1.00	1.000
Allergic rhinitis history	0.91	0.59-1.40	0.666
Asthma history	1.55	1.01-3.10	0.044
Atopic dermatitis history	1.43	0.66-2.28	0.369
Geographic regions of Taiwan			
Northern*	1.00	1.00	1.000
Central	1.17	0.67-2.05	0.577
Southern	1.15	0.68-1.93	0.599
Eastern	1.56	0.55-4.43	0.406
Economic level of family (monthly income) (USD$)			
>1000*	1.00	1.00	1.000
601~1000	0.693	0.39-1.23	0.208
<600	1.28	0.72-2.27	0.409
Urbanization			
1 (most) *	1.00	1.00	1.000
2	0.94	0.42-2.10	0.875
3	1.52	0.86-2.70	0.151
4	0.91	0.48-1.73	0.772

*Reference group

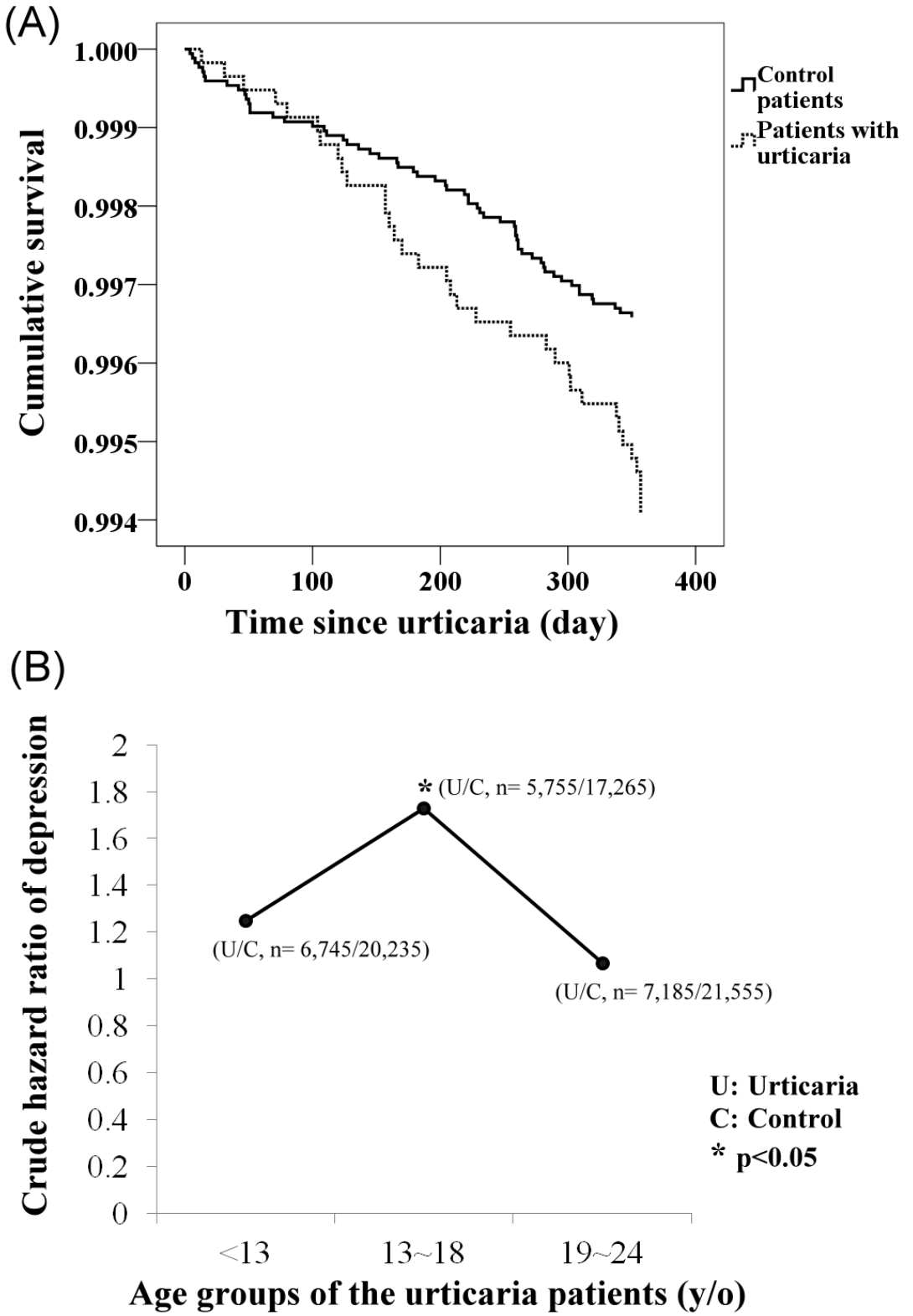

Figure 1 Depression-free survival curves and HRs in different age groups (A) Depression-free survival curves for the urticaria and control patients during the 1-year follow-up period ($p<0.05$) (B) Urticaria significantly increased the risk of depression

only in the adolescent age group (HR 1.73, 95% CI, 1.13-2.64). The patients were divided into three age groups according to the age at which they experienced their first-attack of urticaria. Each patient was followed for one year. In each age group, crude hazard ratios were calculated using stratified Cox's proportional hazards models (stratified by age, gender, and the year of index hospitalization), which were performed to analyze the risk of a new onset of depression between the urticaria and control patients. In the age groups of <13 years, 13 to 18 years, and 19 to 24 years, the numbers of patients who suffered an episode of depression during the follow-up period after experiencing urticaria were 5/12, 34/59 and 55/150 (urticaria group/control group), respectively.

Real, Relevant or Redundant: Positioning and Re-Positioning Buddhism in Australia as an Education Paradigm

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Abstract

This discussion paper seeks to determine what relevance the Buddha-Dharma might have to contemporary education in Australia, and draws conclusion about how the Buddha Dharma might inspire and progress the agendas of democratic schooling more generally. It is argued that if education is seeking to promote resilient individuals and socially engaged citizens, then these aims warrant specific and targeted teaching of values and that these are predicated upon students having facility to be aware of their actions and able to make choices and consider consequences. The meta-ethics of wisdom and compassion are discussed alongside key commentators who have sought to shape directions in democratic schooling. Finally a model is presented of how some of the key values emphasised in the Buddhist path, the *paramitas* (Skt.) when coupled with mindfulness exercises, serve to build a more robust pedagogy that has individual resilience and engaged citizenship at its core.

Buddhists in Australia

The Buddhist population in Australia has reached a new highpoint in the twenty-first century, adding impetus for considered attention to education if there is to be intergenerational longevity. By 2006, the Australian Census showed that Australia's declared Buddhist population had more than doubled since the 1996 census, and growth has steadily continued. The 2011 Census reported that 2.5% of Australia's population identified as Buddhist, and Buddhism holds the second largest religious population in Australia behind Christianity.

Alongside growth explained in part by the rapid expansion of migrant/ethnic Buddhism as a consequence of migration from Asia and the Indian sub-continent (particularly from the 1970s onwards) there has been a significant increase in numbers of Australian-born citizens who have adopted the Buddhist path (Spuler, 2000), but rather than assuming an identifiable religious profile, Buddhist people have for the most part integrated into the society and participate in a broad range of community activities and vocations, both from within their cultural groups and as participants in the wider community (Sherwood, 2003).
However, given the predominance of Buddhist people and their willingness to engage in community life, it appears somewhat anomalous compared to the other major religions in Australia (Christian, Jewish and Muslim) that there is as yet no representative position on education articulated by Buddhist people, and the establishment of Buddhist schools is tentative and nascent. The Buddhist Council of New South Wales has the longest-standing religious instruction program running in Australia, which in the last couple of years has experienced unprecedented growth. In Queensland too, Buddhist Education Services for Schools Inc. has responded to community requests to offer a coordinated Buddhist program to both primary and secondary schools. The opening of the Daylesford Dharma School in 2009, and the popularity of Buddhist Special Religious Instruction/ Education programs in state primary schools reflect a growing impetus from within Buddhist communities to formally engage in education. With a firm commitment to ethical living and intellectual development, the Buddhist path prizes education, although how this transposes into contemporary education is still a slow and delicate task.

The experiences of immigrant peoples establishing homes, families, careers, cultural networks and Buddhist centres has left systematic education of children for a later stage. Amongst refugee people with whom I have worked there is deep appreciation for the liberty afforded in Australia and for many, having survived repressive and sometimes brutal political systems, there is uneasiness about voicing concerns and aspirations publicly. For Australian nationals who have adopted the Buddhist path, the trajectory towards Buddhist education has also taken time to mature. Initial steps have been to join with immigrant peoples in the establishment of cultural networks and Buddhist centres, and to embark upon personal study and practice of the Dharma (the Buddha's teachings). These endeavours have produced many temples, Dharma centres and retreat facilities (more than 400 nationwide) that offer a robust range of community development and awareness programs that aim to preserve and share the Dharma.

Yet it would be pre-emptive to consider that Buddhism in Australia is established, and these centres, viharas and gompas could easily become conference facilities

and nursing homes in the future. Some recent closures of Dharma facilities are already indicators of this possible trend. Even if some continue, without dedicated commitment and guidance to youth it is conceivable that large temples might be artefacts in fifty years' time, perhaps only accessed a couple of times a year for new year and Vesak celebrations to commemorate Buddha's birth, enlightenment and death. Of the 250 Buddhist organisations with membership of state Buddhist Councils, barely 14% currently offer programs for children and youth. Of these memberships of course there are monasteries, hospices, and retreat centres that would necessarily preclude children's education, and there are university youth groups that pursue this function. There are occasional family and children's activities offered in many centres, and the language schools that often run within some centres provide a vital role combining Dharma values and materials into the delivery of their language programs. There are also websites, such as http://buddhanet.net and other authentic sites tailored for children and youth yet these can be no substitute for a comprehensive educational approach.

Firstly for Buddhists: how they might articulate Dharma as pedagogy, and further in a wider educational context: how ethics and values can be taught in schools, and how religious and spiritual perspectives can be authentically taught in a plural society.

For Buddhist people in Australia, the slow development of Buddhist education or public positions on education can also be attributed to various factors from within the epistemology. Firstly, Buddhism considers itself a non-proselytising religion: *"Ehipassiko,"* said the Buddha, "Come and see," so the movement to education comes with immediate tension, particularly regarding children, yet almost paradoxically Buddhist centres are places for education. These offer teaching, generally free or at operational costs, and are reluctant to advertise their services. Furthermore, there is also uneasiness amongst some Buddhist practitioners about identifying their practice of Buddhism as religious. Socially and politically, Buddhism holds the place of a religion and shares features of other religions in terms of offering methods to help understand connections between life, death and beyond, and ethical living. However, the promotion of freedom of thought and preclusion of self-surrender that hallmark the Buddhist path (Narada, 1988, 1993) render it anathema to conventional religious constructs, and how religion is perceived in society.

This unique position, as both religion and speaking to the human sciences, has prompted practitioners in the fields of psychology (Dockett, 2003; Hayes, 2003; Ragsdale, 2003), philosophy (Harris, 2006; Mohanty, 1992; Pickering, 1995; Thom, 2005) and feminist discourse (Klein, 1995) to seek an expanded, more informed and inclusive understanding of the Dharma beyond a solely religious label. Secularised borrowings from Buddhism have become profligate across the world in the last twenty years, especially the many permutations of Mindfulness, Positive Psychology and Positive Education. While these movements are encouraging for Buddhist educators, it is at this stage difficult for Buddhists to enter these arenas visibly as Buddhists because, with a religion label, proselytising assumptions can be hard to avoid. With but one school, and education bodies that administer only volunteer programs, there is also but small opportunities for Buddhists to contribute substantially to religion and ethics education dialogues in Australia.

Buddhists typically are fairly reticent. Vasi observed that the willingness of Buddhist people to contribute to society comes from the Buddhist notion of interconnectedness of all beings and the empowerment of individuals and their activities through the notion of skilful action (Vasi, 2006, p. 10).

Sherwood makes a similar observation of,

"a distinctively Buddhist praxis arising from the Buddhist values of compassion, the linking of inner and outer transformation, and the dissolving of the artificial boundaries between I and you, between human and non-human" (Sherwood, 2003, p. 95). These can inform what a person does, but there is no apparent need to talk about it.

It appears to be an assimilated population. Buddhists overall have not drawn attention to themselves, they have not been a problematic population, nor problematised by academics. They are largely not known and hence not fully integrated into the society. For adults this may not be a problem, but it is potentially more awkward for youth to maintain this identity. With youth resilience now an imperative – a societal responsibility as well as in education – there is a real possibility to integrate inclusive and proactive strategies known to Buddhist peoples around a common theme of improving young people's wellbeing.

The 'core business' of Buddhism is education, and increasingly Buddhists are articulating their spirituality in terms of education. Centres, institutes, temples, pagodas, gompas, wats and viharas are all places for teaching and learning. Superficially perhaps they appear to be places of ritual, worship and veneration, but these serve deeper curricula aimed to develop wisdom, compassion, awareness and responsibility. Buddhist institutions provide courses in skilful living, life-long learning in student-paced programs – that is a path to awaken minds from ignorance. This type of curricula is based on an ontology that recognises interdependence, causality, promotes individual empowerment' and means where mindfulness practise is employed to support ethical sensibility.

The Dharma is pedagogy of personal development.

However, traditional structures have changed dramatically and are continuing to do so. Changes to the education of lay children, that has traditionally been a family and community concern, have also occurred:

"The impetus to teach children to be aware of what they think, say and do and act with kindness has been an assumed and informal component of Buddhist parenting and teaching….[C]children absorbed Buddhist teachings by learning from their parents' modelling, by developing relationships with village temple monastics, and through moral lessons in scriptures and stories" (Loundon, Kim, & Liow, 2006, p. 338).

Buddhist children in Australia are being educated in state schools or, to a lesser extent, in independent (Christian) schools. Seldom are Buddhist people's voices heard, and as Smith (2013) has argued there are contributions to be made to secular school by way of elevating compassion, wisdom and ethical living, continuing to promote mindfulness exercises in school contexts if the common concerns of promoting the wellbeing of young people and their development as citizens in a globalised world.

Buddhist scholars such as Buddhadasa (1988), Conze, 1980), Nyanatiloka (1982), Sivaraksa (1994), Batchelor (1989) and other scholars such as Smullyan (1977) and Sternberg (1990) have seen benefit from drawing on Buddhist philosophy to reshape education, while Erricker furthers these arguments by proposing that education inspired by Buddhist philosophy is both "radically democratic and childcentred" (Erricker, 2009, p.87). These scholars find agreement with Batchelor (1989) and Erricker (2009) who deem that a hallmark feature of such pedagogy will be where students learn how to think, and not what to think. This sits neatly with the child-centred inquiry based and experiential approaches to teaching and learning that education systems such as in Australia promote. However, where public educators have been reticent has been how values and ethics can be incorporated into this type of learning. Here the Buddhist tradition can provide some clarity. The Buddhist path foregrounds particular values and ethics in the *paramitas* (Pali; Sanskrit) that are practised on the path of awakening mind. These are variously ten or six perfections. In Sanskrit these are: *dana* generosity, *sila* morality, *ksanti* insight, patience and forbearance, *virya* vigour, *dhyana* focused contemplation, *prajna wisdom and insight.* Loving kindness, compassion and equanimity are also assumed within these.

Developing wisdom and the educated person

In the early years of the twenty-first century the government of the day introduced a national Values Education initiative. Considerable time was required for discussing and clarifying values and invariably consensual understanding remained elusive. The pedagogies are still emerging. With subsequent changes of government the prominence of values education has waned, or rather has the funding, but nevertheless the national policy that guides education, *Melbourne Declaration on Educational Goals for Young Australians* continues to stress the importance of values. Alongside this however has been the introduction of standardised testing in the National Assessment Program – Literacy and Numeracy (NAPLAN) that is administered annually for students in Years 3, 5, 7 and 9. This move has shifted emphasis in teaching and learning towards this type of achievement with measurable outcomes, and overt teaching of values more vulnerable because these pertain to lifelong learning, and must concede that applications will be individual and situation specific.

Given the current context, to define these may well be premature. If, for example, the success of these programs was to be measured by decreases in school disobedience and improved grades, such results could equally come from heavily authoritarian practices that favour training and conformity over qualities that would accord with lifelong learning, such as contextual awareness, self-control and concern for others. From a Buddhist perspective the intrinsic aim of education is to enable people to live happily and with active concern for others throughout their lives. It can be termed pedagogy for personal development.

Actualising these aims is predicated upon mindful awareness. This facility greatly assists self-control; ability to make choices that coupled with kindness determines positive outlooks on life. The inward looking pursuit of meditation is a tool to effect more aware and skilful engagement in the world. The role of the teacher, *guru* in Sanskrit, has traditionally played a pivotal role. In values discourse Lovat

and Toomey (2007) have also drawn attention to the essential role of the teacher as an ethical role model and companion guide.
In the work of R.S. Peters we can find agreement between Buddhist aspirations and public education. In his self-confessed rushed publication Peters (1970) foreshadowed a shift in education towards instructional training models and exhorted education communities not to lose sight of important functions of education.

For Peters, education is much more than skills acquisition. It is about doing something worthwhile and for human betterment, which necessarily includes an ethical imperative:
"Educational practices are those in which people try to pass on what is worthwhile as well as those in which they actually succeed in doing so. Success might be marked by general virtues such as a sense of relevance, precision, and the power to concentrate and by more specific virtues such as courage, sensitivity to others, and a sense of style" (Peters, 1970, p. 26).

The notion of an educated person is developed by Peters in a later publication where he creates further distance between what education can and should be, and instruction and indoctrination. By enabling students to transform knowledge by understanding the reasons for things, rather than simply react, Peters links education to understanding connections and consequences, the inclusion of multiple perspectives and subsequent moral reasoning:
"Any moral judgement, for instance, presupposes beliefs about people's behaviour and many moral judgements involve assessments of the consequences of behaviour. An educated person, therefore, will not rely on crude, unsophisticated interpretations of the behaviour of others when making moral judgements; he will not neglect generalizations from social sciences, in so far as they exist, about the probable consequences of types of behaviour" (Peters, 1973, p. 240).

With this approach people are better because of education. Warnick (2007) has argued exception from a single case of an educated immigrant who, because of his education became alienated from his family. The case serves to illustrate ambiguities and particular sensitivities that operate within diverse groups of people, yet Warnick nevertheless sides with Peters in that the capacities to understand situations and choose appropriate and ethical actions, hence human betterment, are distinctive traits of an educated person.

Peters invites discussion and collaboration between different branches of the social sciences, particularly psychology and education. The broad aims of education that produce free thinking, creative, moral people is for him too a community concern that openly values respect for children and is modelled in teacher-student dynamics. Peters' work synthesised much of the educational thinking that preceded him. Most noticeably he developed Dewey's (1916) democratisation of education and the seeds he planted for experiential child-centred learning. In the emerging Australian Curriculum we can see how child-centred learning and, through the work of Kolb (1984), discovery and experiential learning, has become part of the orthodoxy. The imperative for democratic educational theory and practices has in the past decade gained urgency in the face of growing violence, poverty and intolerances in the

world and in Australian society, and where many of its citizens can feel powerless in the face of these.
Pearl and Knight write passionately that powerlessness of leaders and citizens can be redressed by education that empowers students to critically engage with all issues:

"Part of the powerlessness stems from an inability to think deeply about anything, part from an inability to conceptualize the inter-connectedness of problems, and part from a lack of visions of a world capable of solving problems. Part of the difficulty is organizational - implementing actions that are contagious (i.e., encouraging active and meaningful mass citizen participation in the achievement of a desired goal). The needed conceptualization, appropriate organization, and contagious action are addressed in a democratic education. In fact, democratic education is designed to treat all the issues that current education fails to address or worsens" (Pearl & Knight, 1999, p. 20).

However, Pearl and Knight, and current state and national directives are nevertheless biased towards outward-looking social engagement. Yet without dedicated and explicit intrapersonal learning these ambitions seem ever more likely to fall short. I have bid to conceptualise how an education system that prioritises reified individuals, with ad hoc ethical teaching and learning in Figure 1. below.

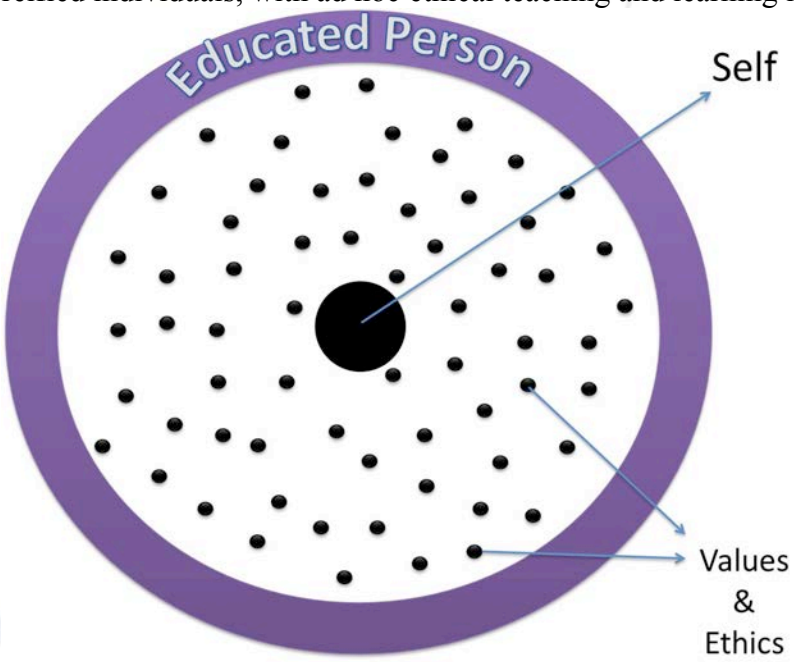

Figure 1. A highly individualised model of education

Here, a Buddhist perspective challenges conventional notions of a reified self, that finds sympathy through the work of Martin Buber (1958). His 'I and Thou' ethical perspective challenges the human sciences to create imperatives to act that require the ability to perceive 'thou' as 'like me' i.e. connected. Actions consistent with this perspective are therefore kind and compassionate because these maintain consistency with what 'I' want and 'thou' wants. The 'I' and 'you' perspective thus defines a separation and otherness and with this lack of connection the moral imperatives from the 'thou' perspective can be waived. Nor with this self-other

dichotomy, that denies connections, is there much incentive to consider the other as 'thou'.

Meditation, such as mindfulness exercises, can play an instrumental role. Iris Murdoch, who has been a sustained voice for morality and goodness throughout her academic and creative pursuits, concluded towards the end of her career that to teach meditation in schools would help foster these values (Murdoch, 1992, p. 337). Buddhist philosophy and practise can be distilled into the cultivation of wisdom and compassion. These are the meta-ethics from which other virtues and forms of ethical conduct are subsumed. In practice the import of care and compassion, and the pursuit of wisdom in education appear to have lost vigour in recent policies, although with increasing concern for students' wellbeing, resilience and good citizenship educational goals it is timely to examine the importance of love and kindness as part of an education paradigm.

Noddings, has also been a longstanding advocate for the ethics of kindness, care and compassion to be legitimate and necessary aspects of education. Like Peters she too has railed against economically driven, skills-based learning, and that providing instructor proof, and research limited to this method also limits the scope of intelligence and the potential for education to take seriously the potential for concern for self, others and consequence. This Noddings (1993) has argued is 'skewed self-understanding'.

Wisdom *per se* is embedded in education discourse by scholars such as the authors above, but latterly is resurfacing as a discrete and vital topic amongst educators.
In part this is in response to growing disquiet amongst educators that there is an over-reliance on knowledge (Maxwell, 2007) and 'paratechnical' language (Sockett, 1987) on the one hand, and imperatives for teachers' own understanding and their abilities to educate that arise from values and moral education discourses (Hart, 2001, 2004; H. Smith & others, 1997; van Manen, 1994) on the other.
Positive Psychology has deemed wisdom, being the coordination of knowledge and experience, as a key character strength that promotes well-being (Peterson & Seligman, 2004; Seligman, 2002).

These authors' research found that wisdom is not age-dependent, and brought into question the popular notion that wisdom largely increases with age, as forwarded by Erikson. He placed wisdom at the pinnacle of his eight-stage theory of psychosocial development that accrues over a lifetime (Erikson, 1968, pp. 140-141). While there remains agreement with Erikson that wisdom can ideally develop over time, new confidence has been found to actively pursue wisdom as a goal that can, and should, be cultivated through education and life-long learning.
Clearly a Buddhist perspective aligns with this view, but is at variance with Peterson and Seligman who treat character strengths and virtues as logically independent and who encourage a cavalier, 'more is better' approach to their development.

Wisdom, never isolated from compassion in a Buddhist approach, resonates more closely with educators such as Almond (2007), Barton (1999) and Kekes (1995) and the philosophic thought from Noddings, Midgley (1981; 1989a, 1989b) and

Gilligan (1989) who define wisdom to include expressions of care, empathy and subsequent moral conduct.

The place of wisdom in western discourse inevitably leads to the ancient Greeks. In a collection of essays edited by Lehrer (1996) the educational applicability of the wisdom teachings from Socrates, Plato and Aristotle are discussed. For Aristotle virtues are interdependent, and happiness (eudemonia) requires all the virtues, and that more of a virtue is not always better than less – a position that accords with a Buddhist perspective. that Aristotlean 'practical wisdom' has an executive function that uses discretion to temper the exercise of other values and virtues.

They cite as an example that your best friend is heading off to a wedding in a dress that you had not seen. You personally think it is unflattering but she asks, "How do I look in this?" A measured practical wisdom response, they argue, would trump bald honesty. Their argument stands in contradistinction to Peterson and Seligman. Wisdom that embraces discernment and concern for others, from a Buddhist perspective, more fully captures the nature of wisdom and being wise.

Like other values and virtues wisdom is never left as an abstract ideal, but comes with assumptions that it will be nurtured and practised. The Dharma teaches that the means to develop this, and alleviate suffering, is through ethical conduct and the development of concentration through meditation:
"Without taming the mind and restraining its habit to chase after desirable sense objects, you will not be able to meditate or attain concentration. Wisdom depends on concentration, and in order to see reality just as it is… In order to realize that kind of wisdom, you must have the control and peace of concentration" (Sopa, 2005, p. 393).

In Figure 2 below I have attempted to synthesis a Buddhist conceptualisation of education, where are more mutable 'thou' oriented conception of self is promoted, where the cultivation of charity (giving), morality (ethics), concentration (focused attention), patience, joyful endeavour (effort) and reflection (insight) form what is a curriculum for 'awakening mind' i.e. Buddhahood, and soundly befitting of an educated person.

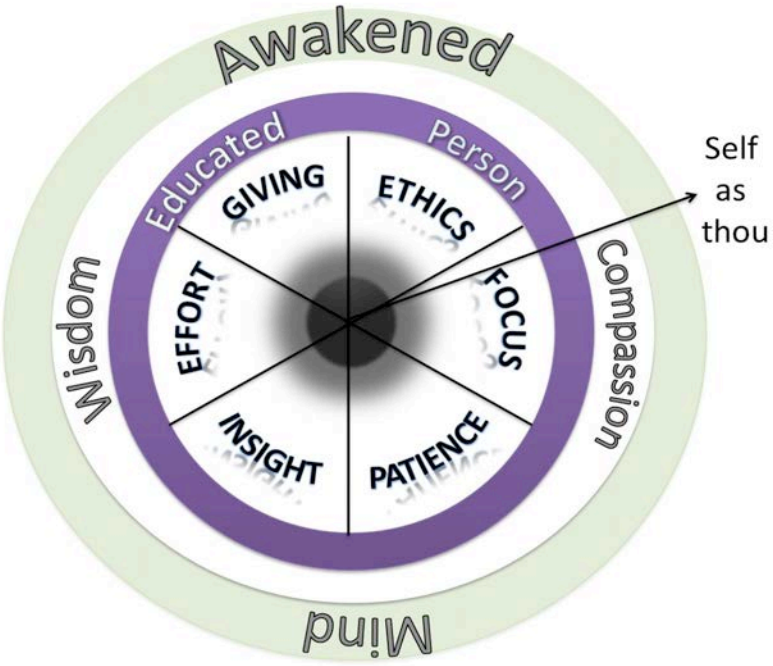

Figure 2. a Buddhist conceptualisation of education

Certainly wisdom, ethical conduct and contemplation are not the sole preserve of Buddhists, but rather, more universal features that can be found in spiritual, cultural and educational traditions. The degrees to which, and the ways in which these are expressed certainly vary according to various dispositions and heritages. However, wisdom, ethics and kindness that the Dharma spirituality embraces, are universal concerns, made all the more compelling if education systems are to proactively progress how young people are to be educated to be well, resilient and good citizens.

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Brief Psychodynamic Psychotherapy for the Elderly – a Case Series

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Abstract

Psychodynamic psychotherapy is an increasingly rare commodity to find in psychiatric practice, but has never been seen to have a prominent role with respect to the older patient. This presentation discusses the changing recent literature regarding this concept, and discusses a case study from the author's own experience demonstrating a successful outcome with limited-session psychodynamic psychotherapy for an older patient. Issues of patient selection, and why the older patient may in fact be more likely to benefit from this intervention, are also discussed.

A 74 year old woman was admitted following deteriorating suicidal ideation. This was her fourth admission for the year, preceding admissions each lasting for 2 months, each of those precipitated by overdoses on benzodiazepines and alcohol, with multiple failures in antidepressant trials. She was a survivor of multiple traumas including torture and attempted murder by her second husband, and had a long history of poor engagement with mental health services. The patient was discharged after a planned 2 week admission, but three days after discharge she drank a bottle of whisky and took several paracetamol tablets, then rang her daughter to let her know. This had been her pattern of suicide attempts for the preceding 3 years.

On return to the ward, the team changed tactics and instead had a visiting psychoanalyst assess her. It was decided by the visiting analyst that although she had obvious psychopathology, "She's not appropriate for psychotherapy as she's too old." Nevertheless, the team went on to trial thrice weekly inpatient dynamically oriented psychotherapy, by a registrar who was supervised by another senior psychoanalyst. Multiple early traumas were explored. On session 17, the patient discussed the death of her mother, stating that her first husband had refused to allow her mother to stay with them. Her mother then suicided. She then volunteered that her own daughter's husband refused to allow the patient to stay with them 3 years ago. She then realised her run of suicide attempts started after this.

"I couldn't say a word against [him], [my daughter] would never bear it. I don't blame my daughter for it, though. I don't think so. It'd be awful if I did, wouldn't it? But I do blame myself for my mother's death. Maybe I really do blame her."

There was no further suicidality. After six weeks of therapy, she had improved, but was also realistic, "I don't think I'll ever be normal, but I think I'm better able to deal with things." She was seen a month later after discharge and noted to be much brighter and socially engaged. She is now on no antidepressants or sedatives, and has not had a mental health admission for the last four years.

This case demonstrates an excellent outcome with limited psychotherapeutic intervention in an older person. It also raises several questions. Is psychodynamic psychotherapy an intervention that should be considered more often for older patients? Is it being underprescribed, or underresourced, or both? And what should be done about this?

Should Older Persons Not Have Psychodynamic Psychotherapy?

It has been claimed that older persons do not respond to dynamic psychotherapy. Freud, wrote in 1905, "Near or above the age of fifty, the elasticity of mental processes, on which the treatment depends is, as a rule lacking – old people are no longer educable."[i] Curiously, Freud wrote this at age 49.

Are there practical reasons not to proceed with psychotherapy for older persons? Freud considered that the older person would simply accumulate too much unconscious material for analysis to be practical. It could be argued that the nonprovision of dynamic interventions is a compassionate decision for the older person – the symptomatic elderly patient, already burdened with the pressures of age, should not have to "open old wounds"[ii]. However, Hildebrand noted greater emotional strength and self-reliance in older patients[iii]. For those able to access

psychotherapeutic help "the outcome is comparable, sometimes better, than for younger patients."[iv]

Cognitive impairment is often regarded as a logical contraindication. This does not necessarily extend to mild cognitive impairment however, with the literature citing a number of case studies and even a randomised controlled trial[v] demonstrating the benefit of interpersonal interventions for older patients. Garner considers that mild cognitive impairment (and other practical issues such as mobility and hearing), need to be carefully assessed as to "whether these are real external problems...or whether either patient or therapist is employing them as a defence."[vi]

Should Older Patients Receive Psychodynamic Psychotherapy?

The 1991 NIH review noted "There are no clear comparisons with placebo or pseudo treatment control groups, with the old-old, or with medically ill elderly."[vii] There has been minimal progress since that time. The reader is directed to the excellent summaries of Payman[viii] regarding the current evidence base, in particular regarding the Koder review[ix] which found five studies indicating brief psychodynamic therapy to be more effective than control.

Do Older Patients Receive Psychodynamic Psychotherapy?

A study of 94 depressed elderly inpatients on a Australian psychogeriatric unit found that only 12% were referred for psychotherapy, compared to 97% receiving an antidepressant.[x] A postal survey of 100 psychotherapy departments in the UK found 87% of respondents feeling that the psychotherapy needs of the elderly were not as well met as for younger patients.[xi] A U.K. study found 93% of general practitioners said they would consider referring elderly patients for psychological help, although only 44% had actually done so, with 33% unfamiliar with the psychological therapies available.[xii] There is only one study describing a dedicated geriatric individual psychotherapy clinic[xiii].

Summary

There is historical bias against psychotherapy for the elderly, maintained by a paucity of research leading to perpetuation of non-prescription. With sufficient research the cost-benefit qualities of these services can then be explored and perhaps thus encouraged. The cited case demonstrated a cost-effective intervention. The patient had had 9 months inpatient of stays over the preceding three years, and following 20 half-hour has maintained superior functioning for four years. This is arguably rare and shows the benefits of good patient selection. Nevertheless, this patient was almost denied a lifesaving intervention because she was "too old". This would be a laughable oversight if it were not so pervasive, and so indefensible an attitude.

One of the greatest joys of psychiatry is to listen to the stories of patients. What better stories could there be than with the older patient?

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Influence of mental models of attachment during middle childhood on self-esteem and social competence: a short-term longitudinal study

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Purpose:

This short-term longitudinal study examined the influence of attachment mental models (AMM) during middle childhood on self-esteem and social competence. Additionally, given recent evidence for multiple attachment models, we examined the structure of the AMM. We compared three models: the hierarchy model, independence model, and integration model. In the hierarchy model, the mental model for the first attachment person influences the mental model for other attachment persons and strongly influences the dependent variable. In the independence model, the mental models for specific persons are separated and independently influence the dependent variable. In the integration model, the mental models for specific persons are integrated via the general model and influence the dependent variable. Attachment theory hypothesizes that secure attachment predicts good development. Thus, our study regarded the dependent variables of self-esteem and social competence as developmental outcomes.

Method:

A questionnaire survey was administered to 764 elementary school pupils (grades 4–6; 393 boys, 371 girls) at two intervals, separated by was eight months. First, we identified the attachment figures in middle childhood. These figures were assessed by three nominated important people with respect to proximity-seeking function, secure-haven function, separation-protest function, and secure-base function. Second, we measured the children's AMM for each of these attachment figures. Two dimensions of the AMM were assessed: avoidance of intimacy and anxiety regarding abandonment. Third, we measured self-esteem and social competence.

Results and discussion:

SEM analysis was conducted on the hierarchy, independent, and integrated models. Results showed that the integration model had a better fit than the other two models regarding BIC criteria. In the integration model, the general avoidance model and general anxiety model at Time 1 significantly influenced self-esteem (β = -.16 and -.07 respectively) as well as social competence (β = -.12 and -.10 respectively) at Time 2. These results indicate that the integration model could adequately explain the structure of the AMM in middle childhood and that the AMM predicted self-esteem and social competence.

To See is to Believe: Why Students Cannot Detect Geometric Properties?

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Geometric properties are important characteristics to identify geometric shapes. The sorting task in geometric shapes is to help students understand the relationship between geometric shapes and properties. Satlow and Newcombe (1998) indicate that students of different ages have different preferences to identify geometric shapes. From the psychological perspective (Emmanuel et al., 2011), people prefer to use one dimension to classify objects. Both studies show that students would use a geometric property or their visual cues to classify geometric shapes. Therefore, this study would like to understand how students classify them. There are two research questions which will be addressed: do students have any preference to classify geometric shapes? If students use geometric properties, which property are used by students for classifying geometric shapes? Geometric shapes in primary schools have two basic attributes which are sides and angles. Triangle shapes are one of the most important concepts in primary schools. Materials in this study will adopt the sorting task in triangle shapes. There are seven kinds of triangle shapes in the Taiwanese textbooks, including obtuse isosceles, obtuse scalene, acute isosceles, acute scalene, right isosceles, right scalene and regular triangles. The sorting task in triangles has 24 geometric shapes. Each triangle shape appears three times. One is a typical type, another one has a different size and the other one has a different orientation. There also exists three non-triangle shapes in this task. The result shows that students have preferences to classify geometric shapes. They prefer to use sides to identify shapes rather than angles.

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Students' Perspectives on Learning Environments: Factors Affecting Their Satisfaction and Emotions in School

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Abstract

Children spend most of their waking time in school; therefore, experience in school is a major domain in the life of children. Aside from academic achievement as one of the indicator of school effectiveness, students' affective status, such as their state of school satisfaction and emotions, need to be given more attention by parents and educators because its impact on their social-emotional development. There is a paradoxical finding from research that while there is no problem in achieving good academic outcomes, many students report dissatisfaction with their school or learning experiences. Hence, it is important to explore the experience of students of their school. In this study, the thinking and the feelings of Jakarta-Indonesia primary school students about school are explored through students' written stories or drawings and through focus group interviews. As the subjects of education who have rights to be heard, students' voices can be a communicative power to highlight the realities of their life in classrooms and schools. Students' perspectives on their learning environments reflect how they construct meaning of their school experience. Emerging themes of this study are used to identify what factors of the learning environments impact on students' school satisfaction and emotions in school. The result of this study shows that the psychosocial school environment is a pivotal aspect that influences students' feelings and emotions in school. Different perspectives of students across the schools are valuable information in providing them with a better learning environment.

Keyword: *emotions, learning environment, school satisfaction, students' voice*

INTRODUCTION

In the educational systems in many countries, successful schools are measured by their students' academic achievement. Governments often use improved student achievement as an indicator of the performance of their educational system. Schools too often use students' academic achievement as an indicator of the quality of their school. However, Suldo, Riley, and Shaffer (2006) argues that intensive efforts to increase students' academic achievement, while positive, also present a potential issue of students becoming dissatisfied with their school. This is despite other research finding that high academic achievers are also often those students with high satisfaction of their school (e.g. Huebner & Gilman, 2006; Samdal, Wold, & Bronis, 1999). The results of research comparing high academic achievement with school satisfaction indicate some contrast in positions. A study by Park (2005) found that Korean high school students with a high achievement in OECD PISA 2003 assessment also indicate a low psychological well-being, reflecting low school enjoyment and life satisfaction. Drawing from the findings of the WHO Health Behaviour in School-aged Children (HBSC) studies on students' well-being, Finnish students has also indicate a relatively low level of school satisfaction (Linnakyla & Malin, 2008). High academic achievement coupled with low school satisfaction is also seen in a Belgium study (Vyverman & Vettenburg, 2009). Of Belgium students with a high achievement level, only between 15% and 20% who really like going to school.

As students spend most of their waking time in school it is clearly preferable that they have positive school experiences. However, several studies revealed that students are more likely to be dissatisfied with their school experience compared with other aspects of their life, such as engaging with family, friend, self, and living environment (Huebner, Drane, & Valois, 2000; Huebner, Valois, Paxton, & Drane, 2005). In a study in the USA, high school students who reported dissatisfaction with school are nearly a quarter of the total number of students (Huebner et al., 2000). Instead of educators focusing on increasing students' achievement, some increased attention to improving affective features of the learning environment —the quality of students' life in school and classrooms—would result in improved psychological well-being as well as improved academic outcomes (Matsumura, Slater, & Crosson, 2008). Students' affective status, such as their school satisfaction or their well-being tends to be undervalued or assumed separately from academic achievement (Suldo, Shaffer, & Riley, 2008). Noddings (2003) argues that students' happiness should be a major aim of their schooling. In addition, Seligman, Ernst, Gillham, Reivich, & Linkins (2009) state that a positive education outcome is indicated by two components: high academic achievement and students' enjoyment of learning at school. The importance of students' satisfaction with school is associated with students' academic achievement (Huebner & Gilman, 2006; Samdal, Wold, & Bronis, 1999) and personal adjustment (DeSantis King, Huebner, Suldo, & Valois, 2006; Elmore & Huebner, 2010; Huebner & Gilman, 2006). Therefore, improving students' satisfaction of school will have a positive impact on academic achievements.

School satisfaction is defined as the cognitive-affective evaluation of overall satisfaction with one's school experience (Huebner, Ash, & Laughlin, 2001). Similar to global life satisfaction, school satisfaction includes both cognitive judgement and the related affective component—positive and negative emotions (Diener et al., 1985

cited in Huebner, Gilman, Reschly, & Hall, 2009). More specifically, the term of school satisfaction refers to emotional responses such as happiness, enjoyment of school and sense of well-being at school (Samdal, Nutbeam, Wold, & Kannas, 1998).

Connell and Wellborn (1991) suggested that students' evaluation of their school experiences reflects the degree to which their basic psychological needs are satisfied by school experiences. According to self-determination theory (SDT), these needs are the need for autonomy, competence, and relatedness. The need for autonomy is the need to experience that their behaviour is endorsed by the self (Niemiec & Ryan, 2009; Ryan & Deci, 2004). The need for competence refers to when people feel effective in managing their ongoing interaction with social environments and they experience optimal challenge to exercise their capacities and skills (Jang, Reeve, Ryan, & Kim, 2009; Niemiec & Ryan, 2009; Ryan & Deci, 2004). The need for relatedness is the need of feeling cared by others and caring for others. When these needs occur, they have sense of belongingness and connectedness with other individuals and their community (Jang et al., 2009; Ryan & Deci, 2004). In addition, satisfaction these needs by the social context will promote intrinsic motivation, positive functions in learning, and psychological well-being (Deci & Ryan, 2000).

However, school and learning environment are not the same for every student. There is a variation in school experience between individual, classes and schools, as well. Sometimes in the same school, many of the students find their school environment as a supportive place, but for those students who do not feel supported it may actually be psychologically problematic (Anderman, 2002). In other words, there is an individual difference between students in how they construct their own meaning of psychosocial learning environment. Thus, even though learning environment can be defined by observable characteristics, such as school building, instructional method, interactions among students or between students and teachers, it can be better understood through students' individual subjective perceptions (Frenzel, Pekrun, & Goetz, 2007).

The current study was triggered by observations by us of Indonesian educational contexts. Adil, as an academic working in an Indonesian University in educational psychology at opportunity to observe over many years psychological well-being of students within Indonesian schools. Shaw, having undertaken work in the education sector in Indonesia in 2011 had interest in school pedagogy and leadership through working with principals' professional development programs (Shaw, 2012).

Exley (2005) argues that Indonesian schools have particular characteristics, such as a focus on what might be called 'traditional' teaching and a regimented learning environment. Most of teachers in Indonesian schools applied teaching practices that can be labelled as teacher-centred instruction. Such an approach is often considered to be traditional because it is the usual practice, and the practice mostly deferred to. This instructional approach is not adapted to the needs of individual children in learning process (Kaluge, Setiasih, & Tjahjono, 2004), but rather is used for other reasons such as having to cover content loaded curriculum and deal with large numbers in classes efficiently. In implementing school programs to achieve educational objectives, schools focus more on achieving high academic outcomes. Typically, Indonesian teachers give smaller attention to helping students develop their aesthetic, social, affective and moral aspects (Kaluge et al., 2004).

Since 2008, the Indonesian Central Government implemented a standardised and centrally administered National Examination that was undertaken at the end of primary school (Year 6). In responding to this policy, school success was measured by students achieving higher academic results in their score in National Examination. According to Sahlberg (2007), when an educational system adopts standardisation of education as its policies and reform strategies, it reflects policy makers' belief that performance standards for schools, teachers and students will necessarily improve the quality of outcomes. Therefore, the strategies focus the attention on student learning and school performance (Sahlberg, 2007). However, educational outcomes tend to be narrow, and focus on content acquisition and re-presentation, particularly of the main academic core curriculum areas. Students become the object of instruction from above where educational issue are directed by government to school districts, and then schools district give instruction to schools, principals, and teachers (Levin, 2000). Furthermore, parents also have expectation that their children can achieve a high score in the National Examination, in order to be able to enrol their children into prestigious or popular middle schools. As the primary stakeholders of education, students are generally left out in these decision making processes (Oldfather, 1995). This focus on the academic achievement has become dominant part of Indonesian culture and belief system, and attitudes are broadly entrenched.

Taking our concerns about Indonesia educational context within this paradigm and belief system of the academic achievement and the traditional approaches to instruction that are used, the goal of our study was to explore the experience of learning within this environment from the students' perspective. We wanted to understand the students' perceptions of the learning environment and identify what factors of the school and learning environments lead to students being satisfied with their school experiences and having positive emotions about school. Conversely, the research was also interested in what factors of the school and the learning environments lead to students having negative emotions and not being satisfied with school. The voice of students in expressing their feelings and thoughts about their experiences in all aspects of their school experience was an important consideration in designing this research. The research focused on student experiences from their points of views of learners. It was guided by the premise that students have unique perspectives on learning, teaching, and schooling (Cook-Sather, 2006).

METHODOLOGY

This paper focuses on the second phase of a mixed-method sequential design study. A qualitative approach was used to complement the findings from a quantitative study in the first phase in order to get a deeper understanding of how students experienced their school and how these experiences were related to differences of school satisfaction level and frequency of positive and negative emotions.

Participants

A nested sample is used as the sample selection procedure in this second phase, in which sample members of a group of students in the qualitative phase are selected from the students in the quantitative phase (Onwuegbuzie & Collins, 2007b). Out of 345 students in the quantitative phase, 67 students were selected for the qualitative phase. The selection of these students used purposive sampling: intentionally

selecting participants who experienced the central phenomenon or the key concept being explored in the study (Creswell & Plano Clark, 2011). School satisfaction level is the central phenomenon investigated in this study. In each school, 10–15% of students with the highest level and the 10–15% students with the lowest level of school satisfaction were selected to participate in focus group interviews and story writing or drawing.

Students who were involved in this study comprised 10 groups of Year 6 students from five primary schools in East Jakarta-Indonesia. Participants consisted of 28 (41.79%) male students and 39 (58.21%) female students with the age range was 10–13-years (Mean = 11.08, *SD* = .35)

Data Collection Methods

Data collection in this phase involved several techniques: students' story writing or drawing, and focus group interviews. Using different techniques for children is valuable since children may have different preferences and competencies (Punch, 2002). Some children may prefer to write, while others prefer to draw or talk. The students were asked to choose an activity: write a story and/or draw about school. As a guide, students were asked to express what they think and feel about school. The subject generally was, 'Tell us about your school'. Particularly, the students were asked to identify the important aspects of their school and learning environment that generates positive and negative feelings in school, and to provide examples in their stories or drawings.

A piece of lined paper is provided for the students who preferred writing a story and a piece of A-3 blank paper folded in a half, a set of black pencils, coloured pencils, and crayons for students who preferred to draw. Drawing techniques were used in some studies with young children as a strategy to engage them in the topics about school (e.g. Einarsdottir, 2010; Einarsdottir, Dockett, & Perry, 2009; Symington & Spurling, 1990). For students who preferred to draw, they were asked to draw in two kinds of situations, "At school, I like"; and "At school, I do not like". Using opposite situations is an opportunity to clarify the meaning of both pictures, both for them and for the researcher (Maxwell, 2006).

Out of 67 students in the Phase Two, 48 preferred to write story, while 19 preferred to draw. In order to understand the content of their drawing and the meaning they wish to convey, the children were also asked to talk about or write a short description about their drawing (Walker, 2007). The focus group interviews were conducted using a semi structured interview approach. Both closed and open-ended questions were used (Tashakkori & Teddlie, 2003). This technique allowed the participants to move the discussion into related areas, but it was also possible to keep the interviews focused on the main topic because of the structured elements that needed to be covered.

Data Analysis

The students' stories were retyped into digital text, the focus group interview results were transcribed into narratives and digital text. The technique of data analysis launched by Braun and Clarke's (2006) used thematic analysis as the overarching process guiding investigation of the students' narrative story and focus group

interviews. Thematic analysis is a method for analysing the data in order to identify of patterns (themes) within the data (Braun & Clarke, 2006). In the process of searching for the themes, this study used an inductive as well as a deductive approach (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). Our current study also used qualitative contrasting analysis (Collins, Onwuegbuzie, & Sutton, 2006) to address responses of student participants with the highest and the lowest level of school satisfaction.

The approach taken of analysis of the drawings used content analytical procedures (Gamradt & Staples, 1994). This approach identifies the features of the drawing, or codes by content (Bland, 2009). In order to avoid interpretation bias of the content of the drawings, the students were asked to write down the title of their images (what they had drawn), and an analysis was subsequently developed based on the student's description of their drawing. The content of the drawings were then categorised into pattern or themes.

THE RESULT AND DISCUSSION

Student perspectives of their emotional experiences in school

The students expressed both positive and negative emotions about their school experiences. In the stories, the students covered a range of aspects of their school experiences, as well as descriptions of the school, including school buildings, classrooms, teacher characteristics, school activities inside and outside class, subjects/lessons, instructional practices, and their relationships with friends and teachers. The kinds of positive emotions most frequently expressed were: 'delight', 'joyful', 'happy', and 'concentrated'. The negative emotions most often expressed in the stories were 'upset', 'hate', 'annoyed', 'bored', and 'sad'. One of the 19 students who selected drawing to express their feelings, demonstrated feeling lonely as a situation not liked in school.

In the students' stories, students with the lowest level of satisfaction expressed more diversity in the responses and also more frequent negative emotions than those with the highest level of school satisfaction. The former group used 23 words describing negative emotions; in contrast to the latter group, which used 11 words describing negative emotions. In particular, the words 'hate' and 'bored' were more frequently expressed in relation to school lessons, while students with the highest level of school satisfaction only expressed these words twice. Those who felt that the lessons were boring did not like the school subjects:

> I hate Indonesia language subject because it makes me extremely bored. (T Primary School, Group 2) .

> Calculating and again. Calculating makes me feel unenthusiastic towards math. It makes me weary. Why am I never being able to master this subject? I always have to join a remedial class. Sometimes the teacher is annoying; I have not yet got 100% in math. So, I hate math. (T Primary School, Group 2)

Students also felt frustrated or bored because of the lesson difficulties:

> Math is really frustrating because it is hard to learn. (C Primary School, Group 2)
>
> Even though I do not get math, but I have to be able to do it. Sometimes, I am bored. (C Primary School, Group 2)

The examples of students' expressions above indicate that the task demands that they undertook at school influenced their attitudes towards the learning of content or activities, their perceived control of the learning situations, and their emotions about their learning experiences. Even though they might value the content they were required to learn, when they are unable to engage in the content because it is difficult, they experience frustration. Likewise, if task demands are too high or too low, so reducing the meaning and value of the task, boredom can result (Pekrun, Frenzel, Goetz, & Perry, 2007b, p. 21).

In the focus group interviews, most students in both groups were happy at school, even though some expressed negative perceptions. Common negative emotions expressed by both groups were 'annoyed', 'unenthusiastic', 'feeling hurt', 'sad', 'worried', and 'depressed'. They also expressed physical problems such as 'tired' and 'headache'. However, a contrasting expression also emerged. The group of students with the highest level of school satisfaction more frequently expressed negative emotions related to school experiences; 'stress' and 'depressed'. Related to these emotions, students in the group with the highest level of school satisfaction were more concerned about their assignment workload, the tight timeframe available to complete assignments and the teachers' expectations of them:

> I am tired after school hours. Even on Sunday, I have to study, too. I have to prepare for test. (KP Primary School, Group 1)
>
> Because of I am in higher ability class. I feel depressed. I have to get higher score to prevent loss of face. (M Primary School, Group 1)
>
> … we are under pressure, we do not have enough time for playing. (M Primary School, Group 1)

The group of students with the lowest level of school satisfaction have similar concerns about the National Examination and their achievement. They expressed worry about getting a bad score and felt sad when they got bad scores in tests. Related to the assignment task, they felt tired and sometimes confused about the due date of assignments. In addition, they also become irritated when their parents did not show appreciation of their achievements.

Student feelings related to their teacher's comments about their abilities provided an interesting topic of conversation in the group of students with the lowest satisfaction. The teachers often compared performance and achievement between students or classes. The students felt publicly humiliated; as a result, many students were 'sad', 'feeling hurt', 'annoyed', and 'ashamed'. Instead of teachers making an effort to motivate and encourage the students, the students were disappointed because more often the teachers criticised them about their inadequacy. When teachers implement

competitive structures in the classroom, many of the weakest students perceive this as reducing their control over their success, which further stimulating negative emotions (Pekrun, Frenzel, Goetz, & Perry, 2007a). In classrooms with a competitive structure, success is measured by normative standards. Consequently, a limited number of students can outperform their peers. Moreover, Helme (1983, as cited in Frenzel et al., 2007) reports that pressure for achievement and perceived competition among classmates is related to anxiety. In contrast, depressive symptoms are less likely experienced by students when they feel less competition, less comparison of academic achievements across the class or less being pressured to pursue high grades (Ming-Te, 2009).

Learning environment factors impacting on student emotions

Generally students expressed that they were happy at school. However, many students felt dissatisfaction with their experiences in school. In this current study, factors in the learning environments that impact happiness are divided into school conditions and psychosocial environments.

School conditions all

The factors in the learning environments related to positive views in one school may be regarded by students in other schools as factors associated with negative perceptions about school. The differences in the school settings led to these different perceptions. The five primary schools involved in this study had various school conditions. School conditions are the physical conditions inside and surrounding a school (Konu & Rimpela, 2002).

For the students from schools with good facilities, students perceived the physical characteristics of the school as good and positive aspects of the school. School buildings, cleanliness, natural beauty such as gardens, and various facilities were common themes emerging from these students' stories and focus group interviews. In contrast, students from schools with a lack of facilities expressed negative views related to the condition of buildings, school furniture, toilets, canteens, and playground. While students did not mention these characteristics as directly affecting their specific emotions, these characteristics influenced their perceptions about school positively and negatively respectively. Even though the students did not express their emotions in relation to school conditions, according to Pekrun et al. (2007b), there is a short circuit between perceptions and emotions, so perceptions themselves are sufficient to stimulate emotions. For example, when students experience many positive/negative experiences in a situation, they can experience anticipatory pleasant/unpleasant emotions before entering a situation without any need to evaluate those expectations or values according to the situation. Therefore, positive perceptions can be predicted to stimulate positive emotions, and negative perceptions will activate negative emotions.

Psychosocial school environment

Learning environments do not merely refer to physical space, such as school buildings, or materials used in instruction, but also include interactions between and among students and teachers (Frenzel et al., 2007). The latter aspects are conceptualised as

psychosocial school environment (Haapasalo, Välimaa, & Kannas, 2010; Roeser & Midgley, 1996; Samdal et al., 1999). According to Gillander, Gådin and Hammarström (2005, as cited in Haapasalo et al., 2010, p. 135) the psychosocial school environment can be defined as the 'school's social situations that are related to students' work (such as teacher support, task demands, and influence over school work), and also related to student-student relationships (such as bullying, isolation, etc.).'

Teacher-student relationship

During interviews the students responded with comments such as 'teachers are nice', 'teachers are funny', 'teachers are caring', when asked 'what is good about their school'. Student satisfaction with their school experience is substantively related to perceptions of a caring classroom environment (Baker, 1998). The students mentioned their teacher's support as positive aspects of school, particularly teachers' instrumental support for students who have difficulties in learning. However, they also considered teachers as a source of unpleasant experiences in school. Many students voiced negative feelings related to interpersonal teacher behaviours. For instance, they noticed teachers who showed favouritism to higher achieving students and conversely, those teachers who underestimated lower achieving students by giving them lower expectations.

> Interviewer: What do you mean by 'the teacher is not fair'?
> Student 1: Teacher maintained close relationships with the clever student, whereas not close to the others.
> Student 2: Teacher gave good appraisal to the clever students, but teacher get mad on those who are not clever. (KP Primary School, Group 2)

This situation confirms Stipek's (2006) finding, that teachers often favour high-achieving students and develop more personal supportive relationships with them than with low-achieving students. Skinner and Belmont (1993) also found a reciprocal effect of students' behaviours in learning and teachers' behaviours towards them, and vice versa. Students who perceive their teachers as providing support and emotional involvement are more likely to be more effortful, persistent, feel happy and show enthusiasm for learning. So too, teachers' perceptions of students influence teachers' interaction with students. Teachers respond to the students who are engaged in learning with more involvement and support. In contrast, teachers respond to students who lack engagement with less time given to them (neglect) and pressure on them to participate (coercion).

Students also mentioned teachers' comments related to their ability to understand lessons as a cause of dislike. Sometimes the teachers were rude. Interestingly, almost all student participants in schools where this occurred (KP Primary School & T Primary School) perceived the same teacher as behaving rudely—a shared perception.

> When there is a student who does not understand, teacher commented on him as 'stupid' (KP Primary School, Group1)

> The teacher often mentioned students' names that got bad score in test, and then the teacher gets mad at them. When students still did not

> understand the lesson, the teacher got more angry … Teacher seems to like comparing students to each other and did not take into account those students. (KP Primary School, Group 2).

Students also expressed their relationship to the teachers in their drawings about school. Three pictures out of 19 described situations when a teacher was getting angry with the students. There were also two drawings showing the student being punished. Picture one illustrates a student being punished in a flag ceremony because he did not wear his complete school uniform. Picture two illustrates three students standing in front of the schoolyard because they were being punished for some misdemeanour.

Academic demands

Academic demands provide another source of negative feelings. Academic demands are a set of tasks or teachers' expectations placed on or directed to the students (Samdal et al., 1999). Student emotions were stimulated when teachers allocated a short amount of time to complete a large amount of homework. Sometimes, the students had several tasks that had to be finished simultaneously, and students expressed frustration over this and perceived this situation as demanding. When academic demands are higher than students' capability, they are likely to feel under strain (Takakura, Wake, & Kobayashi, 2005). Several previous studies reveal that students frequently feel alienation and failure when expectations exceed individual levels of capability (Samdal et al., 1999). Some students said that instead of having enthusiasm for finishing such tasks, they became lazy or just gave up. This behaviour is a goal frustration mechanism. When individuals perceive that there is environmental pressure and they also perceive an obstacle in meeting the goal, their response may turn the goal from desired to undesired (Boekaertz, 2007).

Students' drawings also displayed issues about academic demands. The titles of their drawings included: 'difficult homework'; 'difficult lessons'; 'teacher is getting angry with students'; 'students cannot answer the teachers' question'; and 'students got bad score in the test'. These pictures describe the experiences students did not like in school. On the other hand, three students drew pictures about having a good test score and getting appreciation from classmates as their pleasant experiences.

To some extent, teachers' expressed expectations can be a positive motivation to some students to do their best (Takakura et al., 2005). Obviously, students feel good about school when they are able to adjust to school expectations and demands (Van Petegem, Aelterman, Van Keer, & Rosseel, 2008). Moreover, positive appraisals of school are associated with classroom practices that afford students opportunities to feel competent (Baker, Dilly, Aupperlee, & Patil, 2003). However, other students might experience the inverse of such classroom practices, especially those students with lower ability. Students regard the teachers' techniques to motivate them by comparing performance between classes as non-supportive treatment. As a consequence, students feel 'sad', 'feeling hurt', or 'anger', because their competences are degraded by the teachers. This finding supports other researchers, who state that many individuals perceive that social comparison performance likely reduces control over success, instigating negative emotions such as anger, anxiety, and hopelessness (Pekrun et al., 2007b).

Student-student relationships

Student-student interaction is indicated as a significant theme related to their positive perceptions and emotions at school. A relationship with friends was a common topic generating either positive or negative emotions in both students with the highest level of school satisfaction and those with the lowest.

Examples of phrases related to interactions with friends include: "I am happy because I will meet my friends at school", or "At school, I am happy because I have a lot of friends". Still, students' interactions were also essential factors generating negative emotions. The students told that being teased by friends, as an example, can make them feel 'sad', 'lonely, 'annoyed', or 'angry'. The students expressed the phenomena of bullying as a negative experience in school. This finding in our study confirms Weiner's (2007), that the majority of emotions in the school setting are generated by social acceptances or rejections, social activities, and other social concerns. Most children reported that to be with their friends underpinned their intention to go to school.

CONCLUSION AND IMPLICATION

These findings confirm that schools or classrooms may not have an equal effect to all students. Within the same school setting, different students are exposed with different experiences. How they construct the meaning of school experience is related to what extents to their psychological needs are satisfied by school contexts. Psychological outcomes, such as school satisfaction or emotional experiences, are influenced by individual differences in perceiving the environments and by the average perceptions of the student body in a classroom (Baker, 1998; Frenzel et al., 2007).

Teacher is a significant factor in the learning environment, stimulating students' positive and negative perceptions about school. 'How students like teachers' often answers the question 'how students like school' (Sabo, 1995 as cited in Konu & Rimpela, 2002, p. 84). Interpersonal qualities of their teacher become a focus when students evaluate whether or not their teacher is a good teacher (McGrath & Noble, 2014). However, teachers are frequently unaware that they systematically convey differential expectation to different students (Brophy & Good, 1970).

The findings of the current study offer tentative implications for educational stakeholders, especially for teachers and school principals. The first implication involves the importance to promote students' satisfaction with school experience. Thus, teacher must likely pay equal attention to promoting academic achievement and student well-being, as well to best prepare students for success (Seligman et al., 2009). The second implication involves the importance of considering students' perspectives and their cultural background. Students' perspectives on what make school more enjoyable, promote their positive emotions, and reduce their negative emotions should be taken into account. Even though voices of students on their school experience are just expressed once or infrequent, it might be a critical incident that has strong impact on their well-being. That is, such program to promote students' school satisfaction must likely be designed to specific students in specific contexts. Professionals should focus their efforts exclusively on creating positive school environment; particularly from the current study it is associated with the supportive

conditions for student perceptions of competence and relatedness. Many researchers and educators have suggested that teacher have to be responsible people who ensure they establish positive relationships with each student (McGrath & Noble, 2014).

Limitation

This study may not cover the question of what specific aspects of school experiences are more or less important in influencing students' school well-being. Also, the findings could not evaluate the extent to which schools provide psychosocial environment that satisfy the three fundamental students' psychological needs as usually can be measured by the quantitative approach. However, the findings demonstrate what specific aspect of school experiences that influence students' positive and negative affect. Thus, students' school experiences reflect in what aspects school provides experiences that support and undermine satisfaction of these three basic needs. Complementary findings from the quantitative and qualitative approach are suggested to determine more comprehensively how students feel and think about their school experiences.

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Attitudes towards Meeting in Real Life via the Internet in Japanese University Students

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Introduction

In recent years, a number of crimes regarding meeting in real life have been reported in Japan in which victims and perpetrators had previously met via the Internet.
According to National Police Agency (2010), 730 young people in Japan became involved in a dangerous situation or the victim of a crime because of getting to know someone online. Considering the recent increase in the use of smartphones and other forms of personal Internet access among youth, this rise in cases may be the result of expanding opportunities to communicate with others online. Recruit Shingakusouken (2013) investigated smartphone ownership among high school students and found that approximately 55% of students in Japan already used this technology for communicating with school friends and forming new relationships. Most students also reported that they had already communicated with strangers online.

One of the contributing factors to this complex issue is personal attitudes towards meetings via the Internet. Although many news reports have discussed the risk of crimes associated with meeting Internet acquaintances in real life in Japan, younger people are relatively more permissive and accepting of these meetings compared with other generations. Watanabe (2006) explored these beliefs among youth aged 15 to 17 years using a survey that included a question about whether meeting someone through the dating site is forbidden. While some youth were permissive and accepting, others mentioned that meeting using of dating site was bad and said that had never done so. Thus, attitudes toward meeting others via the Internet vary among individuals. Furthermore, such individual differences is crucial factor in predicting the meeting behaviors with Internet acquaintances in real life.

Purpose of the Present Study

The purpose of the present study was twofold: (1) to examine an actual prevalence of meeting Internet acquaintances offline in university students and the kinds of applications used by students who do so and (2) to develop a scale to measure attitudes toward meeting via the Internet.

Method

Two hundred and fifty-two university students (139 male and 113 female; average age = 19.68 years) in Japan participated in a questionnaire survey and completed a questionnaire consisting of 21 items related to attitudes towards meeting in real life people whom they knew only via the Internet. Students were also asked whether they had experienced meeting an online acquaintance in person. Those who reported this experience were asked which applications they used to get to know that person on communication online from options such as Facebook, Skype, and dating sites.

Results

Fifty-four students (21.4%) reported having met in real life someone they had met initially via the Internet. There were no sex differences in terms of these encounters (29 female and 25 male). Additionally, they met in real life after corresponding through Twitter (20.6%), SNS like Facebook and Mixi (17.6%), email (13.2%), free

phone applications like LINE and Kakao Talk, Skype (5.9%), bulletin board systems (BBSs; 4.4%) and others (27.2%). Only 1.2% had previously corresponded via a dating site before the real-life meeting.

An exploratory factor analysis using maximum-likelihood extraction with promax rotation was conducted for examining the structure of the scale consisting the 21 items.

In the result, five factors were extracted: (1) Interest in meeting via the Internet, (2) Convenience of online dating, (3) Risk awareness with meeting via the Internet, (4) Normative consciousness, (5) Anonymity of online dating. These cronbach's alphas ranged between .67 and .83. Arithmetic mean and standard deviations of these five factors and relationships among them were shown at Table1.

An independent t-test was also conducted to compare scores on the above five factors between students who had met in real life people whom knew only via the Internet (n = 54) and students who had not experienced these meeting (n = 198). Results showed that scores for "interest in meeting via the Internet" was higher in students who had met such people than in students who did not. At the same time, scores for "risk awareness for meeting via the Internet", "normative consciousness" and "convenience online dating" were low for students who had such meetings. Scores for "anonymity of online dating" did not differ between the two groups. These results were shown at

Table2.

Table 1 Means, standard deviations, and relationships amaong attitudes towards meeting via the Internet

	M	*SD*	2	3	4	5
1. Interest in meeting via the internet	2.54	1.05	.27**	−.20**	−.30**	.26**
2. Convenience of online dating	2.26	0.93		−.06	−.11	.34**
3. Risk awareness with meeting in real life	3.93	0.71			.40**	−.02
4. Normative consciousness	2.88	0.86				−.03
5. Anonymity of online dating	2.99	0.87				

**$p < .01$

Table 2 Means (standard deviations) and results of t-test replication for the attitudes

	Having experience	No experience	*t*-value	Cohen's *d*
Interest in meeting via the internet	3.48	2.28	8.44 **	.47
	(0.80)	(0.95)		
Convenience of online dating	2.02	2.32	2.12 *	.13
	(0.95)	(0.92)		
Risk awareness with meeting in real life	3.75	3.97	2.13 *	.13
	(0.77)	(0.68)		
Normative consciousness	2.45	2.99	4.22 **	.26
	(3.56)	(3.44)		
Anonymity of online dating	2.94	3.01	0.45 *n.s.*	.03
	(3.24)	(3.27)		

$^{**}p < .01$, $^{*}p < .05$

Discussion

In the present study, we sought to understand the prevalence of meeting in real life people known via the Internet and found that about one out of every five students has ever experienced this type of meeting. Interestingly, most students did not use dating sites to meet others, even though these sites have the objective of providing matchmaking services to users. Instead, most students has the experience after communication using relativity familiar applications in daily life such as Twitter and SNS. These findings demonstrated that meeting in real life people known only via the Internet may happen to anyone using of the popular methods.

We also extracted five attitudes regarding meeting via the Internet as background factors related to meeting online acquaintances offline. T-tests revealed that persons who engaged in offline meeting were more interested in meeting people via the Internet. Meanwhile, people who had not done so previously had risk awareness and normative consciousness towards developing a relationship via the Internet, and found meeting via the Internet more useful for making new relationship than people who had the experience. These findings show that risk awareness, normative consciousness, and convenience of online dating were key determinants of whether individuals met others via the Internet. Convenience of online dating includes literacy for the meeting. Therefore, perceiving online dating as more convenient may work as a deterrent against meeting others via the Internet.

This study provides new findings and fundamental information regarding meeting Internet acquaintances offline in Japan. Two limitations of our study deserve consideration in future research. First, our sample consisted of university students in a specific area. Future studies should collect data from students from a broader range of countries as well as from different educational school stages for determining the generalizability of our findings. Second, the scale we used regarding attitudes towards meeting online acquaintances offline seems to be divided into cognitive and affective

components. Although interest in meeting via the Internet can be considered an affective element, other emotions such as guilt and anxiety may be importance. In future studies, we may have to revise the affective component of our scale to include items measuring such emotions.

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Femoral Neck Fracture Increase the Chance of Suffering depression: A National Population-Based Follow-Up Study

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Objective: Comorbidities, poor levels of activity and pain may contribute to the development of depression, but these factors have not been well addressed. This study aims to investigate the frequency and risk of major depression after a femoral neck fracture using a nationwide population-based study.
Methods: The Taiwan Longitudinal Health Insurance Database was used in this study. A total of 4,547 patients who were hospitalized for femoral neck fracture within 2003 to 2007 were recruited as a study group; 13,641 matched non-fracture participants were enrolled as a comparison group. Patients who had histories of any form of depression or femoral neck fracture before the study period were not included. Each patient was prospectively followed for 3 years to monitor the occurrence of major depression. Cox proportional-hazards models were used to compute the risk of major depression between members of the study and comparison groups after adjusting for residence and socio-demographic characteristics. The most common physical comorbidities that were present after the fracture were also analyzed.
Results: Fifty-five (1.2%) femoral neck fracture patients and 95 (0.7%) non-fracture comparison patients were diagnosed with major depression during the study period. The stratified Cox proportional analysis showed a covariate-adjusted HR of major depression among patients with femoral neck fracture that was 1.82 times greater (95% CI, 1.30-2.53) than that of the comparison group. Most major depressive episodes (34.5%) presented within the first 200 days following the fracture. Peptic ulcers (40.0%) were the most common comorbidity after fracture that differed between the study and comparison patients ($P<0.05$).
Conclusion: Patients with a femoral neck fracture are at an increased risk of subsequent major depression. Most importantly, major depressive episodes mainly occurred within the first 200 days following the fracture.

Table 1 Characteristics and personal histories between patients with femoral neck fracture and comparison patients

	Patients with femoral neck fracture (n=4,547)		Comparison patients (n=13,641)		
	No.	%	No.	%	*p*-value
Gender					1.000
Male	2029	44.62	6087	44.62	
Female	2518	55.38	7554	55.38	
Mean age (y/o) (Mean±SD)	71.4± 16.6		70.4±16.2		1.000
Age group (y/o)					1.000
18-39	324	7.13	972	7.13	
40-49	234	5.15	702	5.15	
50-59	324	7.13	972	7.13	
60-69	617	13.57	1851	13.57	
70-79	1506	33.12	4518	33.12	
>= 80	1542	33.91	4626	33.91	
Economic level (monthly income) (USD$) *					<0.001
<600	2744	60.35	7783	57.06	
601~1000	1682	36.99	5167	37.88	
>1000	121	2.66	691	5.07	
Urbanization					<0.001
1 (most)	921	20.26	3207	23.51	
2	339	7.46	959	7.03	
3	1021	22.45	3003	22.01	
4	2266	49.84	6472	47.45	
Geographic regions of Taiwan*					0.004
Northern	2019	44.4	6380	46.77	
Central	900	19.79	2492	18.27	
Southern	1472	32.37	4389	32.18	
Eastern	156	3.43	380	2.79	
Personal history					
Diabetes Mellitus*	959	21.09	2619	19.2	0.006
Hypertension	1349	29.67	4038	29.6	0.941
Renal failure*	832	18.3	1491	10.93	<0.001
Liver cirrhosis*	223	4.9	418	3.06	<0.001
Stroke*	943	20.74	1809	13.26	<0.001
Osteoporosis*	1660	36.51	2237	16.4	<0.001

*Significant differences

Table 2 Crude HR for the presence of new-onset major depression among patients with femoral neck fracture and the comparison patients

Presence of depression	Total sample (n=18,188)		Patients with femoral neck fracture (n=4,547)		Comparison patients (n=13,641)	
3-year follow-up	No.	%	No.	%	No.	%
Yes	150	0.8	55	1.2	95	0.7
No	18,038	99.2	4,492	98.8	13,546	99.3
Crude HR (95% CI)	-		1.82* (1.30-2.53)		1.00	

*p- value =0.001

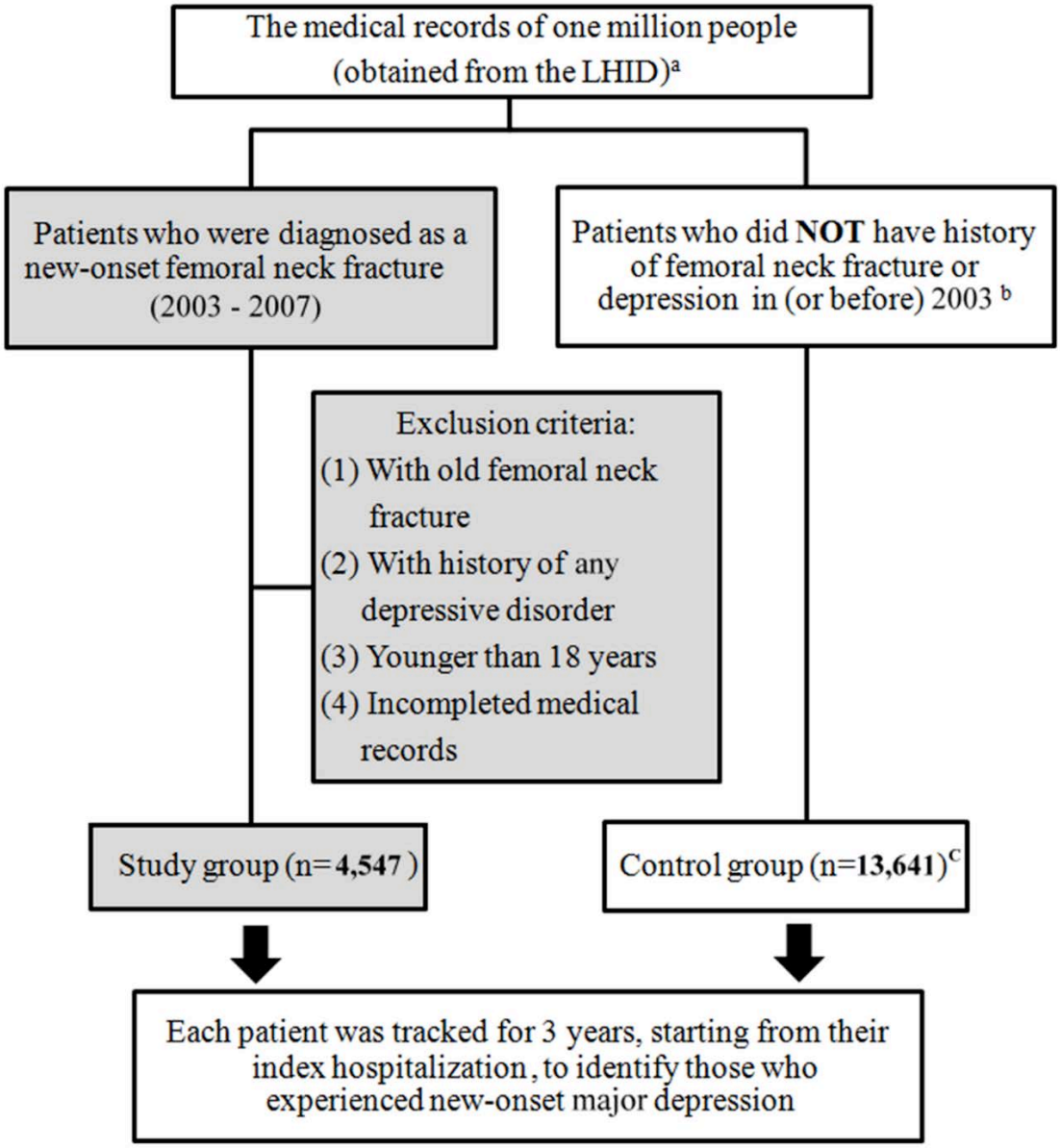

Figure 1 Flowchart of the selection methods in study and comparison patients. [a] The LHID contained medical records of one million people, which was randomly selected from the Taiwan National Health Insurance (NHI) program (supported by Taiwan government and over 98% of the Taiwanese population was enrolled in this program). [b] All personal medical records (diagnosis, treatments, medications), which had been recorded by different hospitals, were finally input into the NHI for requiring payments. Because almost all hospitals in Taiwan have joined the NHI; therefore, we could use it to screen patients' past histories. [C] Three comparison patients for each femoral neck fracture patient (matched with study group patients in terms of sex, age and years of healthcare use)

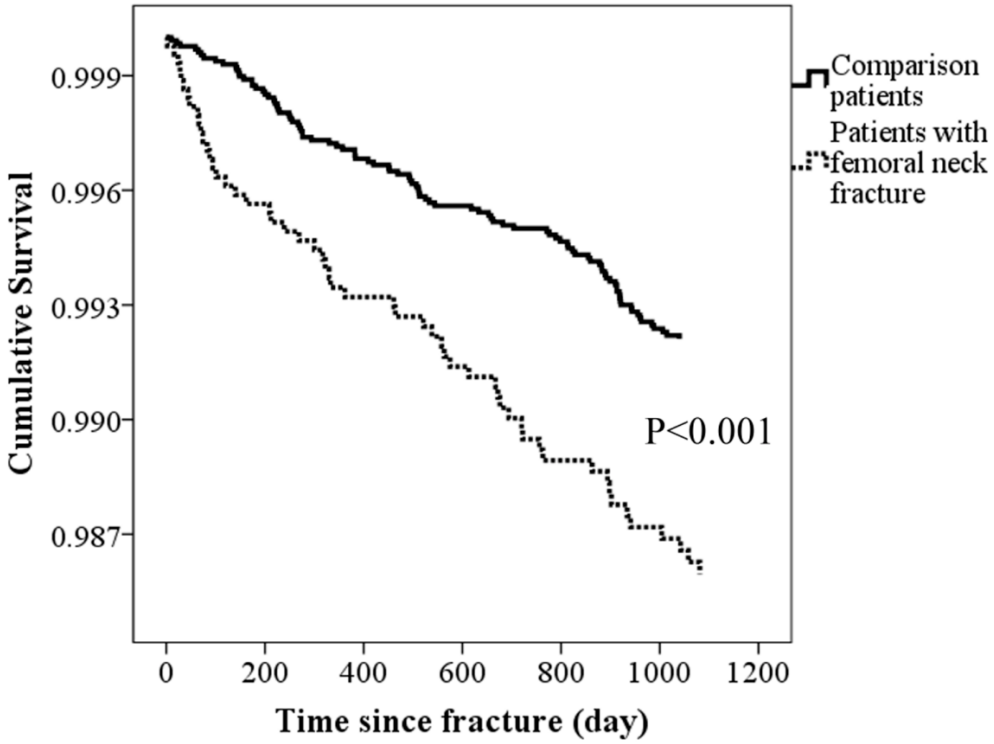

Figure 2 Time-related factor associated with the major depression occurrence. (A) Major depression-free survival curves for patients with femoral neck fracture and the comparison patients during the 3-year follow-up period (p=<0.001).

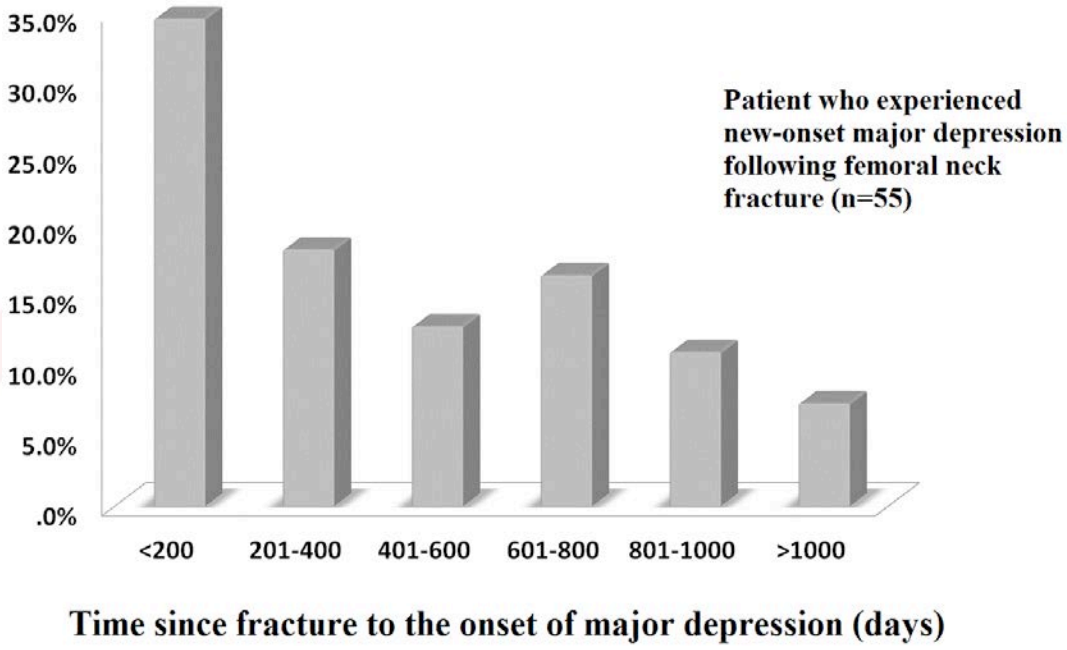

Figure 3 Most major depressive episodes (34.5%) occurred within the first 200 days following femoral neck fracture. The percentage of major depression patients also gradually decreased as the observation period prolonged.

A Study of the Relationship between Resilience and Symptoms of Post-Traumatic Stress Disorder among Adolescent Students affected by Civil Unrest in the Three Border Provinces in Southern Thailand

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Abstract

This research is aimed to 1) study resilience of adolescents students affected by civil unrest in the three border provinces in Southern of Thailand (Yala, Pattani and Narathiwat) 2) to study the symptoms of posttraumatic stress disorder and 3) to examine the relationship between resilience and the symptoms of posttraumatic stress disorder. The sample was consisted of 395 high school students who were studying under the office of Educational Service Area, 15th and was derived by using the sample size of Krejcie and Morgan (1970) with multi-stage random sampling. Tools used in this study were 1) the resilience scale named The State-Trait Resilience Inventory (STRI) which developed by Hiew, Mori, Shimizu and Tominaga (2000) and translated into Thai by the researcher 2) the questionnaire for children affected by disaster (Revised Child Impact of Events Scale: CRIES-13) of the Department of Mental Health. The statistics used in data analysis were : percentage, standard deviation and correlation analysis.

The results are summarized below.

1. The levels of the resilience among adolescent students were moderate and high. It was found that 1) the students who were at a high level consist of 245 or 62.7 % and 2) 146 or 37.3 % were at moderate.
2. The number of students affected by civil unrest who had symptoms of PTSD was 214 or 54.7 % and those who without symptoms of PTSD was 177 or 45.3 %. The symptoms of PTSD can be measured with the lowest score at 0.00 and maximum at 65.00.
3. The Resilience and the symptoms of PTSD among adolescent students affected by civil unrest were inversely related.

Keywords : Resilience, Symptoms of PTSD, adolescent students, the three border provinces in Southern of Thailand

Introduction

Children and youth are play importance role as a group of individuals to the development of the country. Since they are filled with physical and intellectual performance and the potential to develop into a national strength that must be inherited and given the mission of developing countries in the economic, social, security and safety. If children and adolescent were abandoned, it make known that society have lost the good resource of the nation. Based on the unrest in the southern provinces of Thailand that occurs continuously and long does not seem to calming down, now it was 9 years. The statistics have been recorded since January 2547 until September 2555 with the incident occurred a total of 12,377 times. It causing of the death and wounded in total of 14,890 cases, separated into died people total of 5,377 and wounded at 9,513 (Srisomphob, 2555).Children and adolescents who suffer from the violence based on human actions impact the many aspects of mental health problems. The studies of children and adolescents in foreign countries found that who were suffer with the hands of human show the prevalence of PTSD at 10 – 15 percent. In Thailand, a study of post traumatic stress disorder (PTSD) both from natural disasters and threats from human found the difference of prevalence in each study, for example it found the prevalence of PTSD at 21.9 percent in children and adolescents age 11 - 18 in the southern province and 7.8 percent in children who their families have been directly affected by the incident. The prevalence of PTSD in the students who experienced with tsunami was at 57.3, 46.1, 31.6, 7.6, 4.5, 3.9 and 2.7 at 6 weeks, 6 months, 1, 2, 3, 4 and 5 years, respectively(ChomsurangPotisat, 2555). The Post traumatic stress disorder was influence to the process of child's development in many aspects such as thought processes, beliefs, initiative, interpersonal relationships, personality, self - control, motivation, worldviews and self esteem. It is believed that the instructive and re-experiencing phenomenon can interfere with the attention. The violent incidents can reduce the scope of learning experiences that are essential to the development of thought. The scope of logical learning is restricted because it requires avoiding anything that associated with the symbols that monument to violent incidents. The irritability and trouble with controlling aggression will lead to a disturbed of a development of a relationship with friends. The reduction of imaginary will affect the development of both mind and emotions. Moreover, PTSD may affect to their personality, reduce self-esteem or lack of self-confidence.

To think in positive that this crisis is an opportunity or a lesson to improvement spirit regarded as the most importance (Terdsak, 2548). The characteristics of individuals who can adapt and recover back to normalcy after encounter with an event or crisis situations that cause hardship in life is the one feature that helps individuals to overcome the obstacles and live effectively (Department of Mental Health, 2551). This behavior was corresponds to English word as Resilience, which originally was called Psychologically Invulnerable or the resistant to the suffering of children. Later there is a dispute of the nature of meaning that has a narrower scope than it should be. As Rutter (1985) has indicated that the child has the ability to respond to stress is not something ingrained since the advent and was not caused by a risk only. The flexibility is to maintain the level of resistance to various forms all the time to every situation in life. So it should be recruiting more appropriate word, such as rehabilitation, mental healing, emotional flexibility or currently use the Resilience. In psychological resilience is a positive force or a person's ability to deal with stress, severe stress or disaster, and is also used to identify the characteristics of individuals

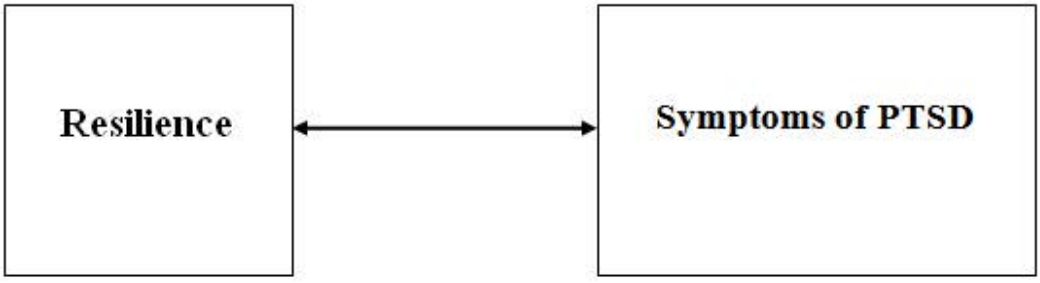
in the future to face a negative situation happened in life, such as a serious accident natural disasters terrorist attack, etc. These conditions have contributed to the person's life at risk to have a negative knot in life, as the poor, street children, disabled children, etc. The study of resilience has expand as broadly which Grotberg (1995) have tried to study and improve resilience available with a child under the statement that resilience is a basic human capacity, nascent in all children. Parents and other care givers promote resilience in children through their words, actions, and the environment they provide. Adults who promote resilience make family and institutional supports available to children. They encourage children to become increasingly autonomous, independent, responsible, empathic, and altruistic and to approach people and situations with hope, faith, and trust. They teach them how to communicate with others, solve problems, and successfully handle negative thoughts, feelings, and behaviors. Children themselves increasingly become active in promoting their own resilience.

Therefore, the researcher is interested in studying the relationship between resilience and symptoms of post traumatic stress disorder of adolescents who have been affected by the unrest in the three border provinces in southern of Thailand, in order to contribute to helping teenagers correctly and efficiently. It would be a psychological barrier to these young people step through a crisis life, grow as a great youth of the nation.

Objectives

This study based on a survey research. It has the following objectives :
1.To study resilience of adolescents students.
2 To study the symptoms of posttraumatic stress disorder of adolescents students.
3 To examine the relationship between resilience and the symptoms of posttraumatic stress disorder of students in the three southern border provinces of Thailand.

Conceptual Framework



Methodology

Population and Sample

The population used in this study included high school students under the office of Educational Service Area, in area of secondary school 15th (Pattani,Yala and Narathiwat), with a total students population of 29,531 people.
The sample was 395 high school students that was derived by using the sample size (Krejcie and Morgan, 1970), with a random multistage.

Instruments

The instruments used in this study were:

1.The State-Trait Resilience Inventory (STRI) which was originally created by Hiew, Mori, Shimizu and Tominaga (2000) and translated into Thai by the author.

2.The Revised Child Impact of Events Scale: CRIES-13 which created by the Department of Mental Health.

Data Analysis. Information from the questionnaire was analyzed by using descriptive statistics which were the frequency, percentage, mean, standard deviation and correlation analysis.

Results

Table 1: Shows mean, standard deviation and level of resilience in aspects and overall

(n = 391)

Elements of Resilience	TRC			SRC			Total		
	Mean	S.D.	Level	Mean	S.D.	Level	Mean	S.D.	Level
I AM	2.54	0.38	High	2.62	0.34	High	2.58	0.33	High
I CAN	2.57	0.44	High	2.63	0.34	High	2.60	0.34	High
I HAVE	2.52	0.38	High	2.67	0.37	High	2.60	0.31	High
Total	2.54	0.35	High	2.64	0.29	High	2.58	0.30	High

The table shows the resilience of adolescent students classified by elements found in high levels for all aspects. The components of the State Resilience Scale (SRC) had the highest average at 2.64 and the Trait Resilience Scale (TRC) had scores averaged at 2.54, respectively, when viewed as a whole, the two elements had an average score at 2.58.

Table 2: Shows level of resilience.

(n = 391)

Level of resilience	N	%
Medium	146	37.3

High	245	62.7
Total	391	100

The table shows that levels of the resilience of adolescent students are in medium and high levels. The numbers of adolescent students who had a high level are 245 or 62.7 percent, and medium levels are 146 or 37.3 percent, respectively.

Table 3: Shows symptoms of PTSD classified by with and without symptoms.

(n = 391)

PTSD Symptoms	N	%
With symptoms of PTSD	214	54.7
Without symptoms of PTSD	177	45.3
Total	391	100
PTSD Symptoms Min = 0.00 Max = 65.00	Mean = 27.36 S.D. = 13.71	

The table shows that total sample of 391 people with symptoms of PTSD of 214 people as a percentage at 54.7 and without symptoms of PTSD of177 people as a percentage at 45.3.
Symptoms of PTSD can be calculated with the lowest score at 0.00 to maximum of 65.00. People who got scores equal to or greater than 25 are considered with symptoms of PTSD.

Table 4: Shows relationship of resilience and symptoms of PTSD.

	Resilience	PTSD Symptoms
Resilience	1	-.055 (.276)
PTSD Symptoms		1

The table shows that resilience and symptoms of posttraumatic stress disorder were inversely related, but not significantly.

Application

Results of this research will be information for all those involved in caring for adolescents. They will aware of the nature of the problems that children are facing, the potential of young people in the face of the problems in the context of the unrest in the southern provinces of Thailand. When they known, it will lead to helping teenagers is correctly and efficiently.

Acknowledgement

The author would like to extend special thanks to Assistant Prof. Dr. Surin Suthithatip, Dr. Doldao Purananon and Assistant Prof. Dr. Warakorn Sapwirapakorn from Department of Research and Applied Psychology, Faculty of Education, Burapha University for many valuable suggestions for this project.

Suggestion

1. The study found that the average of the symptoms of PTSD of the students in the border provinces, Southern of Thailand were in high levels. Therefore, there should be more deep study about the symptoms of PTSD later.
2. There should be a study on relationship of resilience with other related mental health variables such as depression and so on.
3. There are a lot of mental health problems of adolescents from the three border provinces in Southern of Thailand. Therefore it should be additional studies on so many other psychological variables related to mental health.

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Internet Using Behavior Of Teeangers

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Abstract

This research was qualitative research. The objectives were to search for terms that corresponded to internet using behavior of teenagers. The students were both male and female university students studying in their first to fourth year. The sample was nine students were selected and volunteered to share information about internet use in a group interview. The researcher collected data manually by using group interviews which consisted of an unstructured interview and a structured interview. The data was analyzed by analytical induction and content analysis.

The results of the research were: to recognize terms that corresponded to internet using behaviour of teenagers as followings: 1) Attitudes toward using the internet included importance, needs, and consideration use internet. 2) Behaviors affecting the use of the internet in education were convenience and ease of access, and analyzing data in use. 3) Reasons for using the internet for entertainment in a positive way consisted of fun activities, finding friends and awareness of using the internet properly. 4) Behaviors of using the internet in negative entertainment consisted of curiosity and subjugation. 5). Behaviors of using the internet in online trading contained confidence and unworthiness. 6) The effects of internet use on physical health were the awareness of body movement, agility skill practice, and aches. And 7) The effects of internet use on mental health included stress reduction, decreased social interaction and increased anxiety.

Keywords: Internet Using , Internet Using Behavior

Introduction

Overview

Advances in communication technology have caused the globalization. Mass media is considered a social broadcasting institution substantially connected to changes in globalization due to a lot of information sent via the media, conducted by the great number of research, is either useful or dangerous to teenagers. (Bunyaketmala, B., 1996; Thamcharean, S. and Suwandee, L. (2004) Internet plays a key role for young people. It can be said that the Internet is a useful information technology: easy-to-use, fast convenient and interactive innovation of communication with text, video, audio display screen at a time. It solves a problem of remote area and time by live messaging.

Internet media give the freedom to the Internet users because the users can use the media all the time and everywhere in the world. They can also access both information that they want many sources of entertainment. Collecting advantage features of other media such as television, radio, telephone, etc., Internet media become the very practical media and can meet the users' needs in learning, education, business or entertainment which now is a powerful part of our present life. The use of the Internet in Thailand found that 24 million out of a population of 67 million people were internet users in 2012 (NECTEC, 2012) which is regarded as the high rate of use. From the statistics, Thailand is ranked 16th in the world for internet use and 4th in Asia, only lower than India, Indonesia and the Philippines respectively (http://analytics.socialbakers.com/). It can be seen from the statistics that even if the use and advantages of the internet has been increased, problems also occur in the society because consuming the internet too much will unbalance lives, work and relationships. Due to the nature of the media it makes it impossible to know the identity of internet users. Some people feel addicted to and dependent on the use of media. Some are happy to make online friends and forget real-life friends and cannot stop playing the game, gambling and searching on the Internet.

The research of behavior of internet use found that most high school students (Matthayom 4 - 6) and diploma students in Bangkok have a habit of using the internet for leisure 2-3 times a week. Especially on Sundays, internet users will spend up to three hours continuously during the day. Most enjoy playing online games, and watching news it was also found that 73 percent of 1,556 youth aged 15-24 years living in Bangkok Metropolitan Region use the internet more than 1-2 days per week. Up to 38% of young people are using the internet as much as five days a week. The reason that they use the internet is to find information, for entertainment and to join groups and to chat with friends. (Pornsakulvanich, V. , 2007) And from a review of several studies, it was found that the use of the internet in Thailand is mainly used for entertainment rather than knowledge. This is especially true of the users who are in school. They waste too much time just playing games on the internet filling their heads with nonsense. (Nantawet, R. 2007) Excessive internet use (or internet addiction) causes a number of problems including relationship issues, financial and physical problems, and the resulting academic problems affects students the most. (Makasiranonth, T. 2002 ; Young, 1998). Nevertheless a study by Chittiphon Wairotwitthayakan (2008) on the behavior of appropriate and profitable internet use on mobile devices in lower secondary school students revealed that there are good

attitudes towards the behavior under the theory of sufficiency economy - namely future orientation, self control, being a consciousness, and being a significant predictor of behavior of using technology properly, concerning with a research which (Kaewkungwan, S. 2002) samples were adolescents whose internet media play their important role and influence their self-actualization as well exceptionally young people who like to try new things, accept changes, and are easily ready to imitate at any time in order to be accepted into a group of friends and keep updated.

Research in Thailand showed that the majority of internet addicts are students more so than employees, officials and entrepreneurs. (Boonsong, W. , 2005) It also found that high school students are more at risk of internet addiction than university students. (Kim & Kim, 2002)

From the study and research, it was found that using the internet has both pros and cons depending on the purpose for which it is used. Therefore, researchers was interested in conducting studies in order to understand the internet using behaviour of teenagers and to find conditions that correspond to the internet media consumption behavior of teenagers by conducting qualitative research to gain insight via group interviews. This allowed the researchers to know the views, attitudes, or behaviors of teenagers using the internet and also the effects on their physical and mental health after using the Internet. The information gathered will be used to develop ways of preventing problems.

Research objectives

To recognize terms that corresponded to internet using behaviour of teenagers.

Scope of the Research

1. Location of the research was at a state university.
2. Participants were both male and female undergraduate students, who students at first year to forth year.
3. A group of nine students volunteered and were willing to share information about the their behavior of using the internet and to participate in group interviews.

The following provides a brief overview of the students who participated.

Som-O, 19, a female student who was born in Buriram province. She is polite and confident in herself. She first started using the Internet when she was in Prathom 5 (grade 11), but did not feel anything on the internet much. It might because she liked to play video games or was unable to use the Internet.

Linchi, 21, a female student was born in Buriram province. She found it easy to talk to people. She began to use the internet when she studied at junior high school. She was taught to use the computer to do word processing and also to use the Internet to search for information.

James, 18, is from Buriram. He is cheerful. He has used the internet since he was in Prathom 4 (grade 10). He has been using for it for the past 12 years mainly to play games, chat on Facebook, and do assignments.

Nadet, 19, was born in Nakhon Ratchasima. He is shy and not very confident in himself. He started using the internet when he was a Matthayom 1 student. Formerly, he sometimes played the puzzle games in the computer. Once he became

familiar with the internet, he didn't pay much attention to it. He mostly played offline games, sometimes up to 4 hours a day.

Dome, 22, from Buriram province. He is involved in sports and has high self-confidence. He first used the internet in high school to find information or to play games that involved fighting or puzzles - not ones involving violence or sex. He enjoys using Play Station.

Wan, 20, is a female student who was born in Buriram province. She works very hard, and is quite responsible. Her first internet use began in the eleventh grade. Her computer teacher taught students how to use a computer but most students were just playing online games. Then she tried to do as the same. Once she realized that the games were fake, she stopped playing them.

Gaew, 21, born in Buriram province, is a good-humored helpful mindful positive-thinking girl who likes to make people happy. She watched news online for the first time when she was in Prathom 4 (grade 10).

New, a 22-year-old male student, was born in Buriram. He is cheerful, loves animals. He first started using the internet when he was in Prathom 4 (grade 10). He really enjoys playing games every day even if his grades are not quite satisfactory.

Dao, 22, born in Buriram province, is sensitive, but not confident in herself but she cares for others which opposes to her appearance. She started to use the internet when she was in Prathom 5 (grade 11). She used it to send a report and when she needed to find information. She used the computers which were available in the school. After that she asked her parents for a computer for when she attended university.

Methodology and methods

Research Methods

This research was qualitative research using inductive data analysis. The objective was to search for the conditions that correspond to internet using behavior of teenagers. In this case, the researchers would not express feelings or interpret using the experience or prior-knowledge, but neutralized. The researchers would analyze and describe happening opinions independently as much as possible in order to react the research objectives above regarding the data collecting steps as following:

1. Collection of data

The data was gathered by a group interviews which provided the delicate details with various aspects of ideas and experiences of Emic as the interviewers trying to feed the interviewees the stimulating questions, etc. least showed the notions of Etic. And in case the interviewers noted that the data was not complete, it could be repeated in a group interview. From the collection of such information, the study was performed by these following:

1.1 In this study, the results were performed manually by the researchers due to the researchers required the actual data from the data providers beginning from talking to a group of students who were being taught and advertising on facebook with a message about the purpose of the interview, and then asking for volunteering. If anyone was willing to participate in it, the researchers would request for a telephone numbers to make an interview appointment, which might start on that day or another day depending on the individuals.

1.2 A group interview took 90-120 minutes in a classroom or a meeting room, depending on the convenience of the providers.

1.3 At the beginning, the researcher would be given a small talk to create rapport with the researchers on the courses taken and friends. When a group of researcher felt relaxed, the researchers, therefore, would ask the questions about personal information, family background, and the behavior of using the internet.

1.4 Initially the data were recorded by note-taking. After that, when the informants felt completely trustful, the answerers would be asked to make a tape recording to get every details. But if the researchers noticed that the students felt uncomfortable or spoke unnaturally, the note-taking would be reused.

1.5 The length of collecting data was approximately one month beginning from July 2013 to August 2013.

2. Data Analysis

The data from the interview would be analyzed by content analysis following steps below:

2.1 The data from the tape were transformed into a conversation by the researchers, and then checked for the validity by comparing to and replaying those from the tape.

2.2 The researchers repeatedly read to get an overview, observed, and distinguished the meaning of a single word consciously, then decoded the messages out of the interview.

2.3 When many issues achieved and no new ones occurred, the researchers stopped interviewing.

2.4 The researchers attempted to categorize the contents by decrypting what each word represented, grouped the similar information into the subtheme, and finally summarized it to the theme from the linked subthemes.

2.5 The researchers had some providers examine the preliminary theme.

2.6 Write a summary and a discussion regarding to the found issues and make a proceeding.

3. Protection of Informants

3.1 Prior to collecting data, the researchers built a good relationship for the trustfulness between the researchers and the informants.

3.2 The researchers asked for voluntary participation from all informants and they informants were willing and ready to share every questions being asked.

3.3 The researchers explained the research objectives, collecting of data, permission for note-taking and recording, time and place for the interview, request of information validity verification and rights to answer or not to answer the questions.

3.4 All interview data would be kept confidentially within the group. When analyzed, informants' raw data would be destroyed immediately unless there was the consent from them.

4. Data credibility verification

The researchers examined the reliability of the data by selecting voluntary samples who were willing and consent to disclose internet using behaviour of teenagers. There was also an examination from multiple data sources, including the tape recording,

memos to evaluate the accuracy of the information. In addition, the researchers enlisted the cooperation of some contributors to check the preliminary themes and professors in the field of qualitative research to verify the reliability of the findings once more.

Research Results and Summary

From the studies of the internet using behaviour of teenagers, it was found that the informants had their own attitudes towards the use of internet. Likewise, the behavior of using the internet in such areas such as education, entertainment and online trading was emphasized by their own discretion. The researchers also recognized that the informants mentioned effects of internet use on the physical and mental health as well which were both positive and negative comments. The results can be sorted obviously here:

1) Attitudes Towards Internet Use

Importance and Necessity

From informants' experiences mentioned above, it was rummaged that the attitudes towards the internet still saw the internet as important because of the large data sources, the easy-access capability which is easy to find information, covers the information worldwide, and saves time.

Therefore, it showed that the Internet is vital to our daily lives because it keep us updated. Seeing that the internet will feed current news and information on what happens to the users every day and the information presented on the internet are of many forms to meet the interests and needs of all groups of users, the internet is a significant resource for all, because it can find what they're interested in without wasting time to research in the library or even for catching up the news around the world, it can be read on the internet from various journalism websites. It can be concluded that the internet is important and necessary to the life of the youth today in all aspects.

Critical Thinking

From informants' experience above, it showed that the main point of view to the internet use was critical thinking to assort only useful information. It means that attitudes towards using the internet have both positive and negative sides and it depends on us how we choose to use it. If we choose the wrong way, it will cause harm to the out body and mind.

Choices of internet media today are much more convenience. Anyone can access the information easily and it is enormous in size available. According to the internet contains correct or incorrect and complete or incomplete data, it is necessary to carefully think before applying. And it doesn't fair to accuse for all data providers, but the users because if selecting data without thoughtfulness, everything is useless or it can mislead us a little further.

2) Internet Use Behavior in Education

Convenience and Easy Access

From the experience above, it showed that convenience and ease of access are essential and useful for education enormously because of large data storage where we can find it from everywhere in a few minutes.

Required Discretion in Using Data

The record from the informants told us that before using the data mainly in the field of education, it needed to be carefully considered to ensure that only reliable information will be used to make a decision.

For this reason, the data fetched in the study or reference is regarded of the accuracy and propriety on account of the internet is convenient which allows everyone freely to publish.

The users should compare many choices of websites and then try to summarize the contents. To quote, you should pick the reliable one with date of the article and the author name clearly.

3) Positive Internet Use Behavior in Entertainment

Looking for Friends

Entertainment on the internet can help solve loneliness, meet some unknown online friends, and relax with music. It doesn't bore us.

Relaxation and Fun

Internet use, from the entertainment aspect above, loosen our stress through internet activities such as listening to music, playing games, watching cartoons etc.

The research in such area on the mental health of teenagers who were internet addicts performed by Salini Rattanaphan (2003) revealed that the problem may be caused by a lack of social relationships for instance having friends less than expected or unsatisfying superficial relationship. And teenagers tends to view themselves as a worthless person and often does not dare to ask for help from anyone or even ventilation since they think that it is going to bother someone else or waste others' time like people sitting motionless in front of the mirror and look at the others playfully without any involvement, so that they resolve the mental problem by the internet in various ways such as chatting, playing games. Moreover, this conformed to Davis RA (2001), that is, Generalized Pathological Internet use: GPIU using the internet to communicate, or to find for general information have a few friends or feel lonely, thereby they have spent too much time on the internet. They may join the forums or just surf to kill time.

*Recognition of Using the Internet Properly***.**

Recognition of using the internet properly is important to the informants only choosing creative, useful information but if they are careless, there may be a perceived threat to them.

Consequently, the recognition and choice of information on the internet should be considered elaborately focusing on the benefit, congruity, and accuracy. According to the internet contains correct or incorrect and complete or incomplete data, it is necessary to carefully think before applying. And it doesn't fair to accuse for all data providers, but the users because if selecting data without thoughtfulness, everything is useless or it can mislead us a little further.

3) Negative Internet Use Behavior in Entertainment

Curiosity

Curiosity also arose from the negative use of the internet. As a result of many allurements, they, the informants, were interested in and suspicious of how that behavior occurred.

I Want to Beat You.

Beating or defeating specifically from the game associated to negative internet use due to the fact that the points received are considered incentives. The more times they defeat, the more points they earn. This made them happier and encouraged them to have higher score, it means that they must be only the winner. But if they lost the game, lose the points, and eventually were irritated

instead. This would affect the negative use of the internet in entertainment ineffectively.

4) Internet Use Behavior in Online Trading

Unreliability

Informants' experience said that internet trading could cause unreliability in accordance with they cannot see or test the product before making decisions and may take high risk of product that may not meet their satisfaction.

Feel Confident

Although, there were problems, from the experience above, informants still had the confidence to use the internet online trading. It is because they have ever purchased and received products that meet their needs and doing transactions has never experienced any problems.

5) Effects of Internet Use on Physical Health

Know how to change the positions

Changing their postures could help strengthen the body or relieve body aches and also changing atmosphere was another way for relaxing.

Body Aches

It can be concluded from the research that if the informants used the internet for a period of time without a break or relaxation, it would certainly affect their body especially through the pain and impact on fatigue, exhaustion, and might have long-term consequences from such pain.

As a result, using the computer for a long time will affect the visual system, musculoskeletal system and the nervous system of humans. It is a cause of eye fatigue, dry eyes, worsening headache, nausea, muscle pain, and amblyopia if serious. This can be explained by the fact that when we use computers, our eye sight is centered on a small computer screen with the stable distance between the eyes with the display. So if we need to use the computer for a long time, it will make the eyes work harder than it should be so unconscious that we have fatigue. Besides gazing at the computer screen for a long time, our vision problem can also be caused by exposure to radiation from the computer. Using the computer for more than six hours per day can remove moisture and cause eye irritation and consequently blurry and temporary indistinct vision. There are also associated with migraine. (Thetrakarnporn, S., 2012; & Ratthanapan, S., 2003)

Fluency Skills Training

Using the internet for a long time contributed to the coordination between hand and eye skills to achieve fluency and interrelation.

Scientists from UCLA, said that searching for information on the internet helped activate the midbrain system associated with judgment and reasoning - deciding and clicking can activate this brain more than reading the books. The results of the study showed that questing on the Internet makes the neural circuits work but does not happen when reading books. Scanned by MRI, the neural circuits of the regular Internet searchers work three times more than those who just came to browse the internet for the first time. It can be believed that the surfing on the Internet regularly is one way to help strengthen brain.

6) Effects of Internet Use on Mental Health

Stress Reduction

Using the internet could help reduce stress due to the use of internet activity as a friend by playing games or making a quick search. It showed that the informants found using the internet in such activities relaxed.

Social Interaction

One reason why using the internet lead to good mental health was social interaction from the experience with a lot of friends talking online, yet the informants could provide information that could identify their actual friends from the online world since, the nature of teenagers, they not only need friends at the same age but also exchange information with new friends and use aliases to chat with friends via the Internet.

Positive views of the online world, Dr.Manote Lotrakul, a psychiatrist of Ramathibodi Hospital, pointed out that the social network helps people relax and talk though not in person. Especially those who have trouble with sociability, in the online world, they will dare to say even more, have more self-confidence, and can express themselves the way they want to be but they may actually feel bashful. Thus chatting on the online world is one way of blowing off stream with some suggestions and helps from online friends to make difficulties easier.

Irritability and Anxiety

Trying to win the games over to relax was a cause of irritability and anxiety to mental health because they cannot see or test the product before making decisions and may take high risk of product that may not meet their satisfaction which could affect mental health.

Suggestions

Suggestions from Research

1. Educate the informants the correct appropriate and creative internet use.
2. Educate the informants who were affected physical and mental health with the proper modifications and monitor the physical and mental health results for those affected after being modified to confirm how to heal effectively and to avoid the health effects from the use of the internet.

Suggestions for Next Research

1. Study other factors that may affect health from using the internet.
2. Study in depth whether there are teenagers who are internet addicts in order to assist by counselling techniques.

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Self-esteem, Readiness for Self-improvement and Subjective Well-being in Women from Collectivistic and Individualistic Cultures

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Abstract

The study examined the question of how personal self-esteem and collective self-esteem are linked to readiness for self-improvement and subjective well-being in women from individualistic and collectivistic countries. Indian and Polish women were surveyed in order to measure personal and collective self-esteem, readiness for self-improvement and subjective well-being. The results allowed to distinguish three groups of women: A) satisfied with themselves and their lives (high personal self-esteem and high well-being); B) satisfied with their groups and ready for self-improvement (high collective self-esteem, high readiness for self-improvement); and C) dissatisfied with themselves and their groups and not ready to change (low personal self-esteem, low readiness for self-improvement and lower well-being). Most women from the collectivistic country belonged to group B whereas women from the individualistic country were split between group A and group C. The conclusion is that collective self-esteem is very important for both readiness for self-improvement and well-being in women from the collectivistic culture and personal self-esteem is important for well-being in women from individualistic countries. What is more, collective self-esteem mediates the relationship between personal self-esteem and subjective well-being in women from individualistic cultures.

Introduction

A lot of psychological research has been devoted to searching for correlates of well-being. As far as studying well-being is concerned, there are different approaches: well-being can be analyzed by looking into inner qualities (personal qualities) or outer qualities (living conditions and environment) or else by focusing on life chances and life results (Veenhoven, 2000). In this paper, we adopt the approach in which well-being is seen as life results (subjective well-being), i.e. the way in which individuals evaluate their lives (Veenhoven, 2000). The research so far indicates that personal self-esteem (understood as *feeling of self-worth and self-respect derived from individual traits, abilities, skills*) is linked to subjective well-being. However, the results are not uniform and show that personal self-esteem may be more or less significant for well-being depending on the culture. For example, it was established that personal self-esteem is more important for subjective well-being in individualistic cultures than in collectivistic cultures (cf. Diener, 1994; Chen, Cheung, Bond, Leung, 2006). What is more, it was found out that life satisfaction in collectivistic cultures is linked to constructs referring to interpersonal relations and social environment (Chen et al., 2006; Kwan, Bond, Singelis, 1997). It was revealed that two dimensions of collective self-esteem (understood as *feeling of self-worth related to membership in social groups and the value of the membership to the person*) are linked to subjective well-being in both cultures, but the links are stronger in some ethnical groups than in others, e.g. in Asian groups than in White groups (Crocker, Luhtanen, Blaine, Broadnax, 1994). In other words, culture may be considered an important moderator of relationships between subjective well-being and various aspects (personal and social) of self-esteem. Therefore, studies aimed at a deeper understanding of the relations between those variables are of special significance.

Self-improvement motive is a basic motive for human change and development and that is why in many psychological theories it is regarded as a guarantee of well-being (Maslow, 1970; Ryan, Deci; 2000, Seligman, 2002). In the present study, we assumed that self-improvement motive can be manifested, among others, by readiness for self-improvement understood as an intention of a person to change the self, i.e. *an intention to really improve one's traits, abilities, skills, health state* (Taylor, Neter, Wayment, 1995; Zawadzka, Szabowska-Walaszczyk, 2011). The importance of readiness for self-improvement for well-being was confirmed by research carried out on Polish samples, i.e. subjects remaining under the influence of individualistic culture (Zawadzka 2014, Zawadzka, Szabowska-Walaszczyk 2011, Zawadzka, Szabowska-Walaszczyk 2014). However, the question of how important readiness for self-improvement may be for subjective well-being in collectivistic cultures has not been analyzed yet. Improving oneself in order to meet the requirements of the group to which one belongs is a fundamental principle of collectivistic societies (Markus, Kitayama, 1991). That is why readiness for self-improvement may be even more significant for subjective well-being in such cultures.

The aim of the present study was to find out how personal self-esteem and collective self-esteem and also readiness for self-improvement are linked to subjective well-being in cultures of different ratings on the collectivism-individualism dimension. Two countries were chosen for the analysis: Poland to represent an individualistic culture and India to represent a collectivistic culture.

Theoretical background

I. Cultural differences between Poland and India - individualistic and collectivistic country

Poland and India were chosen for the analysis because of the economic and social transformation leading to the development of free market economy that has been in progress in both countries (e.g.: Minkner, 2010; Zawisza, Luyt, Zawadzka, 2013). What is more, both countries were occupied and isolated: Poland – first, during the partitions beginning in the second half of the eighteenth century and, then, during the time of communist and totalitarian regime after World War II, and India – during colonial times from the seventeenth to the twentieth century; both countries had to fight for their independence. Therefore, although nowadays both Poland and India are young democracies, the people still tend to dislike and ignore their governments (cf. tab. 1).

Table 1 A comparison of India and Poland on Macro Indicators

Key Indicators	Poland	India
Human development index HDI*	0.82 (high)	0.55 (medium)
Gross National income per capita (2012)*	17.78	3.29
Rating of happiness in 2010 - 2011**	5.82	4.77

Source: *Human Development Report 2013, ** World Happiness Report 2013

Research analyzing differences in *four cultural orientations* (relationships, environment, nature of humans and activity) between Indian and Polish employees in similar types of organizations showed that they view human nature in a similar way (Woldu, Budhwar, Parkes, 2006). Both nations perceive human nature as neither good nor bad (Mp=3.93, Mh=3.84, max 7). The same research indicates that Poles (Mp=4.54, max 7) differ significantly from Indian people in their collectivistic values orientations, i.e. Poles are less oriented towards collectivistic values than Indian people (Mh=5.02, max 7).

Hofstede's research demonstrates that Poles and Indian people differ in the degree to which individuals identify with a group (Hofstede, 2014, Hofstede, Hofstede, Minkov, 2010). Poles are more individualistic, focused on achievement and individual rights, and involved in relations based on reciprocity. Indian people, as representatives of collectivistic cultures, focus more on other people's needs, pay more attention to the aims of the group, and create bigger communities. The most significant cultural differences between Poland and India revealed by Hofstede concern uncertainty avoidance, i.e. a dimension which reflects the extent to which a given culture programs its members to feel uncomfortable or comfortable in unclear and ambiguous situations (Hofstede et al., 2010, Hofstede 2014). In cultures with high uncertainty avoidance, anxiety and stress resulting from uncertainty is reduced by a large number of norms, bans and social rules. In comparison with Indian people, Poles rely more on legal rules and social norms, worry more about the future, are more afraid of failure and display emotional resistance to changes. They are also more materialistic, more assertive and more focused on themselves and their individual achievements, less sympathetic to the not-so-successful ones. Indian people, in turn, have stronger power distance, i.e. more acceptance for inequality of power and status upheld and

strengthened by social rules and rites based on obedience and submissiveness (cf. tab. 2). To sum up, the characteristics presented above display that the two selected countries are undergoing economic and social transformation toward strengthening free market economy and differ on the cultural dimension of collectivism and individualism, significant for this study.

Table 2. Index of Cultural Dimensions

Country / Dimension	Poland	India
PDI (*Power Distance*)	61	71
IDV (*Individualism*)	64	49
UAI (*Uncertainty Avoidance*)	82	31
MAS (*Masculinity*)	66	57

Source: *The Hofstede Center, 2014*

II. Self-esteem and well-being in individualistic and collectivistic cultures.
The need for positive self-regards is universal, but its manifestation is realized within the frame of a given culture and its cultural norms (Kurman, Sriram, 2002). Frequently, many differences observed within self-esteem are largely an artifact of culturally non-sensitive ethnocentric methodologies (Heine, Lehman, 1997). Hence, in our study we focus on cross-cultural comparisons.

Self-esteem is an important predictor of life satisfaction and subjective well-being in both individualistic and collectivistic cultures (e.g.: Benet-Martinez, Karakitapoglu-Aygun, 2003; Diener, Diener, 1995; Kang, Shaver, Sue, Min, Jing, 2003; Kong, Zhao, You, 2013). As far as differences are concerned, previous cross-cultural comparisons show that individuals in individualistic cultures have higher self-efficacy than individuals in collectivistic cultures (Klassen, 2004; Scholz, Dona, Sud, Schwarzer, 2002). What is more, people from collectivistic countries are more self-critical, i.e. they have lower self-esteem than people form individualistic countries (Heine et al., 1999). The results of cross-cultural research devoted to studying correlations between self-esteem and life satisfaction demonstrate that self-esteem is a more powerful predictor of life satisfaction in individualistic countries than in collectivistic countries (Diener, Diener, 1995). Research done in individualistic cultures indicates that self-esteem fosters good health and both life and financial success (Diener, Diener, 1995). However, results from collectivistic countries (Hong Kong and China) show that self-esteem is moderately linked with subjective well-being (Chen et al., 2006; Kwan et al., 1997). Considering the above, it was assumed in this study that subjective well-being of women from a more individualistic culture, i.e. Poland, is more closely linked with personal self-esteem than subjective well-being of women from a more collectivistic culture, India.

Therefore, the first hypothesis tested in this study was as follows:

H1: Subjective well-being is more closely linked with personal self-esteem in Polish women (i.e. representatives of individualistic culture) than in Indian women (i.e. representatives of collectivistic culture).

The results of Kwan, Bond and Singelis's study show that the relationship between life satisfaction and independent self-construal (typical for individualistic cultures) is mediated by personal self-esteem but the relationship between life satisfaction, and interdependent self-construal (typical for collectivistic cultures) is mediated by relationship harmony (Kwan, Bond, Singelis, 1997). In other words, the more dominant independent self-construal the more important personal self-esteem in life satisfaction and also the more dominant interdependent self-construal the more important relationship harmony in life satisfaction. Furthermore, other studies revealed that collective self-esteem may be considered a significant predictor of subjective well-being, especially in collectivistic countries (Crocker, et al., 1994; Zhang, Leung, 2002). Zhang and Leung's study (1999 in Zhang, Leung, 2002) conducted in a sample of athletes demonstrated strong relationships between individual self-esteem and life satisfaction, but collective self-esteem was the strongest predictor of domain satisfaction. Zhang (2005) also revealed that, in Chinese people, collective self-esteem is a more powerful predictor of general life satisfaction and life domain satisfaction than the Big Five personality traits. In view of the findings presented above, another assumption of the present study was that collective self-esteem is more closely linked with subjective well-being of Indian women (brought up in a collectivistic culture) than subjective well-being of Polish women (brought up in a more individualistic culture).

Consequently, the second hypothesis tested in this study was as follows:

H2: Subjective well-being is more closely linked with collective self-esteem (and each of its four dimensions) in Indian women (i.e. representatives of collectivistic culture) than in Polish women (i.e. representatives of individualistic culture).

III. Readiness for self-improvement and well-being

Theories rooting from humanistic psychology assume that well-being results from self-actualization and personal development (Maslow 1970; Ryan, Deci 2000; Seligman 2002), which reflects the idea of self-improvement. The universalist perspective suggests that self-improvement involves basic human motives that coexist in the self-system and are prevalent across cultures (Gaertner, Sedikides, Cai, 2012). Similarly, internalization of collectivistic norms gives rise to self-effacement (e.g. criticism, averageness) and self-improvement motives, which aim at achieving cultural ideal of social harmony (Kitayama, Markus, Matsumoto, Norasakkunkit, 1997). However, a study conducted by Gaertner et al (2012) showed that regardless of cultural background the majority of both collectivistic (Chinese) and individualistic participants (American) wanted self-enhancing and self-improving feedback more than self-effacing feedback or no-feedback - these findings prove universality of self-improvement motives.

The influence of readiness for self-improvement on well-being has already been studied on Polish samples. The results of previous research show that readiness for self-improvement allows to predict overall life satisfaction as well as present and future life satisfaction. It was also shown that if people are more ready to self-improve they are more satisfied with their accomplishments, their future, their work and their studies (Zawadzka, Szabowska-Walaszczyk, 2014). Furthermore, in another study it

was also concluded that subjective well-being is linked with readiness for self-improvement in working women and elderly people (Zawadzka, Mroczkowska, 2013; Zawadzka, Szabowska-Walaszczyk, 2011). Moreover, it was revealed that there is a positive relationship between readiness for self-improvement and subjective well-being in a work place measured by the level of work engagement (Zawadzka, Szabowska- Walaszczyk, 2011). To sum up, the studies discussed above indicate that subjective well-being can be predicted according to the level of individual readiness for self-improvement.

In the light of the abovementioned conclusions that self-improvement is linked with life satisfaction and is the basic principle of functioning in collectivistic societies (cf. Markus, Kitayama, 1991), it was assumed in the present study that readiness for self-improvement may be linked with subjective well-being in both groups and that it may be even more significant for subjective well-being of Indian women, brought up in a collectivistic culture, than for Polish women, brought up in a more individualistic culture.

Accordingly, the third and fourth hypotheses verified in this study were as follows:

H3: Readiness for self-improvement is linked with subjective well-being in both Indian women and Polish women.

H4: Subjective well-being is more closely linked with readiness for self-improvement in Indian women than in Polish women.

Method

Participants

141 persons, 64 Indian women and 77 Polish women were surveyed. The average age of the surveyed women was *M*=23,53(*SD*=8,43), where it was M=22,40 (*SD*=9,16) for Indian women and M=22,46 (*SD*=7, 54) for Polish women. The participants were students of social science at University of Delhi and University of Gdańsk.
Materials and procedure

Readiness for Self-improvement Scale (Zawadzka, Szabowska-Walaszczyk, 2011). The scale consists of 11 items which refer to two dimensions of readiness for self-improvement: readiness for self-improvement (*When I feel there is something wrong with me I try to change this, I strive for real improvement of my skills and abilities*) and care for one's health (*Healthy diet is important for me, I strive for real improvement of my health*). Respondents rate their answers on a 5-point scale, where 1 is "*It does not describe me at all"* and 5 is *"It describes me perfectly*". *Cronbach's Alpha* for RS scale was α= .74, *Cronbach's Alpha for* RSH scale was α =.51. However, owing to the scope of the study, we focused on readiness for self-improvement and omitted readiness to improve one's heath.

PSE Rosenberg Self-esteem Scale (Rosenberg, 1965). The scale consists of 10 items concerning self-esteem (e.g. *On the whole I am satisfied with myself*, *I feel that I have a number of good qualities*). Participants rate their answers on a 4-point scale, where 1 is "*strongly disagree"* and 4 is "*strongly agree"*. Cronbach's Alpha for PSE scale was α = .67.

CSE Collective Self-esteem Scale (Luhtanen, Crocker, 1992). A collective self-esteem scale is a measure of self-evaluation of one's social identity. The scale consists of 16 items, four items for each of the subscales referring to four aspects of collective self-esteem (CSE), i.e.: membership self-esteem (e.g. "*I am a worthy member of the social groups I belong to"*), private collective self-esteem (e.g. "*I often regret that I belong to some of the social groups I do"*), public collective self-esteem (e.g. "*Overall, my social groups are considered good by others"*) and identity importance self-esteem (e.g. "*Overall, my group memberships have very little to do with how I feel about myself"*). Participants rate their answers on a 7-point scale, where 1 is *"strongly disagree"* and 7 is "*strongly agree"*. Cronbach's alpha for the whole scale was α=.85. Cronbach's alpha for the four scales was as follows: CSE membership α=.67, CSE private α=.53, CSE public α=.57, CSE identity importance α=.49.

The Satisfaction With Life Scale - SWLS (Dienier, Emmons, Larsen, Griffin, 1985). The scale measures subjective well-being - SWB and consists of five items referring to cognitive judgments of satisfaction with one's life (e.g. "*In most ways my life is close to my ideal"*), which are rated on a 5-point scale from 1 *"disagree" to 5 – "agree"*. Cronbach's Alpha for SWLS scale was α = .75.
Procedure. The survey was carried out at the campuses of University of Delhi and University of Gdańsk. The participants were invited to a lecture hall and seated at separate desks where they answered the questionnaires. The groups consisted of 20 to 40 persons at a time.

Results

Differences between Polish and Indian women concerning self-esteem (personal and collective), readiness for self-improvement and subjective well-being.
The analysis consisted of a simple mean comparison of the reported levels of PSE, CSE (membership, private, public, identity importance), RS and SWLS in the Polish and in the Indian samples. The results showed significant differences in PSE and CSE. Polish women rated significantly higher in PSE as compared to Indian women whereas Indian women rated higher in CSE in all four examined dimensions as compared to Polish women (cf. tab.3). A significant difference was also noted in the level of RS. Indian women were more willing to self-improve than Polish women. The difference regarding SWB was significant on the level of statistical tendency ($p<.10$). Indian women's judgments of satisfaction with their lives were slightly more favorable than those of Polish women (cf. tab. 3).

Table 3. t Student significant difference - Poland - India

Variables	Group		
	Polish (M)	Indian (M)	t
CSE membership	4.61	6.74	9.40***

CSE private	4.68	6.29	7.91***
CSE public	4.48	6.30	7.28***
CSE importance of identity	4.17	5.85	8.69***
PSE	28.25	26.60	-2.36*
RS	4.05	4.25	1.90, p<.059
SWB	3.23	3.48	1.62 , p<.11

significance level *p<.05, **p<.001

The relationship between self-esteem (personal and collective), readiness for self-improvement and subjective well-being in Indian and Polish women.

The analysis of the relationships between the examined variables in the Polish sample demonstrated significant positive correlations between SWB and PSE (r=.35, p<.01) and CSE private (r=.20, p<.09 - significance on the level of statistical tendency) (cf. tab. 4). In the Indian sample significant correlations were indicated between SWB and RS (r=.21, p<.10 - significance on the level of statistical tendency) (cf. tab. 5). Also, a positive correlation was noted between RS, and CSE membership (r=.54, p<.001), CSE private (r=.46, p<.001) and CSE public (r=.31, p<.05).

Table 4 Correlations between variables in the Polish group

	1	2	3	4	5	6
CSE membership						
CSE private	.67***					
CSE public	.55***	.54***	X			
CSE importance of identity	n.i.	.34**	n.i.	X		
PSE	.62**	.48***	.43**	n.i.	X	
SWB	n.i.	.20,p<.09	n.i.	n.i.	.35**	X
RS	**.35****	n.i.	n.i.	n.i.	n.i.	n.i.

significance level *-p.05, **-p<.01, ***-p<.001

Table 5 Correlations between variables in the Indian group

	1	2	3	4	5	6
CSE membership						
CSE private	.59***					
CSE public	.37**	.36**				
CSE importance of identity	n.i.	.23,p<.07	n.i.			
PSE	n.i.	n.i.	n.i.	n.i.		
SWB	n.i.	n.i.	n.i.	n.i.	n.i.	
RS	.54***	.46***	.31*	n.i	n.i.	.21, p<.10

significance level *-p.05, **-p<.01, ***-p<.001

In order to further analyze the examined interrelations, mediation analysis was applied in the Indian and in the Polish samples by means of Sobel test. In the Polish sample it was established that CSE membership (z=1.75, p<.05), CSE private (z=2.21, p<.01) and CSE public (z=1.44, p<.07) were significant mediators of the relationship between PSE and SWB. Increase in PSE created increase in both SWB and CSE. Introduction of CSE membership, CSE private and CSE public as mediators lowered the significance of the relationship between PSE and SWB (cf. Fig. 1, Fig 2, Fig 3).

Fig. 1 Indian Women - CSE membership as a mediator in the relationship between RS and SWB

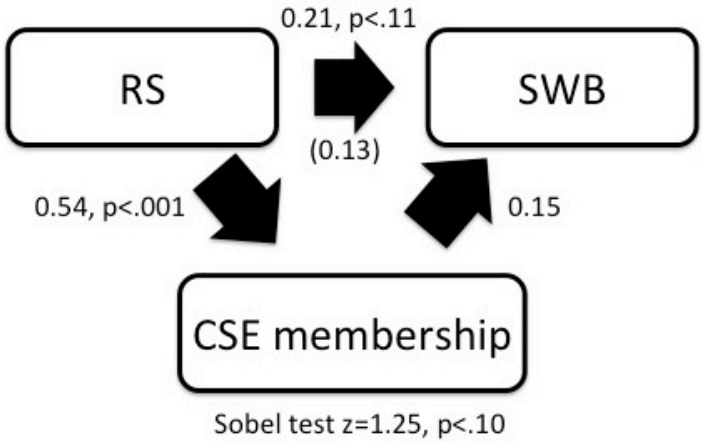
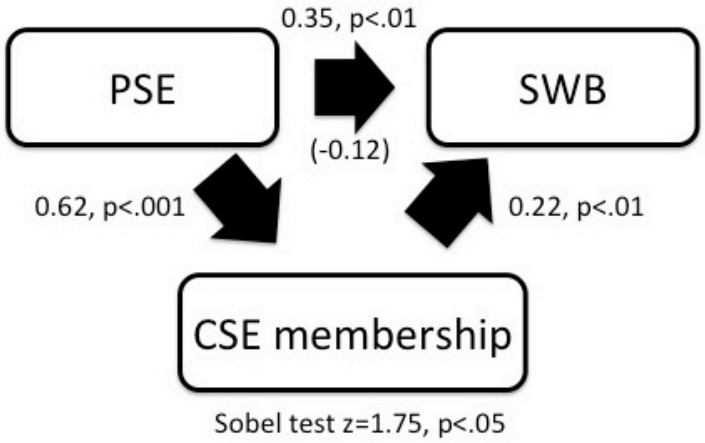


Fig. 2 Polish women - CSE membership as a mediator in the relationship between PSE and SWB



As for Indian women, it was observed that CSE membership was a mediator for the relationship between RS and SWB (z=1.25, p<.10 - significance on the level of statistical tendency). RS was linked with increase in CSE membership and SWB (significance on the level of statistical tendency) (cf. Fig 4). At the same time, it was noted that increase in CSE membership reduced the significance of the relationship between RS and SWB.

Fig.3 Polish women - CSE private as a mediator in the relationship between PSE and SWB

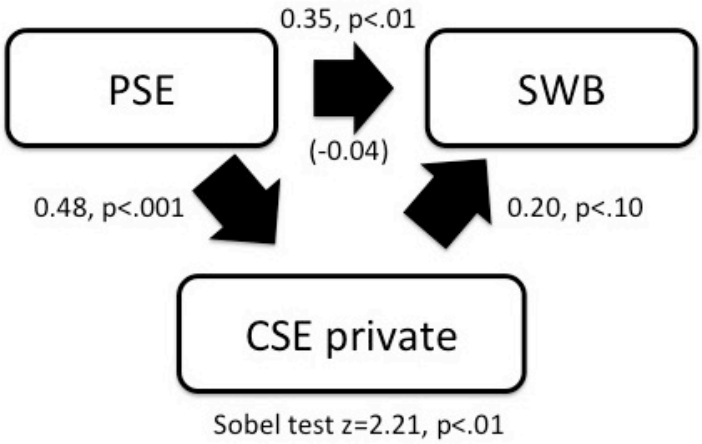
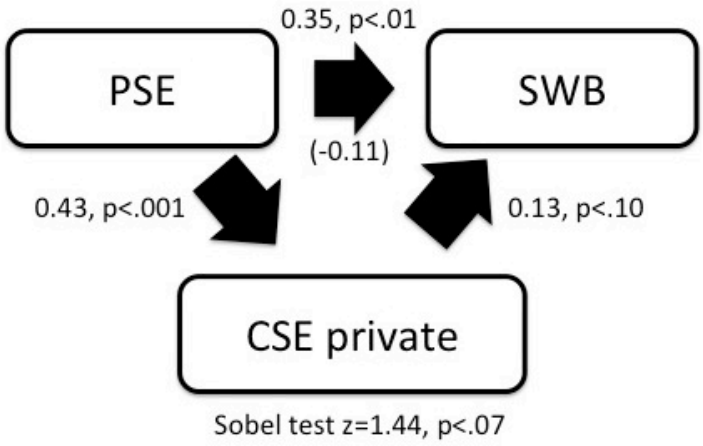


Fig.4 Polish women - CSE public as a mediator in the relationship between PSE and SWB



Self-esteem, readiness for self-improvement and well-being - typologies.
In order to isolate a group of women with similar scores in self-esteem (personal and collective), readiness for self-improvement and subjective well-being, K-means cluster analysis was carried out. Three clusters were distinguished (cf. tab. 6).

Table 6 Results of k-means cluster analysis

Variable	satisfied with themselves and their life	satisfied with their groups and ready for self-improvement	dissatisfied with themselves and their groups and not ready to change
PSE	34.42	26.40	25.59

CSE membership	5.80	6.87	4.20
CSE private	5.16	6.57	4.38
CSE public	5.45	6.51	4.06
CSE importance of identity	4.35	6.01	4.12
RS	4.19	4.40	3.91
SWB	3.61	3.44	3.19

Cluster 1 includes women who scored highest in PSE and highest in SWB. Cluster 2 includes women who scored highest in CSE (in each of the four dimensions) and highest in RS, and slightly lower in SWB as compared with women of cluster 1. Cluster 3 includes women who scored lowest in both PSE and CSE (in each of the four dimensions), and lower in both SWB and RS as compared to women of cluster 1 and cluster 2. Next, discrimination function analysis was used, where cluster membership was a dependent variable and self-esteem (personal and collective), readiness for self-improvement and subjective well-being were independent variables (cf. tab. 7).

Table 7 Discriminant analysis: correlations between variables and canonical discriminant functions

Variables	Function 1	Function 2
CSE public	.69	-.21
CSE membership	.69*	-.19
CSE private	.57*	-.31
CSE identity	.41*	-.34
RS	.24*	-.07
SWB	.11*	.06
PSE	.40	.87*

F1 = 55.1%, canonical correlation: .84, $\chi^2(14)=271.11$, $p<.001$, Lambda Wilksa .10
F2 = 44.9%, canonical correlation: .81, $\chi^2(7)=127.36$, $p<.001$, Lambda Wilksa .34

Two statistically significant functions were discovered. The first function accounted for 55.1% and the second one for 44.9 % of the variance. The variables whose correlations with the first function were strongest were high CSE (its four dimensions: membership, private, public and identity importance self-esteem), SWB and RS. This function points to differences between cluster 2 and 3. The second function correlates strongly with PSE and points to differences between clusters 1, 2 and 3.
Next, it was investigated if the distinguished types of women were anchored in their culture (individualistic and collectivistic). The results indicated that type 2 - women with highest score in CSE, highest score in RS, and high score in SWB - were mostly Indian women (38). Polish women, however, were divided into the remaining two types: type 1, least numerous (20) - women with high score in PSE, high score in SWB and unwillingness to improve oneself, and type 3, most numerous (47) - women with lowest scores in all self-esteem (PSE and CSE), SWB and RS (cf. tab. 8).

Table 8 Number of Polish and Indian women in three clusters

Type	Group	
	Indian	Polish

satisfied with themselves and their life	4	20
satisfied with their groups and ready for self-improvement	38	7
dissatisfied with themselves and their groups not ready to change	7	47

$\chi^2(2)=59.01$, $p<.001$

To sum up, considering the analyses presented above it may be ascertained that the first hypothesis (H1) was confirmed, i.e. a statistically significant relationship between subjective well-being and personal self-esteem in the Polish statistically significant relationship between was discovered. The second hypothesis (H2) and the third hypothesis (H3) were partly confirmed, i.e. a relationship between readiness for self-improvement and subjective well-being was observed in Indian women whereas it was not observed in Polish women. The fourth hypothesis (H4) was not confirmed, i.e. collective self-esteem was not directly linked with subjective well-being in either of the examined statistically significant relationship. Nevertheless, conclusions regarding the relationship between collective self-esteem, readiness for self-improvement and subjective well-being in a collectivistic culture can be drawn indirectly based on clustering. This allowed to distinguish a separate type of women with high scores in collective self-esteem, in each of its dimensions, with high scores in readiness for self-improvement, and with favorable judgments of life satisfaction (high level of SWB). This type included mostly Indian women.

Discussion and summary

Consistent with the assumptions, the study demonstrated a different nature of the relationship between self-esteem (personal and collective), readiness for self-improvement and subjective well-being in the examined statistically significant relationship between women rooted in different cultures: a more individualistic culture, Polish women, and a collective culture, Indian women. The results show that subjective well-being is linked with personal self-esteem in Polish women, representing an individualistic country, and well-being is linked with readiness for self-improvement in Indian women, representing a collectivistic country (on tendency level of significance). The study confirmed significant relationships between personal self-esteem and subjective well-being in individualistic cultures (Diener, Diener, 1995). The relationships between these variables in the collectivistic culture were not significant. The results are similar to results demonstrated by Chen et al. (2006) and Kwan et al. (1997), but they are contrary to the results obtained by Kang, Shaver, Sue, Min & Jing (2003), Kong, Zhao & You (2013) and Zhang, (2005). These differences may be due to the fact that the present study included women only.

Furthermore, the results showed that collective self-esteem was significantly linked with readiness for self-improvement in the Indian women sample and collective self-esteem was linked with personal self-esteem in the Polish women sample. However, in both surveyed samples the relationship between RS was significantly linked with CSE membership. CSE membership mediated the relationship between PSE and SWB in the Polish sample and RS and SWB in the Indian sample. What is more, CSE membership (i.e. how useful one sees oneself for the group to which he/she belongs)

lowered the effect of PSE on SWB of women from the individualistic country and the effect of RS on well-being of women from the collectivistic country. Interestingly, RS in Polish women correlated positively and significantly with CSE membership. A possible explanation is that when Polish women assess their usefulness for the group to which they belong their PSE decreases but their RS increases. As for Indian women, when they assess their usefulness for the group to which they belong their RS increases, which results in weakening their selves and decreasing their well-being. The suggested interpretation of the results for Indian women, however, requires further study and analysis. In the Polish sample, the next two dimensions of CSE (personal and public) also served as mediators. It was observed that the higher the level of collective self-esteem referring to those dimensions, the less significant the relationship between personal self-esteem and SWB. Accordingly, collective self-esteem lowered the significance of personal self-esteem for subjective well-being of the surveyed sample of Polish women.

The analysis of the significance of the types distinguished among women confirms the adopted assumptions concerning both women from individualistic and from collectivistic cultures. Women from the individualistic culture (Poland) were more satisfied with their lives when they had higher self-esteem and then they also wanted to self-improve (type 1) but they were less satisfied with their lives when their self-esteem was lower and then they were not so keen to self-improve (type 3). Women from the collectivistic culture (India) were more satisfied with their lives when their collective self-esteem was high and they were eager to self-improve (type 2).

In the presented study, the relationship between self-improvement and life-satisfaction was not confirmed in the Polish sample and it was observed on the level of statistical tendency in the Indian sample. This is quite surprising since the relationship between readiness for self-improvement and subjective well-being proved significant in previous research carried out on Polish samples (cf. Zawadzka and Szabowska-Walaszczyk, 2011, 2014, Zawadzka and Mroczkowska, 2013). Consequently, investigating the cause of such discrepancies requires further examination. What is more, supplementary research on men and on samples from other countries differing on the dimension of individualism vs. collectivism is needed.

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The Discourse Analysis of Social Reflection Drama of Sexual Behavior of Teenagers

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Abstract

The objectives of this research were 1). To find the characteristics of adolescent's sexual behavior reflected in the characters. 2). To understand the language and behaviors associated with sexual behaviors among adolescents from the reflections in the play. 3). To analyze the language associated with sexual behavior of adolescents reflected from the drama. For research methods, the content analysis of "the behavior that reflects sexual behavior of the characters" in the series TV drama– Hormones – was analyzed by using discourse analysis, sexuality about sexual behavior of teenagers as a framework for analysis.

The results found that:
1). This play reflected every nook and cranny of Thai community as revealed by having sex in school, drug use, or minor emotional disorders to which have never been referred neither at home nor at school. Thai community's eyes and ears have been covered for a long time. Currently, Thai teachers have not taught young people about sex educations because they have been afraid that it would let them have a chance to have sex too early. Now, the Thai teen abortion statistics reach 100,000 per year, hence it is impossible not to mention about safe sex.

2) The circumstance that teenagers had more free sexual intercourse made their self-esteem changed. Sexual intercourse during teen age caused them see sexual activity as just an "exchange" of sexual emotion and object. The more the sexual intercourse they have, the less the self-esteem they see.

3) The sex scene of 'Sprite' – a girl student character who thought that sex was habitual – made the phrase 'Yak-Kin-Sprite-Tong-Sai-Thung' - if you want to have sex with Sprite, you must wear a condom – become popular, even the scene of the group of seniors slapping the junior for scramble for a man in a VDO clip or the scene of two men kissing, etc. It is true whether something we see every day. This play reflected current teenagers' state of society with violence and having sexual relations with different partners. However, these behaviors existed or happened in today's society, no one spoke. This drama revealed the real problems and was a reflection of the reality of society.
Keywords: Discourse , Sexual behavior , Teens' love

Introduction

Overview

Problems with premature sexual intercourse cause directive impacts to teenagers, families, societies, and nation largely. Especially, the teens will be affected by the physical, social, mental and spiritual influences inevitably. Effects occurring are unplanned pregnancy, illegal abortion, sexually transmitted diseases and AIDS, future progress loss, lack of self-esteem as well as impressed stigma. However, associate institutes give an interest and try to solve this problem seriously and continuously, it seems that the effort devoted is unsuccessful as they should - as seen from the age of the first intercourse of teenage men and women are likely to decline. Currently, it has been found that the average age of the first intercourse of teenage men and women is 14 to 15 years. Specifically young men, age at first intercourse has decreased steadily.

Adolescents have Sex Drive, which occurs naturally anyway. If no self-control, both physically and mentally, it can cause subsequent problems. When teenagers have started to attract the opposite sex or love, they feel like there is a lot more intimate. Formerly, the rendezvous of lovers in adolescents was not established by adults or guardians, but, at present, children can visit with more privately. Lovers, can be disclosed or introduce to the parents or acquaintances which some parents admit it, but some still do not.

The teens who are lovers may go around, and may have together chances to get to know each other in more various aspects. While sometimes they lovers by themselves, may lead to an atmosphere conducive to more intimate and may cause sexual desire. Teenagers should be cautioned against inadvertently potential sexuality and should distinguish between love and lust, need to be guarded, or inhibited and responsible.

The significant emotions of teenagers are the passion in the opposite sex, accompanying with curiosity and emulation. So, youths are at risk, if they know about sex wrongly with no good cognition. Teens start having an attention to friends of opposite sex, which may be initially known as a friend and then developed into love with needs to share a life together. Furthermore, the potential problems of the teenagers having sexual emotion can be unwanted pregnancy, the issue of homosexuality, the problem of illegal abortion which would affect their future, their education, and their families.

Sexual emotion is a natural need of the human races for maintaining their tribes, but should be in a
suitable condition. So sexual emotional control is important to avoid the problems and is valid to
Thai traditions established in Thailand to have sex after marriage.

The researcher is interested in the phenomenon of plays reflecting views about sexual behavior of teenagers according to the definition of ‘discourse’ by Michel Foucault stated that Discourse is the system and the creation/production of identity and meaning to things around as; knowledge, truth and power. This research has focused on the study of discourse in the play reflecting the sexual behavior of teenagers that which gist of discourse are produced, how the power of the words of the characters

affect the sexual behavior of adolescents and how it conforms to social problems. These issues will be studied in this advanced independent study.

Objectives

1. To collect the characteristics of adolescent's sexual behavior reflected in the characters.
2. To understand the language and behaviors associated with sexual behavior among adolescents from the reflections in the play.
3. To analyze the language associated with the sexual behavior of adolescents reflected from the drama.

Methodology and methods

Research method

To study the issues mentioned above, we used the following tools to study the qualitative research.

Textual Analysis was an analysis of the text of drama discourse in adolescents' sexual behavior appeared in Hormone – the series. It was to notify how 'sexual behavior of teenagers' is defined. The researchers used Qualitative Textual Analysis principally to analyze and interpret data collected from content in the play.

Data used in the study

For instruments used in the study, this the research aimed to analyze the data acquired from the play, detailed as following:

The researchers studied Hormones – the series, the story of a group of students in Matthayom 5 (grade 11). The play was produced by GTH and Nadao Bangkok, was directed by Songyot Sukmak-a-nan, and was broadcasted by satellite television GMM1 on Saturdays at 22:00 - 23:00 from May, 18th 2013.

Contents to be studied are:

Episode	**Title**	**Broadcasting time**	**keystone**
1	*Testosterone*: Male Hormone	25th May 2013	The story of Win
2	Dopamine: Hormone of intimate	1st June 2013	The story of Ta
3	*Endorphin*: Hormone run when fin	8th June 2013	The story of Sprite
4	*Dopamine*: Hormone of	29th June 2013	The story of Phu

	intimate		
5	*Progesterone*: the hormone of mother being	13th July 2013	The story of Dao

Collection of Data

The researcher collected the data of "Hormones – the series" that aired on Saturdays on satellite TV – GMM1. And for the back-up videos, the data was conducted to collect information from http://www.youtube.com, and then sequenced chronologically to await further analysis.

Instrument and Data Check

This research was conducted using Qualitative Textual Analysis, which could check the validity, because the researcher collected data independently, so the Face Validity existed. Additionally it depended on expert's advice (advisor) to achieve Expert Validity in the research also.

Data Analysis

After collected and validated already, all data were analyzed as follows:
Meaning analysis of the play in sexual behavior of teenagers was the information collection about the discourse from Hormones – the series - to analyze how the definitions of the sexual behavior of teenagers were defined. The researchers have taken Michelle Foucault's concept of Discourse Analysis as a basis for analysis. In addition, the researcher brought the concept of sexuality about sexual behavior of teenagers to study and interpret the data collected.

Data Presentation

After analyzing the data according to the above guidelines, the researcher presented the findings in the form of descriptive analysis by mentioning the discourse of the play reflected sexual behavior of teenagers which appeared in Hormones – the series - both in texts and contexts derived from the meaning analysis of the sexual behavior of the teens in the series.

Discourse analysis of the plays reflected sexual behavior of teenagers. The researcher would like to present the language use of the characters to communicate in the drama which reflected in some potential discourse and was directly related to the meaning creation of the sexual behavior of teenagers that made up such behavior meaningful in Thai society. When considering the present life and the idea of high school students these days in another point of view straightforwardly through the characters in the story with clearly different personalities and views on each issue, but it can be seen everywhere in daily life, also biasing talking about "sex," a distraught teen story throughout the ages with heavy attitude, more than drug problems, family problems, love, or education which has become the current track, or interchangeable broad discussing online on sexual issues of teenagers today, it was particularly interesting because the changed society has affected the perspective of many teenagers such as attitudes towards sex or issues of teenage sexual confusion.

The researcher had the opportunity to watch the drama "Hormones – the series" by words of mouth from students in the school criticizing widely on the day the school started and tracking the fashion of this drama in the online network. The researcher started watching this drama when the first and the second episodes aired by downloading from YouTube. Finishing both first two episodes, I found them impressive because I could keep up this generation. Not only characters' appearance in the story they had, but also the skilled acting level these new young actors could do. Moreover, every character in this play also showed us the common humanity. Unlike many of the leading stars in Thailand, heroes and heroines have to practice good habits or no defects whereas culprits and jealous characters have to be bad for no reason (and no brains). It is that protagonists of Thailand's plays in the past were distant from human being with both the good and the bad in themselves. Audiences felt that the characters were so distant that they almost could not reach anything. When the audiences had known "Win", a impetuous young hot student, who needed to be more prominent than ones, "Sprite", a cute girl, who spent her life overly with many guys, "Phai", a hot-tempered but calm boy, and other characters regarding both good and bad within them. It might feel that these characters represented imperfections so that they became like a friend or someone who existed in their real life.

The beginning…when Hormones bursting out

"Hormones – the series" created Nostalgia phenomenon, or a sense of reminding of the past. And, of course, the teens close in age to the characters in this play would have to commonly track the play, because they felt like having friends who would speak for them. But for adults who already passed their teenage, they would sit in a time machine to go back to the memory filled with sweetness and bitter that we all used to suffer once again like the first love, the broken heart, having intercourses with friends, or contact with the subject of drug or sex.

Exposing what is happening in Thai teen society from the basis for dating with friends, love between heterosexuals, gaps between teenagers and their parents to serious issues but actually seen in newspapers, i.e. having sex in school, smoking, drinking, bickering, or profound love between the same sex, etc.

This play reflected every corner of Thailand whether having sex in school, the use of drugs, emotional variability caused by hormones in the body in general. These things have never been put forward whether at home or at school. Thai society has been covered its eyes and ears for a long time. At present, Thai teachers do not teach young people about sex for they fear that it would let their students have a chance to have sex premature, but actually in this regard the children need to learn from their own experience. For the scene the girl student having an abortion which was widely criticized and was claimed to be banned, he thought that adults themselves were blindfolding to the fact that occurred in society. By now, the statistics of Thai teen abortion reach up to 100,000 cases per year, so it is impossible not to mention about having safe sex.

Who first?

Having more free sex in teens make self- appreciation changed. Having sex during teenage results in teens see a sexual activity as an "exchange" of sexual emotion and object. The more frequent the sexual intercourse, the less self-respect and self-esteem. Moreover, the invitation to have sex in some scenes in some episodes.

When Teen Society Changed?

Sprite's love scenes, Sprite – a young girl who thought that sex is a common thing - so the discourse "yak kin Sprite tong sai thung" (If you want to have sex with Sprite, you must wear condom.) became a hit. Even the scenes that the senior students slapping the younger to take their guy away and record VDO clips, or men kissing each other, etc., are they what we see every day? This play reflected the youth of today's society with violence, and having sex around. These behaviors exist in today's society. It happens every day, but no one speaks. This drama revealed real problems.

Reflection…from psychological view?

Lives of nine young people with "Hormones – the series" were not a long play of ordinary teenagers but the "dark sides" that shocked the audiences especially for teenagers, because the "strengths" of this tiny-but-outstanding form drama presented the truth which was not clean naturally and had the modern storytelling.

There were backgrounds from the smallest unit in society, "family". It is a "core" of the basis repeatedly taught through many dramas. "Hormones – the series" surpassed to target for the "freshness" which did not direct the audiences to believe, on the other hand, it left the further clues, had fun since we did not know how the story would come at the end. This was something new and captivated the audiences.

Understanding and interpretation relied on direct or mutual experience that viewers had encountered.

From the phenomenon found by the researcher, it could be said that why the "Hormones – the series", reflecting the story of high school teenagers in a few minutes after broadcasting, had a sex scene in the toilet and gossiped of other's love. In general, if the drama on TV is talking about "sex education", it will focus on restraining yourself to prevent pregnancy. That's why "Hormones – the series", was to fans' taste who praised its openness daring show the scenes of bussing and copulating.

The article cited Chadet Chaowilai's view, the director of Women and Men Progressive Movement Foundation, on the campaign to increase the instruction of sex education in schools that "Hormones – the series" reflected the actual problems in Thailand but they scared most people.

"When we are unable to talk about sex education in public, so most teens do not know what to do while making love. And most young girls decided to abort because they did not know to protect themselves. They do not even know how to use condoms."

At the end of the article described that absenting these issues would be another example of adult's blindfolding themselves. Abortion rate of teens in Thailand is relatively high with nearly one-hundred-thousand people every year. Keeping away from having safe sex is impossible anymore. Parents watching this play with their teenage kids would understand their campus life. We learn or grow from mistakes. The charm of "Hormones – the series" made it successful because it was true that people could experience and reflected one life span of teenagers whether those who passed it through or those who are still in this range. Adults in Thai society have ignored to teach sex education in the classroom for they have been anxious that it might cause child to have sex, but, unfortunately, it allows children to try out and learn by themselves.

Results

The research on discourse analysis of plays reflected adolescent behavior, the researcher considered regarding to the guidelines of the discourse of drama mirrored adolescent sexual behavior by Discourse Practice and Sociocultural Practice analysis. The details of the analysis will be sorted as following:

1. discourse as a reflection of language, speech associated with adolescents' sexual behavior.

2. discourse as a reflection of psychological and social concept related to adolescents' sexual behavior.

3. discourse as a reflection of teenagers' social practice norms proposing adolescents' sexual behavior.

Discussion

1. discourse as a reflection of language, speech associate with adolescents' sexual behavior.

Talks and Texts of the characters.

Talks here are in a broad sense, that is, the projection (of the characters) in any way that would tell the story to the receivers (the audiences) to be aware and understand through the speech, pronunciation, the use of body language connected to sexual behavior by drama.

Topic Being a starter in intersexual relationship declaration

Findings Anyone can be a starter even if the intercourse does not involve, and males can be one who is proactive in his libido, no matter he is single, just using fluorography or language of flowers.

Topic Word or sentence creation with implication
Findings "I do have mood too…but if you have no condom, you won't get it." became a new hit sentence that had an implication understood and widely used among adolescents.
Topic The use of seducement
findings Using the words of affront or seducement to attract the other.

Topic Being a starter of telling sexual desires
Findings Being an inviter of females may oppose to Thai culture, so that it should have to be avoided by implicating her sexual partners.

Topic Reflection from the researcher's view as an etic
Findings Adolescence is a period of adjustment of progress of feeling from a childhood which is controlled and refined in sexuality from parents' gender role to the creation of more self-confidence from the meaning and evaluation from others' eyes, for example, the roles of young teenagers from movies, television, books, music and entertainment, values in groups of friends with an interaction via the use of language related to emotions and the expression of sexuality, suppression and expression, and the real world and the fantasy. The creation of the discourse that is factored by gender discrimination influences the organization of mind, vision, and views on sexuality of adolescents considerably. Moreover, these are reinforced through various communications continuously and puzzled attitude determination and sexual behavior of teenagers particularly i.e. the communication or talks about sex in a way that it is not good for women (as in situation 1) as seen in "…but my navel is kind of deep, … so I can't wash it all. I really can't!"
A happy and fanciful imagine when thinking of the opposite sex (situation 2 and 3) as in "...a young girl, Dao, has a pounded heart…" and "…his name is strong…", so that it is the creation of excitement and happiness when running on sex with those opposite sex.

Topic Attitudes towards love of male and female adolescents
Findings Men are the ones who asked for relationship which is equal to reinforcing old ideology "Man proposed, women responded". This reflects that women yield to have sex for love from men while men agree to share his love for sex from women. If women have an idea like this, it would allow more behavior of premarital sex because they think it will make men love her even more.

2. discourse as a reflection of psychological and social concept related to adolescents' sexual behavior.

Topic Social adjustment of teenagers
Findings When teens begin, they will be interested in opposite gender friends, sometimes dating which lets both parties have an opportunity to know each other more. Presently, Thailand accepts social dating with friends more and more. Teens, however, need to be very careful about the opposite gender friend and hanging out with friends properly and do not cause damage. Especially teenage girls, making a relationship and going out with male friends may result in harm and other problems, so that when going out with heterosexuals, they should not stay overnight and enter inappropriate places but try to go in a group of friends and ask for permission from their parents at all times.

Topic sexual behavior of female teens
Findings Having sex with other people easily, if you've ever had sex, it was found that women who used to have sex with her lover usually redo with her next one or for other reasons, for example, for money to buy expensive items to satisfy their own needs because they think that they are not virgin anymore. This idea is not correct because all people have value and dignity in oneself. Ever having sex in the past does not lower our value, but our actions in the current situation and the future do. Furthermore, having sex with many people are particularly vulnerable to AIDS or sexual diseases and subsequently pregnancy. Owning to AIDS is a very serious

disease nowadays and is epidemic among children and adolescents. AIDS is cannot be cured.

Topic External incentives is sexual stimulators
Findings Contact with the opposite sex, especially someone we love or not, often causes sexual emotion.

Topic factors influence to sexual intercourse
Findings Human sexual behavior is the result of several factors, both biological and psychological factors. But how the sexual expression is going to happen, it is based on social factors involved. To have activities of love, it needs to care more deeply for the situation. The deeper the relationship has, the more personal it should have to be. So culture becomes norms of behavior to evaluate which is correct. Tradition for practicing activities of humans are different in each community. The young in 2000s in Thailand mixed with Thai culture adopted from the in origin but combined with Western hit culture was in a state of confusion in values of sexual practices different in the two cultures. One stream of Western culture flows through the Hollywood 'films' which pass through the eyes, come into the brain, and track those new values, particularly sexuality.

Topic Meaning of love, a psychological analysis
Findings Psychologically, it was described that love is a phenomenon related to the recognition and society. The psychologist, Robert Sternberg, defined the triangular theory of love and argued that love is composed by three different elements, including proximity, bondage and passion. Proximity is a format that two people share their faith and many details of their personal lives and commonly expresses in the form of friendships and romantic relationships. The bondage is expected that this relationship would last forever. Passion or sexual attraction is the last and most common form of love.

3. discourse as a reflection of teenagers' social practice norms proposing adolescents' sexual behavior.

Topic Skills of refusing
Findings Teenage is a state of the body entering mature stage. This change results in the demand of sex naturally. If they are not careful or control inappropriately, problems can be occurred easily. The following situation that teens should avoid is a girl not going to a male friend's house alone, because his parents may judge her in the bad ways. If necessary, she should go with friends.

Topic Defining men and women's roles today
Findings Some groups of women want sexual freedom as men. Women may be the "encourager" to her satisfied man. A woman may choose the man with whom she wants to have sex. Or it can be said that women want to change the role of the Passive to the Active.

Topic Social acceptance
Findings Conducting, making friends and self-control in the expression of sexuality for social acceptance from sexual changes occurring in adolescent both in physically, mindedly, affectively and socially.

Topic Risky circumstances of sexual relations
Findings Both sides should be careful with their close contact because the female are likely to be inferior to the male. Females should be in the sight of other people, if necessary, they should ask other friends to go with. Never let a boy friend enter a girl friend's bedroom. It is a female private room and inappropriate.

Topic Reflections from the researcher's view as an Etic
Findings According to the society values the object and those who have wealth and power more than honesty, and diligence, so teens love the comfort more than effort, lack of discipline and hard work, consume information and media incorrectly. These cause many problems such as the lack of a life plan, involution with vices - alcohol, smoking, drug addiction, gambling, and the use of inappropriate media. Teens are victims of ads. They consume luxury goods, mimic unlawful sexual behavior, are addicted to online games, go to the pubs, and are at risk offenders. They are also victimized by frauds in various forms and sometimes volunteer or consent to enter sex-service business.

Topic Having sex of teenagers
Findings It reflects the way of thinking of the two genders involved in a sexual relationship before marriage. This shows us that more teens have sex without marriage which is seen as common. It can be said that we admit the Western culture, which has more sexual freedom. But the scenes in the drama mirrored that the women had to be disadvantage in such situations - accident. The psychological disadvantage was derived from concerns arising from results of such actions which the guys did not mind at all, but they only thought how they could get a virgin girl his fan. However, their desire accomplished but they don't know whether they would get married.

Conclusions

Hormones – the series communicated what actually happened in society very straightforwardly and did not jump to conclusions. "Hormones – the series" was a play that exposed what was happening in Thai teenagers' society from the basis for dating friends, love between heterosexuals, gap between teenagers and their parents, as well as the actual violence as seen in the front page such as smoking, drinking, bickering, love of the same sex, etc. Every detail happened was presented artfully. That is what is not teaching, not covering, not jumping to conclusions, and not guiding cues.

Suggestions for applications

This study aimed to research 3 reflections: language or speech, psychological and social concepts, and patterns of social practice of teenagers that dealt with sexual behavior of teenagers to see the views, attitudes transmitted from the characters that reflected the real life of the youth today. It made associates about information and the behavior of young people that change rapidly and can be taken as a guide for planning.

Suggestions for the next research

For the mass media, they should serve to change the attitudes of people in society to be aware of equality between the sexes whether in sexual freedom or any issues by the presenting the information, knowledge and understanding of the differences

between the sexes physically, psychologically, or socially for people to learn about correct sex education.

For the manufacturers, they should offer answers about sexual problems. They should have an understanding of the target audience and the content have to suit the audience. In addition, the presentation should be adjusted to a more two-way communication.

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The Study of Work-Family Balance of Working Adults.

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Abstract

The purposes of this research were 1) to study the work-family balance of working adults in Chachoengsao Province, Thailand 2) to study the correlation between personal factors and the work-family balance and 3) to predict the work-family balance of working adults. The sample of the representative includes 200 working adults who are employed as health personnel in public and private companies in Chachoengsao. They were divided in two groups, 100 public health personnel and 100 people from private companies. The instrument used was the work-family balance questionnaire which developed by the researcher based on the concept idea of Marks & MacDermid (1996). The statistics used for this research were non-parametric statistic, basic statistic, mean and standard deviation.

The results were summarized as follows:
1. The working adults in Chachoengsao had satisfaction balance in highest level followed by the involvement balance and the time balance, respectively.
2. The personal factors (sex, age, status, education, and careers) affected to the work-family balance of the working adults with statistically significant at the .05 level.
3. The personal factors in the aspects of career, status, and educational degree affected to the work-family balance of the working adults with statistically significant at the .05 level.

Keywords: work-family balance, working adults

Introduction

Overview

Family and work are important for all people. From past until now, why people are successful and happy in their life is the capability in managing the balance between family and work effectively. With current social situations, family has been changed from extended family to single family. The changing of economic was aim to industrial society and focuses on personal deftness so that people tend to give precedence to quantity and quality of products. Meanwhile, they have to make their family happy, warm and smooth together with working life. Many working adults may give precedence to family too much and concentrate on working less because they think they should work as a duty at any given time while another group of them mainly gives precedence to work and family as second. They believe that if they don't have a job or their work doesn't progress, they will not be able to make enough money to support their family. Only a few people can keep the balance between family and work properly. In the past, keeping the work-family balance is not hard. But now with many factors such as a desire to be successful in occupation, a need of quantity of products more by some organizations, it is more difficult to manage the work-family balance. Spending time mostly in work and no time for family can sometimes cause troubles between work and family, consequently managing the conflict of family and work and balancing them are very significant.

National Statistical Office Thailand (2554) had surveyed working condition in Thailand and found that most working adults are work as employers. On the yearly average, there are 16.92 million employers or 44% (3.68 million people working for government and 13.24 million people working for private companies). Thai workers mostly spend time for work averagely 44.7 hours a week. The rate of wage is a main factor affecting working for many hours in developing countries because of the low wage of neighboring markets in those countries. Thus, many workers often have to work overtime in order to get enough income. (Phanupak Pongartichat, 2550)

The role of family and work such as maintaining of children while working and troubles in family causing stress and conflicts between family and work. From these situations, those who get married and have children should have the capability for balancing family and work. Nowadays, happiness in Thai families was decreasing as the growing up of divorce problem. According to statistic data from the registry, Department Of Provincial Administration, it was reported that in 2006 there were 347,913 people who registered a marriage certificate and 91,155 people who registered a divorce certificate, and in 2010 there were 285,944 marriage certificate registering people and 108,482 for registering divorce certificate (National Information Center, Department Of Provincial Administration 2555). It showed that the rate of divorce is increasing. Because a society has changed following globalization and the rise of more competitions. Family members must struggle, making money for their lives. Parents must work harder for their children's outgoings. Communication in family also decreased. Even though they can talk on the phone, it is not enough because better things are face to face communication, love, concerned, understanding each other, encouraging, listening to any problems and solving the problems together.

The work-family balance according to Marks and MacDermind's concept (1996) was said that the capability of balancing family and work properly consists of 3 elements; 1) Time balance, giving precedence to amount of time equally between family and work 2) Involvement balance, giving precedence to involvement in many activities equally between family and work and 3) Satisfaction balance, giving precedence to satisfaction equally between family and work.

Thus, a balancing of work and family is important. In fact, family is a factor of success in work. It can be impulsion leading to success in occupation, support to fight any obstacles when facing problems, provide love and care, and be a background of success. On the other hand, if we do not keep balancing between work and family, the family may hold back the success in occupation. The success in occupation with troubles in family never brings happiness perfectly.

Allocating time equally between family and work does not mean that we must give time to only family and work as much as spending time with family but allocate time effectively, creatively, and flexibly. The success in occupation is not always caused by devotion with no break, yet it depends on balancing work and family divisibly in order that family does not hold back but push forward us to achieve our goal in occupation as our intention.

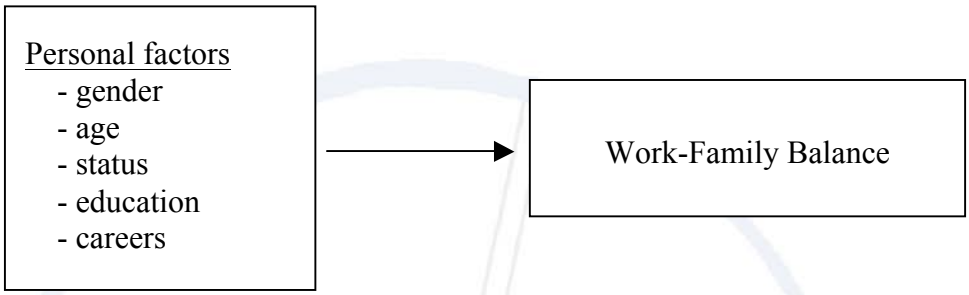
Working adults in each occupation are different; nevertheless, the occupations that have the problem in allocating time and cannot balancing work and family divisibly are mainly found in shift works. The word "shift work" means working at any time except the regular morning. Any time can be called "shift". Checking this definition, we can divide shift work into 3 parts. First are those who work in the afternoon shift; they might work from 4-5 p.m. to midnight. The second are those who work in the night shift and finish at 8.00 a.m. The third are rotating shift workers. The shift working can be found in many occupations like whether industrial sector, service sector, medical profession, nurse or police. Most of them are shift working. As a result of these kinds of work, it affects time allocation of work and family. Lehmkuhl (1999) said that working long hours will effect on workers' health. The problems from weather fatigue or stress or depression will decrease the capability of working. Moreover, the problem of the conflict between family and work causes workers do not have enough time to take care of their family, so they will be absent from work more. From the results of the study in US showed that the workers who have a conflict trouble between work and family cause high absenteeism and resignation.

Hereinabove, the researcher would like to study the working adults about the work-family balance according to the concept idea of Mark and MacDermind (1996) in order to be basic information for orientation and advising those who confront the conflict problem between work and family in advance.

Objectives of the study

This study based on a survey research. It has the following objectives :
1. To study the work-family balance of the working adults in Chachoengsao.
2. To study the correlation between personal factors and the work-family balance among the working adults in Chachoengsao.
3. To predict the work-family balance of working adults in Chachoengsao.

Conceptual Framework



Importance of the study

1. Indicating the level of the work-family balance of the working adults in Chachoengsao.
2. The information from this study can be used to improving personnel in order to manage work and family to be happy and effective in advance.

Hypothesis

1. The personal factors: gender; age; status; education and careers are all affected the work-family balance of the working adults in Chachoengsao.
2. The personal factors effect to predict the work-family balance of the working adults in Chachoengsao.

Scope of the Study

1. The populations of this study were working adults who work as public health personnel in the private companies in Chachoengsao.
2. The sample of the representative includes 200 working adults who are employed as health personnel in public and private companies in Chachoengsao. They were divided in two groups, 100 public health personnel and 100 people from private companies.
3. Variables for the study
    3.1 Criterion variables are 3 elements of the work-family balance: time balance, involvement balance and satisfaction balance.
    3.2 Predictor variables are gender, age, status, education, and careers.

Literature review

Work-family balance concept idea of Marks and MacDermind (1996)
The meaning of work-family balance was that individuals can manage their roles and duties in their life between work and family equally as conditions require. This consists of three elements.
1. Time balance, giving precedence to the amount of time spent, equally between family and work.
2. Involvement balance, giving precedence of being involved the activities with family and at work.
3. Satisfaction balance, giving precedence to satisfaction equally between family and work.

Instruments

Work-family balance questionnaire developed by the author according to the concept idea of Marks and MacDermind (1996) was used for this study. The questionnaire consisting of 3 elements; 1)Time balance 2)Involvement balance and 3)Satisfaction balance. It was the 5 level rating scale questionnaire with 36 items with Cronbach's alpha coefficient at equal to 0.78

Methodology

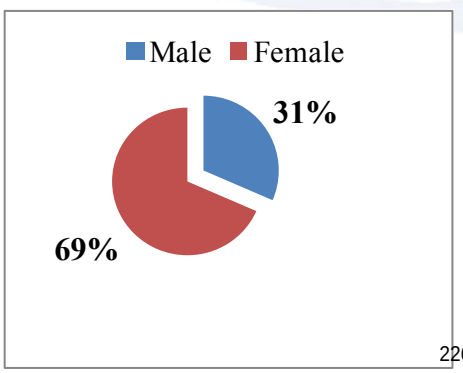
1. This study based on Qualitative research design.
2. The representative sample including 200 working adults who are employed as health personnel in public and private companies in Chachoengsao.
3. They were divided in two groups, 100 public health personnel and 100 people from private companies.

Data Analysis

Statistics for this study
1. Analyzing Descriptive statistics: frequency, percentage, mean, and general standard deviation of the representative samples.
2. Analyzing Pearson correlation co-efficiency between the personal factors and the work-family balance.
3. Analyzing regression coefficient in the personal factors affecting the work-family balance by multiple regression analysis.

Results.

The average of sample classified by gender, age, marital status and career were as follow:



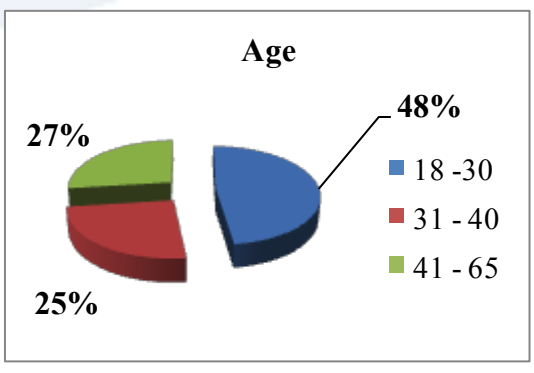


Figure 1: Genders

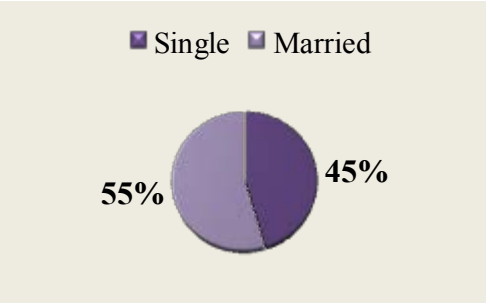


Figure 2: Range of Age

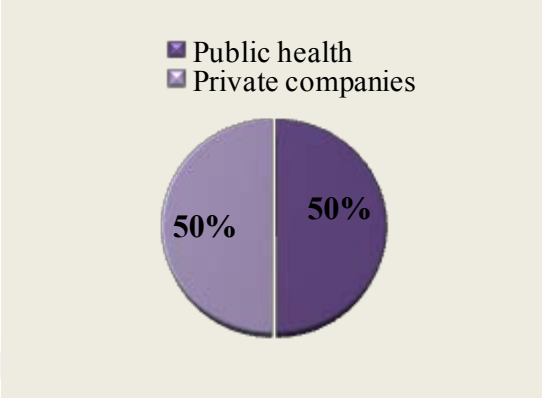


Figure 3 : Marital Status

Figure 4 : Careers

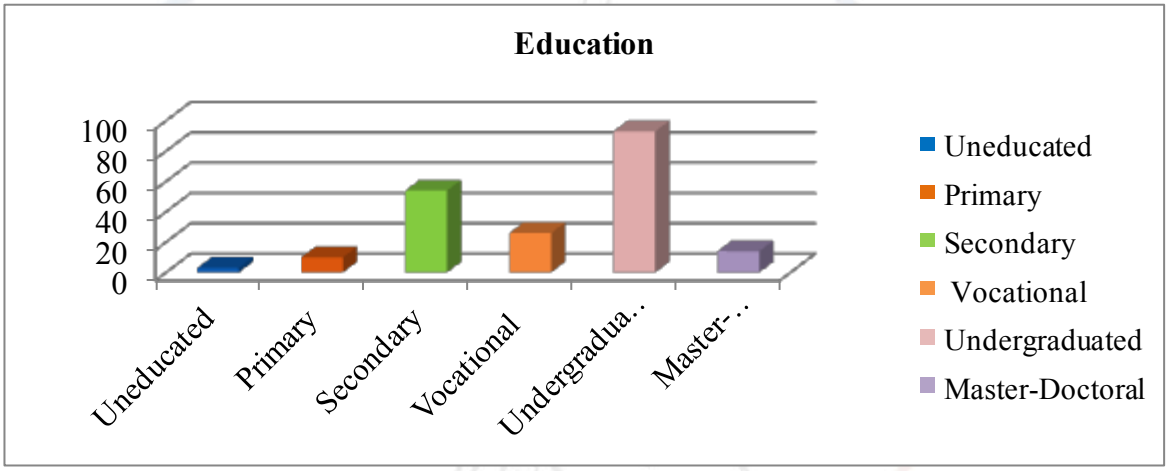


Figure 5 : Education

The result of analyzing discriminative aspects of the work-family balance

Table 1: Mean and Standard Deviation of the work-family balance of the working adults in Chachoengsao

Elements of the work-family balance	$\bar{X}$	*SD*	*Level*
Time balance	2.96	1.11	*Moderate*
Involvement balance	3.02	1.05	*Moderate*
Satisfaction balance	3.21	0.97	*Moderate*
Total	3.06	1.04	*Moderate*

This table shows that the work-family balance of working adults were moderate in all aspects.

Table 2 Multiple regressions Analysis of the factors affecting the work-family balance of the working adults in Chachoengsao by using Stepwise analysis

Sources of variance	df	SS	MS	F	Sig.
Regression	4	10664.40	2666.100	19.376*	.000
Residual	195	26831.12	137.595		
Total	199	37495.52			

*significant at the .001 level

The result of analysis in Table 2 shows that the work-family balance has linear correlation with the personal factors at significant at the .001 level and the forecasting model can be created.

Table 3 Correlation analysis of the personal factors affecting the work-family balance

Factors	b	SEb	β	R	R^2	F
X_{16}	-7.980	1.903	-.291	.446	.198	49.030
X_{16}, X_7	6.275	1.723	.229	.480	.230	8.051
X_{16}, X_7, X_{12}	-10.127	2.803	-.249	.511	.262	8.384
X_{16}, X_7, X_{12}, X_{11}	-5.127	2.054	-.166	.533	.284	6.235

a = 133.96, R = .533, R^2 = .284 SE_{est} = 11.73

The results in Table 3 shows that 4 personal factors including occupations of workers in companies and factories, marital status with children, vocational degree, and high school degree are influence to the work-family balance of the working adults in Chachoengsao at significant at the .05 level

The coefficient of the prediction can be written as Regression equation of the work-family balance of the working adults in Chachoengsao as follows:

Regression equation of work-family balance of working adults in Chachoengsao by using raw scores as follows:

$$\hat{y} = 133.96 - 7.980X_{16} + 6.275X_7 - 10.127X_{12} - 5.127X_{11}$$

Regression equation of the work-family balance of the working adults in Chachoengsao by using standard scores as follows: $Z = -.291X_{16} + .299X_7 - .249X_{12} - .166X_{11}$

Z work-family balance = -.291*workers in companies and factories +.299*Z married people with children -.249*Z vocational graduates - .166*Z high school graduates

Discussion

The occupational factor can makes the work-family balance different according to concepts of Miner (1992). Poor work-family balance there caused of more often conflict. It agreement with the research of Greenhaus & Beutell (1985) who mentioned that unbalance between work and family is the cause of stress in both

males and females. According to Frone, Russell & Barnes (1996), it was indicated that many studies found that the conflict between work and family was related to high stress, low satisfaction in life and frequent physical sickness.

Suggestions

General suggestion

With this result, the factors affecting work-family balance are occupation, status, and education, so the researcher would like to suggest the result from this study in order to be a way to fulfill work-family balance, support youths to choose the jobs they wish to be happy in work, indoctrinate the youths to manage time effectively in order that when they grow up and get a job. They will be able to balance their life, and support the aspect of education or training both work and mind management in their organizations inasmuch as these factors cause the work-family balance level to increase.

Suggestion for Further Study

1. Study the work-family balance in other occupations in order to be a way to develop a balance of working adults in different jobs.
2. Study other factors affecting the work-family balance beside the variables of this study

to cover the dimension of spiritual, social, and behavior in order to increase efficiency in forecasting models.

3. Research for developing psychological programs in order to be a way to support the

work-family balance, and to train for increasing potential of the work-family balance of the working adults.

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The Study of Social Intelligence in Adolescent in Roi-Et Province

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Abstract

This study aimed to 1) to study social intelligence levels in adolescents 2) to study correlation between the individual factors and social intelligence 3) to investigate the effect of individual factors for enhancing the social intelligence. The study was multi-stage and stratified random sampling; samples were randomized from adolescents who were studying in secondary school and vocational school totaling 913 people. Instrument used in this study consisted of questionnaires in the social intelligence developed by the researcher.

The results were summarized as follows:
1)The social intelligence as a whole were high. When the different elements were compared it was found that the social intelligence score for Authenticity had the highest mean followed by the Empathy, Presence, Charity and Situation awareness.
2)The individual factors such as Gender, Age, Field and GPA effected to social intelligence in adolescent with statistically significant at the .05 level.
3)In the range from 16 – 18 years of age and the high GPA that there were a positive correlation with social intelligence with a statistically significant at the .05 level. There were four factors; the range of age were 12 to 15 , 19 to 25 years, low - moderate GPA that were negative correlation with social intelligence with a statistically significant at the .05 level.
4)Four individual factors: the high and low GPA, the age range from 11 – 15 years and enrollment in secondary school effected to the social intelligence score with statistically significant at the .05 level.

Introduction

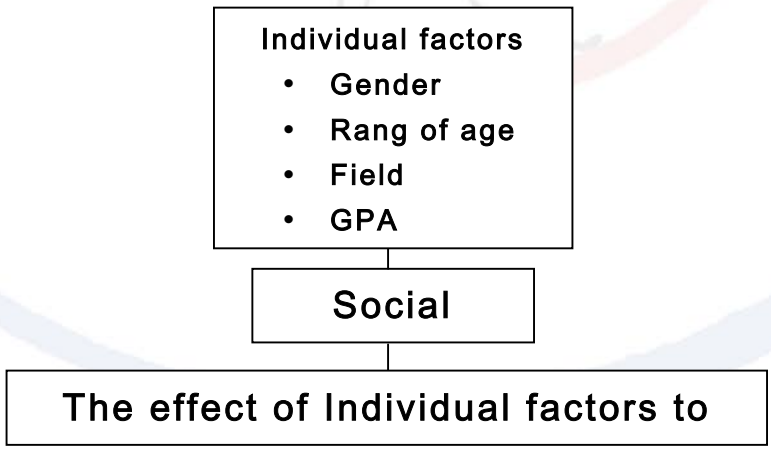
Over the decade Thailand facing a major political that changes faster and more complex. It is bring to both a benefits and risks (Economic Development Board, 2555). For a benefits we have realized situation but for a risk an independent ideas have been increasing that can lead to disunity. Social is an important part of developing the identity of adolescents (Erikson, 1959 cited in Nida Limsuwan, 2555). It can lead to get many opportunities such as improve social skills, and improve self of characteristics nevertheless it causes crisis such as crime problems, drug abuse. It is particularly essential to build immunity in adolescent to the social problem. According to the long-term vision of the country's National Economic and Social Development Plan No. 11 (BE 2555 - 2559) Adhering to the principles of good governance ,the government attempts their population to support and care each other.

Base on such problems and National Economic and Social Development Plan No. 11 (BE 2555 - 2559), the researcher are interested to study of social intelligence in adolescent in Roi-Et province and study of the Individual factors effect to social intelligence in order to plan the development of Counseling Psychology Programs for expansion Social intelligence in adolescents who will be the future of the nation to prevent and solve the problem to reduce the impact of family and social problems.

Objectives of Study

1. To study social intelligence levels in adolescent.
2. To study correlation between the individual factors and Social Intelligence.
3. To investigate the effect of program for enhancing the Social Intelligence.

Conceptual Frame Work



Methodology

Population and Sample

The population and sample that used to study of social intelligence levels. The sample consisted of adolescent who were studying in secondary school and vocational school in Roi-Et province which obtained by Multistage sampling. The researcher used random sampling area (Cluster Area Sampling) in 20 districts and divided then into 2 groups and then each of group of 10 districts were randomly combine into single group. Next both of these group were divided in two group base on enrollment the adolescents were in and vocational school. Both of the groups of secondary students were divided in tree groups base on school size: large, medium, small. Finally both vocational groups were divided into groups depend on whether there school were a private and government school. The examiner define the sample size according to G-power .05 one-tail statistical significant, Power of test was .80, Effect size was 0.2 The data were collected to 1% of students total have 913 people.

Instrument and Data Collection

In the social intelligence questionnaire. The researcher developed a questionnaire of Intelligence of the Social consists of five following components; the situation awareness, the presence, the authenticity, the clearity and the empathy. It was five-level rating scale base on the concept type of Likert (Likert Scale), determine the reliability of the test with co-efficiency alpha of Cronbach (Alpha co-efficient) and found alpha co-efficients all equal to 0.86.

Data Analysis

Information from the questionnaire was analyzed by using descriptive statistics which were the frequency, percentage, mean, and standard deviation of leadership of social intelligence score and Multiple Regression Analysis to predict the effect of individual factors to Social Intelligence.

Result

1. The study to Social Intelligence of adolescent in Rot-Et province, Thailand

Table 1: Shows mean and standard deviation of social intelligence in adolescent in aspects and for all elements.

List (n=913)	$\bar{X}$	***SD***	***Level***
Authenticity	3.68	0.48	High
Empathy	3.49	1.42	High
Presence	3.48	0.43	High
Clarity	3.43	0.50	High
Situation Awareness	3.25	0.49	High
Mean of Social Intelligence	**3.47**	**0.66**	**High**

Table 1: shows the social intelligence as a whole were high. The mean score was 3.47and the standard deviation was 0.66. when the different elements were compared it was found that the social intelligence score for Authenticity had the highest mean followed by the Empathy, Presence, Charity and Situation awareness.

Table 2: Shows Pearson coefficient correlation between individual factors and Social Intelligence.

Variable	SI	Male X_1	Female X_2	2° school X_3	Vocational X_4	Age 12-15 yrs X_5	Age 16-18 yrs X_6	Age 19-20 yrs X_7	GPA low X_8	GPA med X_9	GPA high X_{10}
SI	1.00	-.033	.033	.048	-.048	-.080*	.083*	-.007*	-.106**	-.131**	.161**

Table 2: The individual factors such as Gender, Age, Field and GPA effected to social intelligence in adolescent in Roi-Et province with statistically significant at the .05 level.In the range from 16 – 18 years of age and the high GPA that there were a positive correlation with social intelligence with a statistically significant at the .05 level.

Table 3: show Multiple Regression Analysis of individual factors the predict social intelligence. Independent variable was collected by stepwise method.

Model	Df	SS	MS	F	Sig.
Regression	4	8437.37	2109.343	10.879**	.000
Residual	908	176046.30	193.884		
Total	912	184483.67			

Level ** significant at the .001 level.

Table 3: show that the social intelligence has a linear correlation with the 10 individual factors, these individual factors are statistically significant at the .001 level that mean to the data is a good representation of the population.

Table 4: show the power of individual factor to predict social intelligence.

Factor	b	SEb	β	R	R^2	F
X_{10}	4.307	.995	.148	.161	.026	24.36*
X_{10}, X_5,	-3.736	.987	-.130	.191	.036	9.76*
X_{10}, X_5, X_8	-7.221	1.047	-.074	.204	.041	4.84*
X_{10}, X_5, X_8, X_3	2.388	1.187	.074	.214	.046	4.05*

a = 135.78, R = .214, R^2 = .046, SE_{est} = 13.924

Table 4 show that four individual factors: the high and low GPA, the age range from 11 – 15 years and enrollment in secondary school effected to the social intelligence score with statistically significant at the .05 level.

Social intelligence scores in adolescents were predicting at 4.6 percent coefficient of a regression equation. Skip below.

Predict social intelligence in adolescents. Roi Et. Raw scores were used.
$\hat{y}$ = 135.75 + 4.307X10 - 3.736X5 -7.221 X8 + 2.388X3.

Predict social intelligence in adolescents. Roi Et. Include using standard score.

Z = .148 X10 - .130 X5 - .074 X8 + .074 X3.
Z = .148 * Z ingenuity social studies class - .130 * Z Age between 10 -15 years
- .074 * Z low grades + .074 * Z Teacher Education.

Suggestions:

Application

-Various organizations that involved with the development of Social Intelligence or agencies that interested in result for enhancing the social intelligence as five aspects include the Situation Awareness, the Presence, the Authenticity, the Clarity and the Empathy of adolescent.
-Communities can used as a framework to develop a strong sense of adolescent effectively possible.
-Researcher who are interested in this social intelligence questionnaire can applied it to assess social intelligence in adolescent.

Research

-Next research should apply mixed research design (Qualitative and Quantitative design) to study deeply on social intelligence in Thailand
-To develop the effectiveness counseling program in order to enhance social intelligence in Thailand.

Acknowledgement

The author would like to extend special thanks to Dr. Pennapa Kulnapadol and Dr.Pracha Inang; wonderful Adviser, Faculty of Education, Burapha University for many valuable suggestions for this research.

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A Study on Reasons for Living of Inmates in Chonburi Women's Penitentiary Center

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Abstract

The purpose of this study was to survey the female inmates' reasons for living. The samples included 99 inmates who were convicted and sentenced to more than ten years. The survey instrument was " The Reason for Living Scale " translated from Linehan et al., in 1983. There were 72 questions which use a 6 point scales rating from 1 = Not At All Important to 6 = Extremely Important. The data was analyzed by frequency, percent, mean, and standard deviation.

Results of the survey indicated the youngest inmate in the sample of 99 inmates was 20 years old, and the oldest was 63 years old. The average age was 38 years (S.D. = 10.42). The shortest periods of time for the inmates who were convicted and sentenced was 10 years and the longest was 29 years. The average length of their sentence was 16.5 years (S.D. = 57.54). The shortest period of time served was 1.6 years and the longest period of time served was 19 years. The average period of time served was 8.9 years (S.D. = 53.32).

Ninety five of the female inmates (96%) indicated that family is the main factor for them to stay alive.

The total average of " reason for living " of inmates was 4.38 (S.D. = .62). The inmates gave precedence to child-related concerns, responsibility to family, survival and coping beliefs at a high level (Mean = 5.21 , 5.14 , 4.92) respectively.

At the .05 level of statistical significance, it resulted that Age there was a negative correlation of reasons for living which is the older inmates tended to have less reasons for living. Consider the six sides of Reasons for Living, it found that four sides of Reasons for Living which were Survival and Coping Beliefs, Responsibility to Family, Fear of Suicide and Fear of Social Disapproval were at the .05 level of statistically significant difference.

Keywords : Reasons for Living , Female Inmates

Introduction

Overview

Prisons are the particular society institutions. Prisoners must stay in the prisons by law. They do not have any chances to select when or what time they will leave. They must follow the new life style that is very different from the outside society such as their livings, rules, and cultures. All of these factors create depressions to the prisoners. A study of inmates' opinions showed that the beginning of their lives in prisons was scary, depressed, sad, stressed, and hopeless (Napapawn Hawanon et al., 2012).

No matter how short or long time for living in the prisons, the inmates extremely felt punished and blamed themselves. Some inmates lost their good emotions for themselves. Some felt like murdering themselves. For the ones who had lived in the prisons for a long period of time, they felt depressed and hopeless. After spending their penalty time, it was not easy for them to live their lives in the real society. They had problems such as keeping jobs, living lives, and being blamed as a prisoner. It is really important to support those former inmates to be strong and be able to move on to their lives.

These are not only the problems in Thailand, but also do happen around the world. The results of International Center for Prison Studiesby King's College in 2006 revealed that the most inmates were in the United States of America (183,000 inmates), China (71,280), Russia (55,400), and Thailand (28,450) respectively. The statistics revealed the increase of inmates and also did male prisoners. The important problem was that the prisons were not built to serve the female prisoners. The health welfare was not appropriate for them. Also, there were the shortages of several services such as education, vocation training, and reviving program.

When women are sent to prison. They can feel isolated, distressed and extremely anxious about what is going to happen when they are in the prison. Their loss of freedom, loss of family and social support, fear of the unknown, fear of physical or sexual violence, uncertainty and fear about the future, embarrassment and guilt over the offence, and fear or stress related to poor environmental conditions. (WHO,2007). Inmates have a range of psychological problems. They may be suffering distress, frustration and confusion following imprisonment and will need a good deal of reassurance and support. (Mainstreaming Gender and Women's Mental Health DOH Sept 2003).Many women prisoners enter custody already struggling to cope with a wide range of difficult issues including drug misuse, a history of abuse, mental health problems and family background problems. These have all been identified as significant risk factors for suicide and self-harm. (PSO 2700 contains specific guidance about supporting women prisoners).

According to those problems, Princess Bajrakitiyabha invented a supporting project to help people who needed a second chance in Thai society. The project was called " The Enhancing Lives of Female Inmates Project " or ELFI between July 2009.

December 2010 the 65th United Nations General Assembly (UNGA) signed an agreement establishing United Nations Rules for the Treatment of Women Prisoners and Non-Custodial Measures of Women Offenders (The Bangkok Rules).

The researcher participated in the project according to The Bangkok Charter on the occasion of 7th anniversary Office of the Affairs Under the Royal Initiatives of HRH Princess Bajrakitiyabha on October 31,2013 at Miracle Hotel , Bangkok. This motivated the researcher to aware of the many problems of inmates. The researcher would like to join the program of helping this group.

According to the mentioned problems, the researcher agreed that the prisoners mentally and physically suffered. They were depressed and sad. They blamed themselves and felt hopeless. Some prisoners committed suicide because they felt unacceptable from the society and they did not live in the real society. The researcher would like to deal with the problems and help these prisonerssurvive and live their lives in the real world via Reasons for Living.

The study of reasons for living was a study to discover factors and reasons of inmates' living. The results of the study would lead to the improvement of the reasons for living.

Research Objective

To study the inmates' reasons for living.

Methodology

1. Selection of subjects

Populations :

The population in Chonburi Women's Penitentiary Center is 1,266 inmates.

Samples :

The sample chose 99 inmates who were convicted and sentenced to over 10 years. Based on Taro Yamane's formula, a sample size of 80 inmates was needed (Reliability = 95%).

2. Variables

Independent variables :

Age
Years (Sentenced)
Time (Jail time left)
Who are you living for.

Dependent variable :

Reasons for Living.

3. Instrument

The survey instrument was " The Reasons for Living Scale " translated from Linehan et. al., in 1983. There are 72 questions which use a 6 point scale : 1 = Not At All

Important / 6 = Extremely Important. The researcher requested 3 experts to check content validity. The questionnaire was tried out with 41 inmates who were not the sample. The reliability of the instrument was .96

4. Collection of Data

The researcher asked for the cooperation from the Director of the Chonburi Women's Penitentiary Center. The questionnaires were given to the director and the official workers to pass them to the inmates. The number of the respondents was 99 persons (100%).

5. Analysis of Data

The researcher used the Statistical Package for the Social Sciences (SPSS) to analyze the data as follows:

1. Demographic characteristics consisted of age , years (sentenced) , time (jail time left) , who are you living for. Frequency, percentage, mean, and standard deviation were analyze from the data.
2. The Reasons for Living were analyzed to find mean, standard deviation, and average.

Results

Table 1 : General information of Female Inmates.

	Minimum (years)	**Maximum** (years)	**Mean** (years)	**SD**
Age	20	63	38.02	10.42
Years (sentenced)	10	29	16.5	57.54
Time (jail time left)	1.6	19	8.9	53.32

From table 1 found that :

- Results of the survey indicated the youngest inmate in the sample of 99 inmates was 20 years old, and the oldest was 63 years old. The average age was 38 years (S.D. = 10.42).
- The shortest periods of time for the inmates who were convicted and sentenced was 10 years and the longest was 29 years. The average length of conviction and sentence was 16.5 years (S.D. = 57.54).
- The shortest period of time served was 1.6 years and the longest period of time served was 19 years. The average period of time served was 8.9 years (S.D. = 53.32).

Table 2 : Frequency and Percent of " Who are you living for "

Who are you living for	**Frequency**	**Percent**
1. Oneself	-	-
2. Family	95	96.0
3. Friend	-	-
4. Oneself , Family and Friend	-	-
5. Oneself and Family	1	1.0
6. Family and Friend	1	1.0
(No Answer)	2	2.0
Total	**99**	**100.0**

From table 2 found that : Ninety five of the female inmates (96%) indicated that family is the main factor for them to stay alive.

Table 3 : Meaning of " Reasons for Living "

Related Element	**Mean**	**SD**	**Rank**	**Level**	**Meaning**
1. Survival and Coping Beliefs	4.92	.56	3	5	Quite Important
2. Responsibility to Family	5.14	.78	2	5	Quite Important
3. Child-Related Concerns	5.21	.77	1	5	Quite Important
4. Fear of Suicide	3.24	.81	6	3	Somewhat Unimportant
5. Fear of Social Disapproval	4.03	.83	4	4	Somewhat Important
6. Moral Objections	3.72	1.14	5	4	Somewhat Important
Total	**4.38**	**.62**		**4**	**Somewhat Important**

From table 3 found that : The total average of " reasons for living " of inmates was 4.38 (S.D. = .62). The inmates gave precedence to child-related concerns ,

responsibility to family , survival and coping beliefs at a high level (Mean = 5.21 , 5.14 , 4.92) respectively.

Meaning of the scores.

- 5.51 - 6.00 = reasons for living are Extremely Important
- 4.51 - 5.50 = reasons for living are Quite Important
- 3.51 - 4.50 = reasons for living are Somewhat Important
- 2.51 - 3.50 = reasons for living are Somewhat Unimportant
- 1.51 - 2.50 = reasons for living are Quite Unimportant
- 1.00 - 1.50 = reasons for living are Not At All Important

Table 4 : An Analysis of relation of Age, Years (sentenced) and Time (jail time left) with reasons for living of inmates.

		Survival and Coping Beliefs	Responsibility to Family	Child - Related Concerns	Fear of Suicide	Fear of Social Disapproval	Moral Objections	re fo li (
Age	Pearson Correlation	**-.232***	**-.198***	-.128	**-.254***	**-.223***	-.056	**-.**
	Sig. (2-tailed)	.021	.050	.207	.011	.027	.579	.0
	N	99	99	99	99	99	99	9
Years (sentenced)	Pearson Correlation	-.073	-.085	.002	.012	.007	.029	-.
	Sig. (2-tailed)	.473	.405	.985	.903	.945	.775	.8
	N	99	99	99	99	99	99	9
Time (jail time left)	Pearson Correlation	-.013	.041	.121	.115	.088	-.134	.0
	Sig. (2-tailed)	.895	.686	.235	.257	.388	.186	.7
	N	99	99	99	99	99	99	9

* *p<.05*

From table 4 found that : At the .05 level of statistically significant difference, it resulted that Age there was a negative correlation of reasons for living which is the older inmates tended to have less reasons for living in overall and the four sides which were Survival and Coping Beliefs, Responsibility to Family, Fear of Suicide and Fear of Social Disapproval.

Discussion

Results of the survey indicated that the youngest inmate in the sample of 99 inmates was 20 years old, and the oldest was 63 years old. The average age was 38 years (S.D. = 10.42). The shortest periods of time for the inmates who were convicted and sentenced was 10 years and the longest was 29 years. The average length of their sentence was 16.5 years (S.D. = 57.54). The shortest period of time served was 1.6 years and the longest period of time served was 19 years. The average period of time served was 8.9 years (S.D. = 53.32).

Ninety five of the female inmates (96%) indicated that family is the main factor for them to stay alive.

The total average of " reason for living " of inmates was 4.38 (S.D. = .62). The inmates gave precedence to child-related concerns , responsibility to family , survival and coping beliefs at a high level (Mean = 5.21 , 5.14 , 4.92) respectively.

At the .05 level of statistical significance, it resulted that Age there was a negative correlation of reasons for living which is the older inmates tended to have less reasons for living. Consider the six sides of Reasons for Living , it found that four sides of Reasons for Living which were Survival and Coping Beliefs, Responsibility to Family, Fear of Suicide and Fear of Social Disapproval were at the .05 level of statistically significant difference.

Suggestion for research

1. For application :
Enhancing program on Reasons for Living should focus for the aging prisoners.
2. For research :
Counseling program should be developed to train workers who work in Penitentiary Center in order that they can be counselors.

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A Study of Sexual Value of Students at Rajamangala University of Technology Tawan-Ok Chanthaburi Campus

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Abstract

This research has two main objectives: 1) to determine the sexual value of students in Rajamangala University of Technology Tawan-Ok Chanthaburi Campus: 2) to compare the sexual value of students in Rajamangala University of Technology Tawan-Ok Chanthaburi Campus, classified by gender, residence, family status, and living members. The samples are selected randomly from 178 students. A tool used for collecting the data is a questionnaire that is developed from the sexual value's questionnaire idea proposed by Porntipa Kraitap in 2008. The reliability of the questionnaire for sexual values internal consistency Alpha (Cronbach) is 0.85. The statistics used in analysis are the data percentage, mean, the standard deviation, Hypothesis testing (t-test) and one-way analysis of variance.

The results
1).The students of Rajamangala University of Technology Tawan-Ok Chanthaburi Campus have moderate scores on sexual values. The factor analysis has the highest average for the premarital sex, relationships with the opposite gender and sexual communication, respectively.
2).Male and female students of Rajamangala University of Technology Tawan-Ok Chanthaburi Campus have difference in sexual values relationships with the opposite gender and premarital sex with statistically significant at the level of 0. 05. Students who live in different residential also have the different sexual values with statistically significant at the level of 0. 05.

Keywords: Sexual values, relationships with the opposite gender, Premarital sex, sexual communication

Introduction

With the intensive development of the country from a rural to urban society, people are increasingly relying on technology. The economics, social, politic, and culture have an impact on Thai people beliefs and social values. Regarding with such changing, teenagers learn about sexuality and have much early sexual relations. Thai teenagers have their first sexual relations about the age of 15 to 16 years old according to the Beda Epidemiology Office. The Ministry of public health reveals that the student from high school of grade 8 to grade 11 and the second year of diploma students gain more sexual experiences.(Department of the bead Epidemiology, 2011). In addition, in 2008 Orathai Ketkhao reported that the teenagers living in Sukhothai who study in private school have more sexual relations than the public school.

A study of the opinions and risk behaviors of adolescents in Chanthaburi found that the females have the first sexual relation when they are about 9 years old and males as 12 years old and the average of number of people they have sexual relation with is three (Somjit Yachai, 2012). The survey of the current civil situation shows that the rate of unwanted pregnancy and sexual diseases transmission increases. Bureau of registration office, the ministry of the interior found that the percentage of pregnant teenagers who are about 10 – 19 years old increases from 55.0 percent in the year 2005 to percent of 56.1 in 2010 (Bureau of Reproductive Health, 2011). According to the standard criteria of the World Health Organization (WHO), the criteria of pregnancy must not exceed than 10 percent. However, in 2009 Thailand is the second in the world that has highest percent of teenage pregnancy and the highest in Asia. In Chanthaburi, there is very high pregnancy statistics which is consistent with data from Somchit Yachai in 2011. From 1000 teenagers, it is 19 percent of teenagers, age under 20, who deliver their baby and 71.4 percent of pregnant teenagers who are 15-19 years old.

The teenagers change their social values from the past that they should not have sex before an appropriate time. They should have the appropriately values for their healthcare, happiness and health opportunities in life. To prevent from having sex before aged, men and women need to learn the value of love and to avoid public talking about sex and to avoid having sex before marriage because it will be ashamed of the family reputation and society. Some teenagers accept that having sex is the reason of love and expect to get married in the future. Living together before marriage is a way of life in the new version and they are not ashamed because they believe that it is not wrong. A sexual study value of teen girls in Eastern Thailand found that having sex with their boyfriend is very common, and this is an accepted value of youth according to Wandee Chansiri (in 2013). The relationships between the opposite gender as a couple or lover are to learn the values of love, understanding, warmth and affection and caring for each other. Finally, the teenagers provide the closeness relationship to their partners which is developed into sexual relations

The social sexual value of the communication from the past until present does not encourage talking in public. It is believed that sex is dirty. For someone who is not getting married or who are studying in school or university should not have sexual relations. The study found that teens learn about sex from the media such as television, the internet, and cell phones at school. Most of them choose to communicate with their friends. The improper sexual values lead to sexual risk.

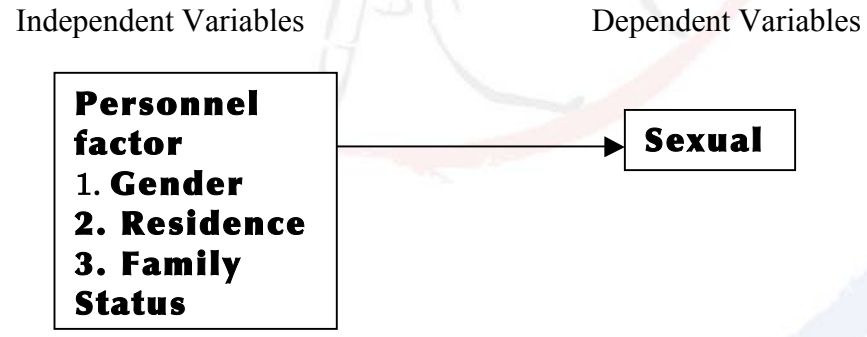
Regarding with the strategic policy of health for helping young people at the age of 15-19 in 2013-2017, the cooperation from all agencies to solve the problems is needed. The creation of right sexual values is an interesting topic in the strategic plan. Teenagers should focus on the value of sex that is the way to enhance the safe and proper sex and should have sexual education. The author found that the sexual values of young people are related to the three topics that are premarital sex, relationships with the opposite gender and sexual communication information. This information is useful to solve the pregnant teenager problem.

In this research, we study the sexual value of teenagers in the East of Thailand. Especially in Chanthaburi, we found that there are the high sexual risk behaviors. Recently, there have not any information confirming whether the sexual value of youth is deviated from the past or not and what the causes of the problem sexual behavior are. From the teaching experience and advising duties to the students continuously, the author found that students who came to ask for suggestion about sexual problems mostly are in the age range 18 to 20 years. Therefore, the author realizes the importance of studying the sexual experience. In particular, the sexual value of the second year students at the Rajamagala University of Technology Tawan-Ok Chanthaburi Campus is studied. The results will be further used as the data for the development of adolescent sexual values.

Research Objective

1).To determines the sexual values of the students in Rajamangala University of Technology Tawan-Ok Chanthaburi Campus.
2).To compare the sexual values of the students in Rajamangala University of Technology Tawan-Ok Chanthaburi Campus, classified by gender, residential, family status, and living members.

Conceptual Framework



Theoretical Background

The Ideas are based on the sexual concept of Rokeach (in 1973).

Sexual value is one faith which believes that a certain practice or way of life is the goal of some of the individual in society and that is people should be seen as good practices over the life of others.

The meaning of the values demonstrated the complexity of behavior patterns. Sometimes the values are expressed through their attitude values. Typically, values are the following three features.

1). Values are cognitive. People should have good knowledge to correct their behavior or learn how to continue their life.

2). Values are affective. It is about feeling like or unlike, agree or disagree, and feeling good or bad.

3). Values are behavioral. The complication of values may determine the behavior of people. When person is motivated by some stimuli, they will behave as their own values.

The idea of sexual values proposed by Porntipa Kraitep (in 2008).

She believes that an opinion about sex occurs within the mind of the students. It is about feeling with the opposite gender friend, and about agree/disagree or like/unlike with having premarital sex. The opinions are divided into two components as follows.

1).The relationships with the opposite gender mean the ways that students behave to their lover for various situations.

2).Premarital sex means person who having sex without a conventional wedding or marriage to be followed by law.

By including the above two concepts of values and opinions about sexuality, the author will develop the sexual values research based on three factors as having relationships with the opposite gender, premarital sex, and sexual communication.

The Sexual System Theory

Abramson, in 1983, (cited by Siriwan Thanyaphol in 2005) proposed the hypothesis that the expression of sexual (Sexual Expression) is controlled by the structure of intellect namely cognitive system. The cognitive system is a source of collection, emotions and experiences of individuals who have been taken from different sources, such as family, their experience etc. This makes them learn about gender roles and how to control their sexual behavior. Currently, theory suggests that the intellectual structure determines people's behavior and control of sexual behavior. In addition, cognitive system has been developed from four factors as follows.

1). Maturity is a growing of body, intelligence, personality emotion developed from a child to an adult where the results are quite clear when children grew into teenagers.

2). Norms of society is the reason that children may not only learn only from their parents but also from social groups such as their friends. Beside, children may learn from the social media such as movies, books, internet, etc., including the religious and culture of community organizations.

3).The standard of parents may affect the values about sex of their children.

4). Previous sexual experience may determine whether to recognize and remember the key to perform sexually (Code of Conduct). For example, the girls will learn that they will be punished if they violate the rules to have sex.

Children who get knowledge and correct attitudes about sexuality at the appropriate age level may be the cause of good perceived system.

Methodology

A: Population and Samples

1). The populations in this research were 321 second year students, currently studying in the academic year 2013, from Rajamangala University of Technology Tawan-ok Chanthaburi Campus.
2). The sample using the table sample size of Yamane (in 1967) for 178 students was selected by proportional stratified random by department and the number of the students.

B: Tools and data correction.

Questionnaire about sexual values

The material used in this study was developed based upon the work of Prontipa Kraitep (2008) that consists of three components such as relationships with the opposite gender, premarital sex and sexual communication. Given form was scaled by fourth levels and consists of 45 items. Analysis of reliability of the questionnaire is performed by determining coefficient alpha of Cronbach which was equal to 0.85. For examining the accuracy, we use the index of consistency between the questions and objectives (Item Objective Congruence Index: IOC) by the third person.

C: Methods of data collection.

The data were collected manually with a survey sample of 178 people with a complete set of 100 %.

D: Data analysis.

The statistics used in data analysis are percentage, means and standard deviation and hypothesis testing (t-test) and one-way analysis of variance.

Conclusions

General Information

Sample of students has general information as follows.

1). Students were 117 female (65.73 %) and 61 male (34.27%).

2). There were 84 students or 47.19 percent that stay in the apartment, 66 people or 37.08 percent stay in University dormitory, 26 people or 14.61 percent stay at home and residence and 1.12 percent stay at the houses of their relatives.

3). For most of students, 118 people as a percentage of 66.29 have their parents living together, There are 20.22 percent or 36 people that their parents divorced, 10.11 percent or 18 people that their father passed away, 0.25 percent or 4 people that their mother passed away and 1.12 percent or 2 people that their parents passed away.

4). There were 77 students or 43.26 percent living with their parents, 42 people or 23.60 percent living with their friends, 22 people or 12.36 percent living with their mother, 19 people or 10.67 percent living with their lover, 9 people or 5.06 percent living with their father, and 9 people or 5.06 percent living with their relatives.

Result

The sexual values of the second year students at Rajamangala University of technology Tawan-Ok Chanthaburi Campus are reported as follows.
The mean, the standard deviation, and the sexual values were shown in Table 1.

Table 1 Mean and standard deviation and sexual values.

Factors of Sexual	Mean	SD	Sexual Value Level
Relationships with the Opposite Gender	2.70	0.75	Moderate
Premarital Sex	2.81	0.86	Moderate
Sexual Communication	2.64	0.83	Moderate
Sexual Values	2.71	0.81	Moderate

From Table 1, sexual values related with the relationships with the opposite gender, premarital sex and sexual communication were all found at the moderate level.

Table 2 Mean, standard deviation, and sexual values classified by gender.

Gender	Mean	SD	Sexual Value Level
Male	2.72	0.78	Moderate
Female	2.76	0.82	Moderate

From table 2, the sexual values of male and female students were moderate.

Table 3 Mean, standard deviation and sexual values classified by residence.

Residence	Mean	SD	Sexual Value Level
University Dormitory	2.76	0.81	Moderate
Apartments	2.70	0.76	Moderate
Relatives' Home	2.69	1.02	Moderate
Parents' Home	2.64	0.79	Moderate

The sexual values of all students who live in the different residents were in moderate level.

Table 4 Mean, standard deviation, and sexual values classified by family status.

Family Status	Mean	SD	Sexual Value Level
Parents stay together	2.71	0.81	Moderate
Divorced	2.70	0.84	Moderate
Parents passed away	2.70	0.58	Moderate

Father passed away	2.81	0.78	Moderate
Mother passed away	2.93	0.70	Moderate

From Table 4, the sexual values of students who have the different family status were moderate.

Table 5 Mean, standard deviation and sexual values classified by living member.

Living Member	Mean	SD	Sexual Value Level
Parents	2.69	0.82	Moderate
Relative	2.65	0.91	Moderate
Lover	2.69	0.80	Moderate
Friend	2.74	0.78	Moderate
Father	2.72	0.84	Moderate
Mother	2.77	0.81	Moderate

Table 5 shows that the sexual values of students who together with living member were moderate**.**

Test results hypothesis.
The author tests the assumption by using tested (t-test) for the variables of gender while one-way analysis of variance for the variables of residential, family status and living members. If there were any differences, Scheffe's paired test (Scheffe ') is employed.

Table 6 The comparison of the sexual values classified by gender
.

Sexual Values	Male		Female		t
	$\overline{X}$	SD	$\overline{X}$	SD	
Relationships with the Opposite Gender	39.39	3.441	41.26	4.196	2.996*
Premarital Sex	40.18	4.657	43.27	6.137	3.451*
Sexual Communication	39.05	3.617	39.91	4.407	1.319
Sexual Values	118.62	9.358	124.45	12.335	3.236*

* $p < .05$.

Table 6 shows that two elements of sexual values both males and females were different, the opposite gender friend and premarital sex as a statistically significant at the .05 level while the sexually communication will affect the difference of sexual value as insignificant.

Table 7 The comparison of the sexual value of the second year students classified by place of residence.

Sexual Values	Score of Variance	*df*	SS	MS	F
Relationships with the Opposite Gender	Between Group	3	187.74	62.58	4.03*
	Within The Group	172	2665.29	15.49	
	Total	175	2853.03		
Premarital Sex	Between Group	3	57.82	19.27	0.56
	Within The Group	172	5900.90	34.30	
	Total	175	5958.72		
Sexual Communication	Between Group	3	51.49	17.16	0.98
	Within The Group	172	3004.66	17.46	
	Total	175	3056.15		

* p <.05.

Table 7 shows that students who live in the different residents have the different sexual values, the relationships with the opposite gender as a statistically significant at the .05 level while the premarital sex and the sexual communication as statistically insignificant.

Table 8 The difference of the average by Scheffe, sexual values to the relationship with the opposite gender classified by place of residence.

Dependent Variable		Mean	SD	Sig.
Parents home	University Dormitory	-3.036	.910	.001
	Apartments	-1.1742	.882	.050
	Relative Home	-5.385	2.885	.064

* p <.05.

Table 8 shows that sexual values of students who stay in the university dormitory and their parents home were different with statistically significant at the .05 level.

Discussion

1). The sexual value of the samples was in the moderate level. The highest average of the factors are the premarital sex, the relationships with the opposite gender, and sexual communication, respectively. From the sample, it was normal for teenagers to touch their lovers and kissing is acceptable. Moreover, many relationship and lovers at the same time are charming that is consistent with Prontipa Kraitep (in 2008) and Kritsana Rachu (in 2012). From the samples, they feel that having sex before marriage was acceptable. It was the way to relax sexual desire as consistent with the

research of Pawan Phuwacharunkun (in 2003) and Siriyupa Nansunanon (in 2006). Most of them agree that having sex before marriage may leads some social problems such as abortion or child abandonment.

The purity of the female before marriage was very important for some of the samples who follow the original culture. While, there were some students of the sample who have the opposite idea and have sexual risk behaviors. Lacking of knowledge about having sex before marriage, it has several problems such as sexually transmitted diseases, pregnancy and abortion. Such situations satisfy with the research of Deardroff et al. (in 2010).

The students will discuss about sexuality with their friends and lovers since they were closed and understand each other. Daring talking about sexuality may lead them to the sexual risk behavior.

2). The different gender of the sample results the different values of contacting gender and having sex before marriage that was satisfied with the research presented by Sirinut Sangiamsak (in 2005). The division of male and female may cause the gender roles. In the past, Thai people think that men have more capability than woman. Thus, men can have sex before marriage without any punishment. For sexual communication, the different genders do not affect the sexual values that are consistent with the research of Siriwan Thanyaphon (in 2005). There are more than 60% of the sample think that they should have a sexual communication freedom. The value of sexual communication is changed from the past because nowadays woman have an opportunity to educate as the men. They also have freedom to have their own way of living. However, Thai society is not encouraged to talk about sexual relation in public because it is an embarrassing to the female teenagers especially during study cite. Most of them believed that they are not willing to show up their concept or any ideas about sex which is affected to the different sexual communication between men and women.

3). The samples who live the different residence have the different values of having friend with the opposite gender significantly at the 0.05 level from the scheffe's method testing (table 8) found that a pair of students who stayed at University residence and stay at their home have the different values of opposite gender which consistent to the research of Pensi Pliankham (in 2001). Due to the different environment such as the residence of Rajamangala University of Technology Tawan – Ok Chanthaburi Campus. The teachers and general officers have to stay at the residence with the students and responsible for controlling and talking care of them as their parents or guardians. Furthermore, we also have the regulation for them. Therefore, everyone will be punished when they did something wrong. The university's residence also provides more knowledge, educator, and other activities. Therefore, the atmosphere should be very nice to stay. Especially, we have junior and senior generation in order to take care and give some good ideas or concept to each other. Even though they are well-educated from their family according to the social is changeable today, there are a gab and problems between member relationship and problems of travelling to the university which is the reason why the sexual values are different between students who stay at home and stay at university dormitory.

4). The samples who have the family status and someone who lives together have the same sexual values which consistent to the research of Chanya Kaeochaibun and Thitiya Kawila (in 2010). The study of the sexual values and the related factors of the teenagers' sexual values are not different and consistent to the concept of Abramson, in 1983 (cited by Siriwan Thanyaphol in 2005). States that the sexual expression (Sexual Expression) is controlled by the intellect (Cognitive System) in structure of the intelligence determines and controls the sexual behaviors from maturity, social norms of their parent's standard and the sexual experiences in the research sample. Despite of living together with people of different sexual values does not make the difference. Therefore, the Educational institutor and all the involvers are responsible for the development of the appropriate sexual values for their students to be succeeded.

Suggestion

A: General feedback.
The results of this study were shown that the sexual value of most students from Rajamangala University of technology Tawan-Ok Chanthaburi Campus generally agree with the negative values, such as " the kiss of couples who are not married is acceptable " because this what they need. And at least with such a positive message such as love clay reserves which is females charming of women never waned, so parents should supervise their children about the opposite gender closely and to discuss about the sexuality with their children to a sexual manner, and parents should learn sexual communication skills with their children. The educational institutions should strengthen the awareness, including the development of sexual values to students within the cultural framework of Thailand. Lecturer should encourage to the students with values framework of Thai culture in order to reduce sexual risk behaviors. For students who have sexual problems should consult with their parents or teachers about sex counseling.

B: Feedbacks for next time research.
1). To develop the effectiveness counseling programs in order to enhance desirable sexual values in Thailand.
2). To study sexual values by using mixed research design (Quantitative and Qualitative) in Thailand.

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The Study of Well-Being in Grade 12 Students

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Abstract

The purpose of this research was to examine the well-being of high school students and to determine comparability of well-being held by these students in regard to ;(1) gender ; (2) programs of study ;(3) academic achievement(GPA) ;(4) family status. The sample used in this study was 156 grade 12 students in the first semester year of 2013 at Phranakorn Si Ayutthaya Thailand.The data was selected by Cluster Sampling. The instrument used in the study was a Ryff's Psychological Well-Being Scales (PWB), 42 Item version. The data was analyzed by percentage, mean, standard deviation, t-test and one-way ANOVA.

The results of the study were as follows :
1. The total well-being score of the sample in this study was 177.22
2. The well- being score of students with different gender was not different.
3. The well- being score of students with different program, academic achievement(GPA) and family status were significantly different at .05 level.

Keyword : Well-Being , Adolescents

Introduction

Well-being is important in life and certainly is what everyone desires. Anyone with higher levels of well-being can do anything as they want to achieve in life and are able to accept the changes that occur in society. In addition, these people can expose themselves to get new experiences, to have a good relationship with others. The people with satisfaction in life can live happily in the society. (Diener,Suh:1997) According to the World Health Organization, mental health is defined as a state of happiness complete mental strength and resistance to something that causes stress and anxiety. It also means good interpersonal and ability to adapt to the social environment appropriately. Those who have well- being will be satisfied with their lives.

Well-being is a positive outcome that is necessary for people and for many sectors in society. Due to their well-being, people realize that their lives are going well. Good living conditions are fundamental to well-being. Tracking these conditions is important for public policy. However, many indicators that measure living conditions fail to measure what people think and feel about their lives, such as the quality of their relationships, their positive emotions and resilience, the realization of their potential, or their overall satisfaction with life.

Development that is primarily focused on material progress has caused many problems, such as social issues, environmental issues and human life. The obvious reason is the decline of nature and the human mind. Happiness economists have proved that the object development increased continuously in many countries did not have the well-being extend beyond (Kittiprapas,S.: 2010). In Thailand the issue of well-being has been defined as a policy of the Commission on Higher Education. This has mentioned the promotion of the well being of students under changes cause by globalization. Teen age is a significant development state of life. Adolescents unavoidably experience many changes which affect them both positive and negative ways, and this will impact on their mental health. If teens have a high level of well-being they will have motivation to learn, but on the other hand, if their well-being is low, hey will probably fail in their learning since they do not like school and have less self-satisfied.(Huebner, 2004; Kiura, Aunola, Nurmi, Leskinen, & Salmela-Aro et al. 2008). High school students are in the age range of teenagers living in rapid changing world with high competition. Such circumstances have surrounded them since childhood and undoubtedly become a model behavior. If they fulfill the need of adolescence, it will be the experience of pleasure from which teenagers often learn and emulate. These will influence attitudes, values and behavior. In contrast, if not, it will be an experience of suffering (Gray.,R.S.,et al. 2010).

Therefore, well-being is especially important for teens. Especially those who are studying in high school living in a society with no happiness, it will cause various subsequent problems such as sexual problems, crime, drug problems and contention issues . These problems affects the life and happiness of the students. The students will not have a deep understanding about life and unable to distinguish right from wrong. They will be overwhelmed and unable to fix the problem themselves. The researcher is interested to study the well-being of adolescents, especially teenagers in high school level 12 in Ayutthaya, Thailand. This is because teenagers in middle adolescence (16-17 years) and late adolescence (18-25 years), are in the range that

must make decisions on their study in university, the occupation and living style. There was also a report from the Central situation of children and youth (2011). That 18 percent of high school students in Ayutthaya Province had controversy or conflicts with friend fairly often, 13 percent felt depressed without reason, 55.4 percent had headaches, vomit and other symptoms due to stress,38.5 percent felt dissatisfied with their own ability and 48.5 percent had low level well-being. Study well-being in adolescents is important. Because when you know the factors and the cause, you can arrange proper environment to raise well-being of students who will become good citizens in the future. Measuring well-being with teens has used a measure of Ryff's (1995) 6 dimensions, which are consists of self-acceptance, purpose in life, positive relation with others, environmental mastery and autonomy.

Self-acceptance : Possessing a positive attitude toward the self, acknowledges and accepting multiple aspects of self, including good and bad qualities ; feel ingpositive about past life.
Positive Relations with others : Having warm, satisfying, trusting relationship with others; being concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understanding giving and taking of human relationships.
Autonomy : Being self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.
Environmental Mastery : Having a sense of mastery and competence in managing the environment; controlling complex array of external activities; making effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.
Purpose in life : Having goals in life and a sense of directedness; feeling in meaning to present and past life; holding beliefs that giving life purpose; haing aims and objectives for living.
Personal Growth : Having a feeling of continued development; seeing self as growing and expanding; ibeing open to new experiences ; having sense of realizing his or her potential; seeing improvement in self and behavior over time; changing in ways that reflect more self-knowledge and effectiveness.

Research Objective

To study the well-being in grade 12 students.

Methodology and methods

Selection of subjects

Population : The population in this study was the grade 12 students who were studying in the first semester of 2013 total of 3,300 students. The school under the control of the government in Phranakhon Si Ayutthaya province.

Sample : The sample used in this study were students in grade 12 who were Studying in the first semester of 2013 total of 156 students.

Variables

Independent : Gender ,programs of study ,academic achievement and family status

Dependent : Well-being consists of self-acceptance ,positive relations with others ,autonomy, environmental mastery ,purpose in life and personal growth

Instrument

The instrument used in the study was a Ryff's Psychological Well-Being Scales (PWB), 42 Item version. Respondents rate statements on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. PWB(1995) have reliability follows : Self-acceptance = .85 , Positive Relations with others = .83, Autonomy = .88, Environmental Mastery = .81, Purpose in life = .82 and Personal Growth = .81

Collection of Data

The researcher coordinated with teachers in each school in order to collect questionnaires totaled 160 students.The number of the respondents was 156 students (97.5%).

Analysis of Data

The researcher used the Statistical Package for the Social Sciences(SPSS) to analyze the data as follows:

1.Demographic characteristics consisted of gender, programs of study, academic achievement and family status .Frequency , percentage, mean and standard deviation were analyze form the data.

2.The well-being were analyzed to find mean, standard deviation and average valuation for each dimension.

3.One-way ANOVA analyzed used to compare the well-being of students at statistically significantly different at the .05 level and comparing different in pairs by LSD analysis.

Results

Table 1 t-test result for comparison of well - being of students by gender.

Gender	$\bar{X}$	S.D.	*t*
Male	171.45	.57	-.30
Female	172.66	.58	

Table 1 showed that the well-being of students by gender was not significantly different.

Table 2 t-test result for comparison of well-being of students by Programs .

Program	$\bar{X}$	S.D.	*t*
Science	179.79	.63	4.30*
Arts	163.80	.44	

* $p < .05$

Table 2 reveal a statistically significantly difference in well-being between students in two programs at the .05 level. The scores of students in science program were higher than those in art.

Table 3 ANOVA result for comparison by academic achievement (GPA)

Well-being	df	SS	MS	F
Between Group	2	2.49	1.24	3.84*
Within Group	153	49.70	.32	
Total	155	52.20		

* $p < .05$

Table 3 represented the well-being of students classified by academic achievement was statistically significantly different at the .05 level.

Table 4 LSD method post-hoc analysis classification of well-being means by academic achievement(GPA)

Well -being	Academic Achievement	$\bar{X}$	below 2.00	2.00-2.99	Higher 3.00
Self-acceptance	Below 2.00	27.65		-.53	-.76
	2.00-2.99	27.51	-	-	-.23*
	Higher 3.00	29.26			
Autonomy	Below 2.00	23.31		-.74	-1.00*
	2.00-2.99	27.02	-	-	-.26
	Higher 3.00	28.63			

Purpose in life	Below 2.00 2.00-2.99 Higher 3.00	27.65 *27*.72 30.10	-	-.01 -	-.35 -.34*

* $p < .05$

Table 1 showed that students with GPA of higher 3.00 had self-acceptance and purpose in life higher score than students with GPA of 2.00 - 2.99 in statistically significantly different at the .05 level. Students with GPA of higher 3.00 had autonomy higher score than students with GPA of 2.00 - 2.99 in statistically significantly different at the .05 level.

Table 5 t-test result for comparison of well-being of students by family status.

Family status	$\bar{X}$	SD	t
Living with parents/single parent	174.16	.59	3.83*
Not living with parents	158.83	.37	

* $p < .05$

Table 3 showed that the well-being of students classified by family status was statistically significantly different at the .05 level. Students living with parents/ single parent scored higher than those who not living with their parents.

Discussion

The sample in this study has total well-being score at 177.22 . The study found that well-being of grade 12 students with different genders was not different. Furthermore, well-being of grade 12 students with different programs, academic achievement and family status were significantly different at .05 level. On average, the science students has higher score than the art ones. Students with higher GPA have higher well-being than those with lower GPA.

The family status variables showed a significant difference in total well-being. The average of the students living with parents or single parent scored higher than those not living with parents

This study found that counseling in the schools may have to focus on students with lower well-being. Especially students who come from broken home and students with low academic achievement(GPA).Educators or persons concerned should focus on developing the well-being of these young students so they are being better, particularly in positive relations with others, autonomy, environmental mastery and purpose in life.

Conclusion

In this study found that well-being in grade 12 students with different genders was not different. Furthermore, well-being in grade 12 students with different programs, academic achievement and family status were significantly different at .05 level.The science program students had higher scores than the art ones.

Suggestion for application : Social institutions such as family, education , community and government should be aware of the priority to the well-being of adolescents.
Suggestion for research : Counseling program should be developed to train the teachers teaching in high schools in order that they can be effective counselors.

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Uses and gratifications for paid mobile applications

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Abstract

The increasing growth of the mobile applications industry attributes to the popularity of the smartphone. More and more people use mobile applications to achive their needs, when the demands for mobile applications increase rapidly create a new market opportunity. But the mobile applications distinguish into paid and free applications. This paper investigates consumer's perception on paid mobile applications.

This paper adopts uses and gratifications theory (U&G) to explore how consumer perceives paid mobile applications. The smartphone users participated in this paper. This paper involved a questionnaire and adopted exploratory factor analysis (EFA) and examined confirmatory factor analysis (CFA) to the dimensions for mobile applications payment factors and discussed the different effects of demographic variables. The four dimensions are " informativeness ", " mode of usage ", " functionality " and " value and interest ".

These findings have implications for the mobile applications company to create the new applications to fit different consumer's need, and make consumers willing to pay for mobile applications.

Key words: Paid mobile applications, Uses and gratifications theory, Exploratory factor analysis, Confirmatory factor analysis

Introduction

According to the Analytics (January 28, 2014) report, global smartphone sales grow 41 percent in end of 2013. On the other hand, IDC (January 27, 2014) also released the related survey, the annual growth rate of smartphone sales was approximately 38.4%.

In Taiwan market, Google (2013) released a survey about smartphone user behavior, the proportion of smartphone in Taiwan continued to grow and the penetration rate increased to 51% in 2013. But other Asia-Pacific countries were also having fast-growing, smartphone penetration rate of Taiwan still fell behind South Korea (73%) but higher than Japan (25%) and China (47%). Although the penetration of Taiwan fell behind South Korea, but the dependence rate of smartphone was the highest in Asia-Pacific, 81% of respondents must to carry out their smartphone every day, slightly ahead of Japan (80%) and Hong Kong (77%) in Asia-Pacific region.

Because of the popularity of smartphone, there has been a dramatic proliferation of report concerned with behavior of smartphone user in recent years. What's more, mobile application industry also becomes popular due to the popularity of smartphone. In Google report, the same report that has been noted above, the smartphone users download average 30 applications and 8 of these applications are paid applications.

Moreover, this paper also adopts uses and gratifications theory (U&G) to explore how consumers perceive paid mobile applications. Uses and gratifications theory is a method to understand why and how audience actively seeks out specific media to satisfy their demands. Uses and gratifications theory have been widely used for different researches about media. However, within that literature, little research has been published on paid mobile applications and adopted uses and gratifications theory.

Literature review

Early mass communications researches, the main ideas focus on media to influence the audience by one-way. Until 1964, Bauer proposed an opinion, stubborn audience. The concept started to be changed and Bauer also proposed an interactive communication model, he thought audiences can choose their desired information actively. The scholar, Blumler (1979) further pointed out that the active audience has following four meanings, utility, intentionality, selectivity and imperviousness to Influence. Therefore, early theorization of uses and gratifications theory can be traced back to Blumler and Katz (1974). They published a book named The Uses of Mass Communication and proposed a "uses and gratifications theory", that can be said to be an important watershed for this theory.

Moreover, various groups of researchers have worked with the motivations of uses and gratifications theory in different media, each group has its own classification. For example, McQuail (1994) has investigated the motivations of the television for uses and gratifications theory were information, personal identity, social interaction and also entertainment. The motivations of different media for uses and gratifications theory are listed below.

Table 1 Summary of the using motivations of different media adopt in U&G

Source	Media	Motivation Category
McQuail (1994)	Television	Information, personal identity, social interaction and entertainment.
Garramone, Harris, and Anderson (1986)	Political Bulletin Board System	Equally by surveillance, personal identity and diversion motives
Kaye (1998)	World Wide Web	Entertainment, social interaction, escape, information and network preferences
Vincent and Basil (1997)	Television news	Surveillance, escape, boredom and entertainment
December (1996)	Internet	Communication, interaction and information

Research Design

In order to understand the motivational factors of using paid mobile applications and adopt in uses and gratifications theory (U&G), this study conducted two-phase surveys. At first one phase is about keyword collecting. The questionnaire had four questions about the paid mobile applications and asked smartphone users to fill out the open-ended survey. Finally, this study got 493 keywords. This study chose 20 keywords which frequency greater than four times and accumulate percentage was about 94%. After that, the study used these 20 items to do a second one questionnaire.

At second phase, the formal questionnaire consisted of three main parts. First part, the motivation of using paid applications which were made by the keywords that this study collected at first phase. In second part, in order to understand the using behavior of smartphone user, this study had four questions such as the mobile system types, frequency of using applications, minutes of using applications and whether purchased mobile applications. Finally, questionnaire had some questions about personal characteristics such as demographic variables.

The participants in this study are smartphone users in Taiwan and the participants who volunteer for this study are chosen on a random basis. This study developed internet survey and paper survey. Then, the researcher posted a link on the Bulletin Board System (BBS), mobile network forum, facebook and asking the smartphone users to fill out the questionnaires during July 20, 2013 to October 4, 2013. Total of 592 questionnaires were recovered and 42 questionnaires were not valid. After that, this study randomly selected 200 questionnaires to do the exploratory factor analysis and 350 questionnaires to do the confirmatory factor analysis. Data were collected primarily by means of paper survey and online survey. The analysis used the SPSS and Amos statistical software package. To address the motivational factors of paid applications, exploratory factor analysis and confirmatory factor analysis were conducted in this study. The analyses of ANOVA were used to detect significant difference among varieties. To understand concerning relationship between the variable, Pearson correlations were calculated. (蕭文龍, 2007)

Results of data analysis

Exploratory factor analysis (EFA) is generally used to discover the factor structure of a measure and to examine its internal reliability. (Maccallum, 1990) And EFA method is in order to describe, classify and analyze the study of the social and behavioral sciences. This paper selected principal component method to do the exploratory factor analysis and varimax rotation method. Then, picked up the factors which eigenvalues were bigger than 1.(Fabrigar, Wegener, MacCallum, & Strahan, 1999) The demographic characteristics are showed below.

Table 2 Demographic Statistics of Respondents, N=200

Category	Item	Number	%
Gender	Male	118	59
	Female	82	41
Age	Under 20	23	11.5
	21~24	98	49
	25~29	50	25
	30~34	15	7.5
	35~39	6	3
	Above 40	8	4
Occupation	Finance, Insurance, Real Estate	13	6.5
	Government agencies, police consumers	13	6.5
	Education, research	8	4
	Building, construction, civil engineering	2	1
	Manufacturers, suppliers	17	8.5
	Medical, health care	6	3
	Law-related	1	0.5
	Logistics, retail	5	2.5
	Sightseeing, tourism, catering, food	7	3.5
	Entertainment, communication, public	2	1
	Advertising, marketing, art	1	0.5
	Agriculture, fishery, animal husbandry	1	0.5
	Student	100	50
	Other	24	12
Education	Junior or less	1	0.5
	High school (vocational)	17	8.5
	University	121	60.5
	Institute or more	61	30.5
Disposable Income	$NT 10,000 or less	95	47.5
	$NT 10,001~20,000	33	16.5
	$NT 20,001~30,000	25	12.5
	$NT 30,001~40,000	20	10
	$NT 40,000 or more	27	13.5
Residence	Northern Taiwan	50	25
	Central Taiwan	78	39
	Southern Taiwan	65	32.5
	East Taiwa	2	1
	Others	5	2.5

According to the item analysis, this study deleted the No.5 factor and did the EFA in the SPSS 17.0. Then, the result showed 5 dimensions, but one of the dimension only has two observed variables, so that this study deleted the two observed variables, No.7 and No.8. Because Bollen (1989) said the potential variables at least had three observed variables.

The KMO measurement was 0.820 and a statistically significant Bartlett (Bartlett, 1937) sphericity test (p=0.00). Consequently, this study deleted the No.7 and No.8 and did the exploratory factor analysis again. The result shows 4 dimensions, eigenvalues of first one dimension is 5.693 and named informativeness, second one is 2.052 and named mode of usage, third one is 1.558 and named functionality, final one is 1.196 and named value and interest, all of them have an eigenvalues greater than 1. Percentage of total variance explained by the four dimensions is 61.76%.

Table 3 Summary of exploratory factor analysis result

	F1	F2	F3	F4
19. Creative	0.83	.097	.040	.178
18. Abundant	0.77	.164	.124	.289
20. Interface	0.66	.169	.253	.155
6. Uniqueness	0.64	.218	-.059	-.094
17. Informational	0.58	.056	.158	.427
9. Frequency	.202	0.75	.082	.044
12. Unlimited use	.116	0.73	.063	.232
10. Necessity	.029	0.66	.220	.102
13. Return on investment	.163	0.66	.085	.161
11. Immediate service	.396	0.6	.183	.047
1. Practical	.059	.081	0.86	.028
2. Convenient	.094	.024	0.79	.237
3. Functional	.199	.194	0.77	.135
4. Demand	.025	.350	0.68	-.034
15. Interested	.206	.143	.170	0.79
14. No advertisements	.252	.140	-.026	0.72
16. Worth	-.023	.458	.273	0.62
Eigenvalues	5.693	2.052	1.558	1.196
explained variance	33.488	12.070	9.166	7.036
Accumulated explained variance	33.488	45.558	54.724	61.76%

Reliability refers to the characteristics of the test or the reliability of the measurement results, the test does not mean the scale or measuring instrument itself, but the consistency of test results or stability. In simple terms, reliability analysis is the degree of reliability of the results in a test. Refer to table 4, all of the α coefficient of the dimensions are greater than 0.6 so that the reliability analysis are acceptable. The dimension of functionality has higher α coefficient and representing the higher reliabilty. All of the factor loading were greater than 0.5 (0.58 to 0.86).

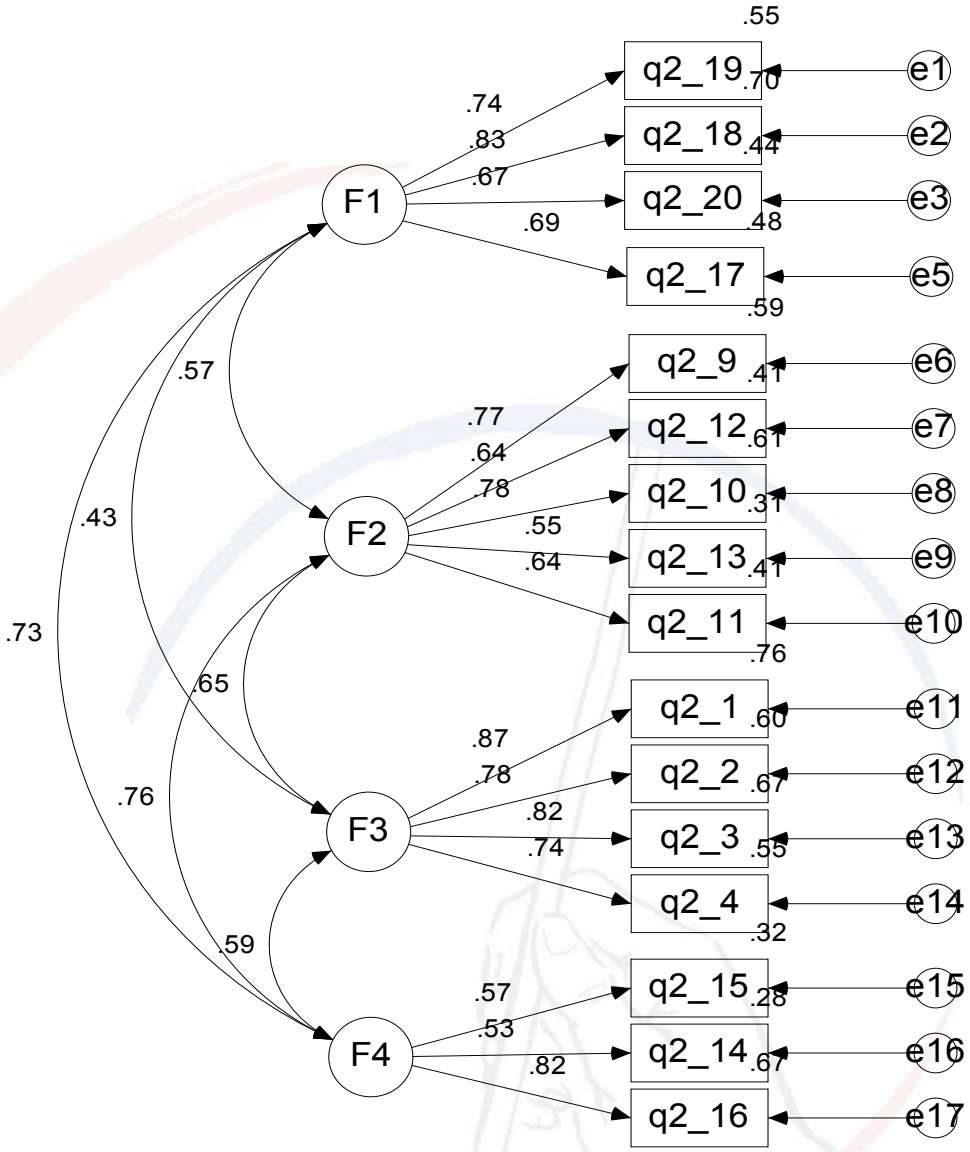
Table 4 Summary of reliability analysis

Item	M	Sd.	Factor loading	Cronbach's α
F1				
19. Creative	5.37	1.319	0.83	0.800
18. Abundant	5.41	1.299	0.77	
20. Interface	5.67	1.206	0.66	
6. Uniqueness	4.88	1.516	0.64	
17. Informational	5.70	1.238	0.58	
F2				
9. Frequency	5.92	1.163	0.75	0.783
12. Unlimited use	6.06	1.171	0.73	
10. Necessity	6.12	1.016	0.66	
13. Return on investment	5.46	1.459	0.66	
11. Immediate service	5.65	1.347	0.6	
F3				
1. Practical	6.31	.934	0.86	0.823
2. Convenient	6.07	.990	0.79	
3. Functional	6.25	.914	0.77	
4. Demand	6.14	1.008	0.68	
F4				
15. Interested	5.83	1.133	0.79	0.690
14. No advertisements	5.14	1.626	0.72	
16. Worth	6.10	1.040	0.62	

CFA belongs to a sub-structural equation modeling model, and allow to react with the interpretation of latent variables, and a set of linear equations interconnected. (Thompson, 2004) A total of 350 respondents participate in this survey, 59.7% are males and 40.3% are females. Most of them are students who have a bachelor's degree (61.7%) and the average monthly income is under NT$ 10,000 (40.6%). The residences of the respondents are northern Taiwan (28.3%), central Taiwan (31.4%) and southern Taiwan (37.4%).

This study analyzed the items by using AMOS 16 to assess the confirmatory factor analysis (CFA). Based on the results of four dimensions in exploratory factor analysis, then, conducted first time confirmatory factor analysis. Then, this study deleted the factor of No.6, uniqueness (factor loading=0.42), because the factor loading are lower than 0.5. Continuously, after deleting the factor of No.6, this study conducted second time confirmatory factor analysis. Then, each dimension is named Informativeness, Mode of usage, Functionality and Value and interest. The result of CFA is listed below.

Figure 1 The framework of confirmatory factor analysis



Fit of internal structural model is a test about internal quality of a model. Various comments of the moderate assessment of the model have been proposed over the course of decades of research.
Here are the four conditions:
- Individual item reliability > 0.5, Bagozzi and Yi (1988)
- Composite reliability > 0.6, Fornell and Larcker (1981)
- Average variance extracted > 0.5, Fornell and Larcker (1981)

The results of fit of internal structural model are listed below. As we can see, the results of fit of internal structural model in this study should be acceptable. Most of the individual item reliability is greater than 0.5, and three of the CR value are greater than 0.8, only one of the CR value is 0.685. Two of the average variance extracted are greater 0.5, two of the value equals 0.46 and 0.42, but that should be acceptable.

Table 5 Summary of Fit of internal structural model

Item	R^2	CR	AVE
F1-Dimenson- Informativeness			
19. Creative	0.547	0.824	0.540
18. Abundant	0.696		
20. Interface	0.444		
17. Informational	0.482		
F2-Dimenson- Mode of usage:			
9. Frequency	0.594	0.810	0.465
12. Unlimited use	0.411		
10. Necessity	0.612		
13. Return on investment	0.308		
11. Immediate service	0.409		
F3-Dimenson- Functionality:			
1. Practical	0.755	0.879	0.646
2. Convenient	0.604		
3. Functional	0.672		
4. Demand	0.554		
F4-Dimenson- Value and interest:			
15. Interested	0.322	0.685	0.426
14. No advertisements	0.281		
16. Worth	0.667		

Overall model fit is a test about the external quality for a model. Hair, Anderson, Tatham, and Black (1998) have proposed that overall model fit was constituted by three perceptions, absolute fit measurement, incremental fit measurement and parsimonious fit measurement. Therefore, this study conduct the different model fit indicators testing by these three perceptions, and consider different comments from different researchers. Refer to the Table 6, to put it briefly, the results of the overall model fit should be acceptable.

Table 6 Summary of overall model fit

Fit indices	Recommended Value	Research result	Estimation
Absolute fit measurement			
χ^2/df	≦3	3.867	might be accepted
GFI	>0.8	0.875	acceptable
AGFI	>0.8	0.827	acceptable
RMR	<0.05	0.097	not acceptable
RMSEA	>0.1 poor fit 0.08~0.1 mediocre fit 0.05~0.08 reasonable fit <0.05 good fit	0.091	mediocre
Incremental fit measurement			
NFI	>0.9	0.861	marginal
CFI	>0.9	0.892	marginal
Parsimonious fit measurement			
PGFI	>0.5	0.631	acceptable
PNFI	>0.5	0.703	acceptable

The concept of the discriminant validity is in order to confirm the measurements between the variables are different. According to the Anderson and Gerbing (1988), they proposed the confidence interval assay. Repeated 1000 times by the bootstrap estimates method, at 95% confidence level, the correlation coefficient of the two variables plus and minus 1.96 standard errors, and the confidence interval does not include 1. That is, this study has discriminant validity. Refer to the Table 7.

Table 7 Discriminant validity analysis - Confidence interval test

Parameter	Estimate	Lower	Upper	P
F1 <--> F2	0.573	0.403	0.733	.001
F1 <--> F3	0.433	0.268	0.594	.001
F1 <--> F4	0.726	0.625	0.826	.001
F2 <--> F3	0.655	0.495	0.790	.001
F2 <--> F4	0.756	0.606	0.889	.001
F3 <--> F4	0.590	0.413	0.736	.001

Conclusions and recommendations

This chapter is divided into five sections, the first section of this research focus on conclusions from research results. Next, section 2 is about research contributions, academic and managerial significances are explained. Final is limitations and future research directions.

Conclusions

This study shows that the motivations of smartphone users for paid mobile applications will be divided into four types, Informativeness, Mode of usage, Functionality and Value and interest. The following are details of four types.

(1.) Informativeness includes creative, abundant, interface and informational.
Mobile applications need to be creative and abundant; it should be special and diverse for customer so that customers are willing to pay for the applications. For example, a famous application named Angry Birds, which is a paid application on App store is fun, easy and high quality for customers. Each level in Angry Birds is a puzzle, which is a very creative game and the interface is also easy to understand. Therefore, information is also an important factor for customer when they decide to purchase a paid application.

(2.) Mode of usage includes frequency, unlimited use, necessity, return on investment and immediate service.
When customers want to purchase a paid application, they consider whether this application is necessary for them or not, and whether they will use this application with high frequency. If it is necessary and they will use it with high frequency, customers might think that it is good return on investment. In addition, the immediate service is also an important factor; developer can think about what features customers need really with immediate service.

(3.) Functionality includes practical, convenient, functional and demand.
In terms of practical, convenient, functional and demand, the functions in mobile application should be satisfactory to customer's needs. For example, navigation applications usually are on the top of best-seller list. Nowadays, customers like to go out and travel by themselves. Hence, navigation tools are very important and useful for them. Likewise, because most of the people bring smartphone with them every day, they can use navigation applications easily, which is convenient and fit customer's specific needs.

(4.) Value and interest includes interested, no advertisements and worth.
In this dimension, value and interest, customers consider the factors about interested, no advertisements and worth. Interested and worth were some kinds of impression. If customers feel that is interested and worth, they would be willing to buy apps. Beside, free applications may bring in advertisements, customers may dislike. In fact, in one-time purchase applications, there were no advertisements mostly. And in in-app purchase applications, maybe still have some advertisements.

Research contributions

In this section, there are academic and managerial contributions.

Academic contributions:
This study explores the motivations of using paid mobile applications. Although substantial studies have been performed on smartphone, app store and business model of application, researches of paid mobile application are still critically lacking. This study also adopts uses and gratifications theory. Uses and gratifications theory was adopted the researches about traditional media, television and radio. In recent years, as new media comes out, such as internet, smartphone and blog, etc, a large number of researches about these new media were conducted with uses and gratifications theory. In addition, the theme about paid mobile applications are novel and unique.

Managerial contributions:
(1.) For providers
Tens of thousands of applications come out, so, it is very important to let customers find the applications. Therefore, marketing and word of mouth could be good promotions for a new application. But, how to do good promotions for applications? Developers can base on the results of this study; they can think the relationship between characteristics of their target customer and their using behaviors. Then, they can do a good promotion for target customers. Also, they can base on their characteristics and create suitable applications.
To put it briefly, practical contributions of this study are the conclusions and recommendations from the research findings that we can know, the results can help the developers of mobile applications to understand what characteristics that customers want actually.

(2.) For customers
Customers can understand the relationship between characteristics, usage behavior and motivational factors, they can consider repeatedly before they pay for applications.

Limitations and future research directions

Although the rapid development in this mobile application industry, the academic researches in this area are relatively lacking. Most of the information comes from media reports, market researches and published reports by research institution; few academic papers have been done.

Because mobile application industry is a new industry, the development has only few years. But, the growth of this industry has increased rapidly. There are lots of possible developments in the future, so, it should have different issues and problems about mobile application in nearly future.

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Exploring Consumer Perception of Pop-Up Advertisement

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Abstract

Nowadays, not only on the computer but also the smart phones and other mobile devices are increasingly common, Internet advertising has become more various. There are many different options for advertisers to use. But when intrusive advertising appears too often, it influences the reading quality of browsing the websites. Much literature shows that the relationship between pop-up ads and user is negative. However, there is little specific guidance on the elements that make users feel bad.

The research framework was demonstrated by the exploratory factor analysis and confirmatory factor analysis. This study explores users' perception of pop-up advertisement. The results show that most perceptions are negative. We suggest that advertisers should emphasize on the effectiveness of Internet advertising.

Introduction

The last decades, Internet advertisements are getting considerable attentions not only from academy of business studies but also from people in general. The World Wide Web has been around for many years, but compared to other traditional advertising such as on TV, broadcast, or DM, there are far fewer studies that have researched the perceptions and attitudes by consumers towards internet advertising. (Kristen Aspray, 2006)According to IAB Internet Advertising Revenue Report, which survey Internet advertising revenues climb to landmark high of nearly $10.7 billion, marking 15% year-over-year growth.

Internet advertising tries to disseminate information in order to influence buyers and sellers business deal. But, unlike other media and advertising, consumers can get more information by moving his or her mouse to click the ad, or take the next step and purchase the product in the same session on the Internet. (Efraim Turban, David King and Judy Lang, 2011) Randall Rothenberg, President and CEO of IAB (Internet Advertising Bureau) said" Marketers' trust in interactive to deliver. It is indicative of the digital age in which we live, advertisers need to effectively reach targeted audiences wherever they are consuming information or entertainment."

The advertising industry had grown steadily over the past few years. According to the report from Interactive Advertising Bureau, Internet advertisements further blur the distinction between advertising and marketing communications. By the transition of mass communication, advertisers try to find new effective ways to communicate with consumers. But, when advertisers increase more intrusive ads include pop-up and pop-under ads, Is it really effectiveness to customers? Therefore, this study aims to exploring the main factors influencing the consumer perception of pop-up advertisement by using data collected in Taiwan.

1. Research method

1.1 Research design and methodology
The purposes of this study are exploring consumer perception of pop-up advertisement. Sequentially, a two-phase questionnaire was designed to collect the first impressions that while the respondents browsing the web, when participants encounter a pop-up advertisement. First, we used a specialized website, namely Google Docs, was used in order to collect the keywords online. A total of fifty opened questionnaires which are distributed on the Internet. The study listed top 16 keywords that frequency over four times: annoying, hate, dislike, closedown, always appear, block, coercion, special, helpless, sudden, porno, practicality, virus, selling, limited to marketing, irritated. Second, after we collected the keywords from first-phase questionnaires, we use them to make our second-phase questionnaires that used during the survey in order to identify the characteristic. The second-phase questionnaire consists of 23 items and is divided into two parts. Part I contains 16 keywords that we collect from first-phase questionnaires. this part we used Likert five point scale from one(extremely disagree) to five(extremely agree).; Part II contains demographic statistics which includes participants' current occupation, gender, different disparity age and education level, personal income, frequency of encounter pop-up advertising and species.

Table 1: First impressions for pop-up ads from first-phase questionnaire

keyword	frequency	keyword	frequency
Annoying	27	**helpless**	5
Hate	12	**Sudden**	5
Dislike	11	**Porno**	4
Closedown	11	**Practicality**	4
Always appear	9	**Virus**	4
Block	6	**Selling**	4
Coercion	6	**Limited to marketing**	4
special	5	**irritated**	4

1.2 Descriptive statistics

There were 113 females and 296 males in this study. The respondents from males occupied 72.3% but females only occupied 27.6%.

Gender	Frequency	Percent
Female	113	27.6%
male	296	72.3%

There were 67 respondents whose age was under 20 years old. There were 326 respondents whose age was between 21 to 30, 10 respondents whose age was between 31 to 40, 4 respondents whose age was between 41 to 50 and 2respondents whose age was greater than 51. The age from 21 to 30 mainly occupied about 79.7% of the respondents.

Age	Frequency	Percent
Below 20	67	16.3%
21-30	326	79.7%
31-40	10	2.4%
41-50	4	2%
Higher 51	2	0.4%

The level of education of sample can be divided into high school, university and graduated university. Most of the respondents were graduated from university. There were only 11 responder had graduated from high school, 170 respondents were graduated from graduated university.

Education	Frequency	Percentage
High school	11	2.6%
University	228	55.7%
Graduated university	170	41.5%

Respondents held a variety of positions in the business. The top three were student, service industry, government career and manufacturing industry. There were 298 respondents whose was student. There were 65 respondents whose job was service industry. There were 19 respondents whose job was government career and manufacturing industry. The respondents from student occupied 51.1%, service industry occupied 15.8% and government career and manufacturing industry both occupied 4.6%.

Job	Frequency	Percentage
Student	298	51.1%
Government career	19	4.6%
Service industry	65	15.8%
Manufacturing industry	19	4.6%
Agriculture	1	0.2%
others	7	1.7%

There were 36 respondents (8.8%) occurred the pop-up ads less than once a week, 114 respondents (27.8%) occurred the pop-up ads at least once a week, 144 respondents (35.2%) occurred the pop-up ads more than 3 times a week, 115 respondents (28.1%) occurred the pop-up ads every day.

Frequency	Frequency	Percentage
Less than once a week	36	8.8%
At least once a week	114	27.8%
More than 3 times a week	144	35.2%
Everyday	115	28.1%

Respondents occurred pop-up ads at variety of website when they surfing the Internet. The top three were game, video and social network. There were 280 respondents whose indicated game (31%). There were 278 respondents whose indicated video (30.8%). There were 139 respondents whose indicated social network (15.4%).

Kind	Frequency	Percentage
Game	280	31%
Video	278	30.8%
Blog	103	11.4%
Social network	139	15.4%
News/weather	36	3.9%
education	15	1.6%
others	50	5.5%

There were 222 respondents (54.2%) incoming below 10000, 105 respondents (25.6%) incoming from 10001 to 20000 and 54 respondents (13.2%) incoming from 20001 to 30000 and 28 respondents (6.8%) incoming higher than 30001.

Incomings	Frequency	Percentage
Below 10000	222	54.2%
10001-20000	105	25.6%
20001-30000	54	13.2%
Higher 30001	28	6.8%

2.3 Research framework

This thesis is organized as follows. Chapter 1 introduces the background, motivation and objectives. Chapter 2 explains the research design and descriptive statistics. Chapter 3 conducts an exploratory factor analysis and confirmatory factor analysis. Lastly, chapter 4 summarizes the findings, conclusions, limitations, future study and discusses the managerial implications based on the findings. Figure 1 shows the research framework.

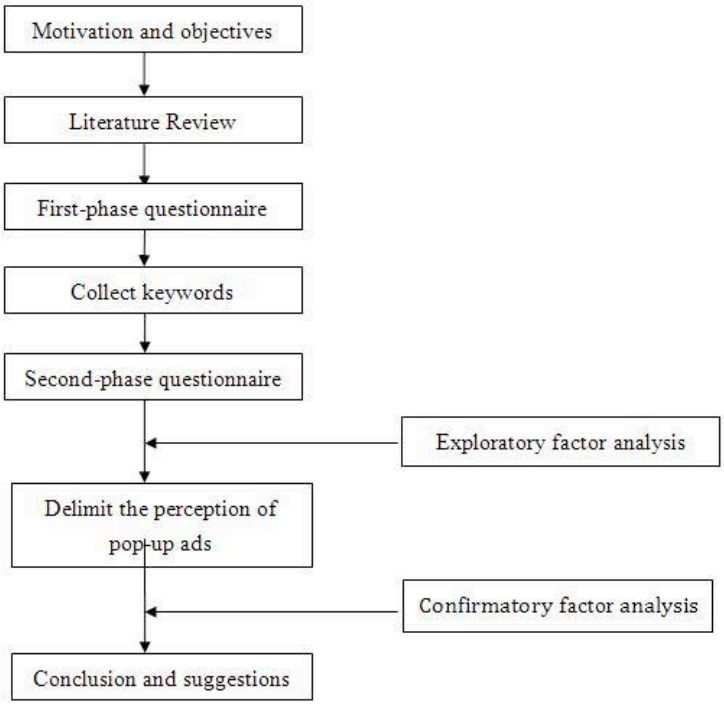

Figure 1: Research Framework

2. Data analysis result

2.1 Exploratory factor analysis

The analyses' results confirmed the matrix high factor ability. KMO was 0.879, classified by Kaiser-Meyer-Olkin (1974). The criterion of KMO is as follow: 0.9<KMO: Very suitable, 0.8<KMO: Suitable, 0.7<KMO: Ordinary, 0.6<KMO: Not very suitable, KMO<0.5: Not suitable.

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measre of Sampling Adequacy		0.879
Bartlett's Test of Sphericity	Approx.Chi-Square	2134.995
	Df	66
	Sig.	0.000

Through Principal Components Analysis, it was possible to decide how many factors would be extracted. All the criteria adopted (eigenvalues higher than 1.0) pointed to the existence of 3 factors. The validity or quality of the items that composed each factor was also analyzed, based on Pasquali's (2008) statement that a valid item is the one that well represents the factor; that is, an item with a good factor loading. Comrey and Lee (1992) classified items with loadings higher or equal .71 as excellent; higher or equal .63 as very good; higher or equal .55 as good; higher or equal .45 as reasonable; and higher or equal .32 as poor. Thus, as to the items' quality, 80% of them were classified as excellent.

Table 3: Results of principal components analysis

	P1	P2	P3
Hate	0.861		
Dislike	0.854		
Annoying	0.839		
Closedown	0.761		
Block	0.748		
Irritated	0.668		
Porno		0.769	
Virus		0.717	
Sudden		0.671	
Practicality			0.846
special			0.828

In order to measure the reliability of our questionnaire, this research uses Cronbach's α reliability analysis. Adopting the value of Cronbach is based on Guieford (1965)'s point of view that if α<0.35 is considered low reliability, 0.35<α<0.7 as average, and α＞0.7 as high reliability. According to the reliability statistics shows in Table 4. The reliability of the research in P1 is described using α coefficient – its value is 0.904, which concludes that factors in this dimension are of high reliability. 0.622 for P2, 0.609 for P3. All coefficients in this questionnaire are above average reliability.

Table 4: Results of Cronbach's α reliability analysis

Dimensions	Factors	Cronbach's Alpha
P1	Dislike, hate, annoying, block, closedown, irritated	0.904
P2	Porno, sudden, virus	0.622
P3	Practicality, special	0.609

3.2Confirmatory factor analysis

Confirmatory factor analysis is applied to test the construct validity of the research model is indeed adequate, appropriate, and CFA testing has to fit the condition: All factor loadings must have statistical significance criteria > 0.5.

Table 5: Standardized regression weights

Dimensions	Factors	Loading
P1	Dislike	0.853
P1	Hate	0.883
P1	Annoying	0.834
P1	Block	0.728
P1	Closedown	0.688
P1	Irritated	0.698
P2	Porno	0.646
P2	Sudden	0.531
P2	Virus	0.620
P3	Practicality	0.619
P3	special	0.715

3.3 Model fitness

In order to assess the degree of fit, several goodness of- fit indices were computed. In Table 6, the results show that all indexes have conformed to criterion.

Table 6: Results of model fitness

Index	Criterion	Result	suitable
Absolute Fit Measures			
RMR	<0.08	0.030	Yes
RMSEA	<0.08	0.073	Yes
GFI	>0.8	0.946	Yes
AGFI	>0.8	0.913	Yes
Incremental Fit Measures			
NFI	>0.9	0.932	Yes
RFI	>0.9	0.908	Yes
IFI	>0.9	0.952	Yes
TLI	>0.9	0.935	Yes
CFI	>0.9	0.952	Yes
Parsimonious Fit Measures			
PGFI	>0.5	0.588	Yes
PNFI	>0.5	0.694	Yes
PCFI	>0.5	0.709	Yes
CMIN/DF	<5.0	3.199	Yes

4. Conclusion

4.1 Finding and managerial implication
In this study, we made conclusions based on the results and findings of this research. We were extracted three main factors from exploratory factor analysis. There were negative consciousness, frightened and convenience. In addition, negative consciousness had significant relationships with frightened, but also had negative relationship with convenience as indicated by confirmatory factor analysis.

About the negative consciousness, we can find many participants thought once they occurred the pop-up ads, they feel dislike, hate even irritated. For them, they all feel loath, but in different level. Compared to other types of advertising, the reason why pop-up ads should be a particularly outrageous because it just surprisingly appearance while Internet users were browsing the website. So it is very important that how to strike a balance between the timing of pop-up ads appear and the general process of surfing the Internet.

First, we also found the Internet users feel annoying once they occurred the pop-up ads. The more likely explanation rests in the reason of frequency. Pop-up ads for them were appearance too often. Second, they thought the pop-up ads always block their view. When they open the windows, when they want to handle their own affairs, the pop-up ads just show in the middle of the window. So we thought it is important to place the advertisement in which side. Advertiser may try to put the ads in the four corners of window that not only attract the Internet users' attention but also not affect them browsing the website.

Next is frightened, in this dimension there are three factors cause Internet users to feel scared. First is porno ads, it shows that almost users had experience to see porno ads in form of pop-up ads. For this aspect, we thought advertisers should be more strict checks for the advertising content. Second, pop-up ads always sudden appear in web page, it could take a gradual approach to enter the web window, make Internet users feel more comfortable. Third, when the most participants saw the pop-up ads, they usually subconsciously think this advertising was linked to a virus or other harmful website.
Final is convenience, although we received some positive keywords from pre-questionnaire, but the result showed that lower than intermediate values.
So, most of the participants in Taiwan were not have positive comments about the pop-up ads. First is practically, they thought the content of the advertising were useless for them. For this regard, we suggest advertisers should different Internet users' using characteristics and habits, to select the appropriate advertising content. Second is special. From the early 20th century, advertising evolved to today, pop-up ads has become no longer particularly for Internet users. We recommend advertiser should be emphasized pop-up ads features, and then further extending other novel forms of advertising to attract contemporary users' attention.

4.2 Research limitation and future study
There are several limitations to this study, requiring further examination and additional research. The first limitation is the problem of external validity, the ability to generalize the results outside Taiwan. However, due to the similarity in the cultural origins, we believe these results provide generalized managerial implications for other

country. Second, this study concludes four factors in perception of customers which could be useful in electronic commerce area; some other key factors could not be discussed in this research.

There are two directions that future studies can follow. First, if we try to generalize the results outside of Taiwan, due to different custom, social, and ethical implications, we may face some problems like external validity or cultural differences from different countries. Cultural differences may influence the perception of pop-up ads. Another one is more studies could accord different situation or various kind of pop-up ads as moderating variable. It would be more informative for advertisers to understand what customers think.

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The Effect of Sensation Seeking from Peers, Parenting Style, Religious Values and Juvenile Delinquency in Middle Adolescence of High School

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Abstract

This study aim to see the influence of sensation seeking, parenting style and religion values on juvenile delinquency behaviour. Sensation seeking is a person's tendency to seek diversity, and finding something new. Parenting styles is a ways of parenting that done by parents to their children. Religious value education is a process of transferring a set of moral values and norms that serve to guide spiritual life and human life both as individuals and as communities. While juvenile delinquency is behavior of breaking social, legal, and religion norms. This research was conducted among people under age 18 years. The research was conducted on 222 middle adolescents (ages 15-18 years) from two high school that has a tendency to behave delinquent. The results of the regression test there was a significant effect ($R^2 = 0.220$ or 22%) of the urge of sensation seeking, parenting styles and religious value education on juvenile delinquency.

Keywords: sensation seeking, parenting parent, religion value education, juvenile delinquency, middle adolescence.

Background

The progress of a nation is determined by the quality of human resources and human resource quality depends on the quality of education (Nurhadi, 2004). Teenagers are young people who have a very important and strategic role in the development of society, the nation and the state. They are also expected to uphold the values and ideals of the nation's development. Therefore, they are expected to grow and develop as an adult and also qualified, responsible and independent human being. The qualities of adolescent development is influenced by a number of factors both within itself and outside the self or environment (Karma, 2002).

Improving the quality of education as a whole which includes the development of the whole human dimension of the moral aspect, manners, knowledge, skills, and behaviors need to be developed. The development of these aspects lead to the improvement and development of life skills which is realized through the achievement of competence of learners to survive, adapt and succeed in the future (Depdiknas, 2006).

The success of learning can be observed with the positive behavioral changes before and after the study (Sanjaya, 2005). Education is an activity that should be organized to promote learners (Syah, 2003). In fact, Ihsan (2005) found along with the development of science and technology started to show the influence of the less encouraging. It can be observed from many learners did act improperly because of noble values, customs, social norms that should be upheld becoming obsolete. Therefore, the development of science and technology must be accompanied by the development of human qualities (Syah, 2003).

One reflection of the kind of action that is performed improperly learned is deviant behavior committed by juveniles. These behaviors have led towards crime and needs to be pursued handling (Arifin, 1996). Various forms of deviant behavior committed is known as juvenile delinquency. Ediati (2004) explains that juvenile delinquency or delinquency behavior is behavior that violates social norms, laws, and religion is made by people who are minors (under 18 years).

Helen (2000) states that in the late 20th century in every community (east society) as well as western society (west society) we found violations of moral values in the young people, especially adolescence. This problem also occurs in the Indonesian society. Fighting between students, drug use, promiscuity, or the tendency of sensation seeking are some negative things that do teenagers (Murniarti & Beatrix, 2000).

Adolescence from middle class is the group of the teens who do delinquency behavior (Sudarsono, 1995). Adolescent is a period before entering middle adulthood. In terms of developmental age, middle adolescent age range between a minimum of 15 years and maximum 18 years and a student who used to sit on the high school. In addition to high school, there are a couple of middle adolescents attending college early (Monks, Knoers & Haditono, 1996). In addition, middle adolescence is also followed by various changes in physical, cognitive, and social conflict (Papalia, Olds, & Feldman, 2003; Gunarsa & Gunarsa, 2001).

Middle adolescents experience physical changes in their body shape rapidly and becoming more adult-like appearance has been able to reproduce (Monks, Knoers, & Haditono, 1996). In cognitive development, Piaget (cited by Marliyah, Dewi, & Suyasa, 2004) describes the middle adolescence entered the stage full of formal cognitive function. Middle adolescence have been able to draw conclusions in a systematic, logical and abstract thinking (Sarwono, 2000). Middle adolescence began to question the concept of right and wrong which they learned from their parents or other adults. This concept is the phase when they begin understand adult is a human being who can made mistake not immune from error (Iman, Haniman, & Moeljohardjo, 2000).

In the psychosocial development, according to Erikson (cited in Santrock, 2000, 2001) middle adolescence experienced the full search of their identity. They are in a transition period and if they does not receive good guidance, it can bring them in delinquency behavior. At this time, adolescents tend to try new things that have never been experienced and tend to take big risks in behavior. This is due to the tendency of egocentric and unbeatable beliefs. This trend makes teenagers less vigilant and act in a careless behavior. (Geldard & Geldard, 2000).

Based on this view, it can be seen that in terms of psychosocial development in adolescents, this may be one of the reason of delinquency behavior. At this phase, especially young adolescents, they tend to associate the behavior which influenced by a group of peers (Ediati, 2004). When a foul in the form delinquency behavior, it is to gain recognition, acceptance and attention from others, especially from their peer group (Sudarsono, 1995).

Sigler (1995) found that many teens join gangs who usually perform various pathological actions. This is why teenagers behave delinquent because it detracted from peers in his alley. It is also expressed by a variety of studies showing that adolescent deviant behavior is heavily influenced by the peer group (Hu, Flak, Hedeker, & Syddiqui, 1995; Michaell & West, 1996; Wang, Flitzheugh, Eddy, & Fu, 1997).

In general, the activities undertaken by the youth in the gang-related behavior delinquency. Various forms of behavior that do tend to disturb the peace of society such as vandalism, driving at high speed, listen to loud music without considering the environment, drug abuse and sexual deviant behavior (Geldard & Geldard, 2000). Various forms of irregularities committed by juveniles is the result of peer pressure. Adolescents tend to choose the activities that gave rise to a new experience in her life even though they tend to be at great risk of harm to themselves or their surroundings. The selection of the activities carried out because of the urge to seek sensation that culminated in adolescents so that they choose to do a variety of risky activities with peers in the alley that facilitates the fulfillment of these activities (Ediati, 2004).

Based on this, the urge of seeking sensation within adolescence along with their peers is becoming the factor that makes teenager choose to join in the alley with a variety of dangerous actions happens. Zuckerman (1994) explains that the impetus to seeking sensation is a person's tendency to seek diversity, novelty, complexity, sensational feeling and experiences, and individual readiness to accept the risk of physical, social, legal and economic experience carried over.

In addition to these factors, parenting behaviors also affect the delinquency behaviour. Parenting in the process of long-term psychological development help their children to be a center of attention in the family (Gottman, Katz, & Hoover, 1996). Every family has certain unique characteristics from other families. This is due to hereditary factors, socioeconomic status and differences in family forms.

The family is the first one's neighborhood in social contact. Family environment with a supportive atmosphere can make a more healthy individual to live a life. To that end, the family environment affects the development of an individual's personality, especially in adolescence. Teenagers who grew up in a family environment that is cohesive and adaptive tend to be healthier than teens who grew up and was raised in a family environment that is rigid or unstructured family (Zdanowicz, 2004).

In addition to the parenting styles, educating moral values, especially religious values has a significant affect juvenile delinquency behaviour. The value of religious education is a process of transferring a set of values and norms of moral teachings that serve to guide spiritual spiritual life and human life both as individuals and as a society (Wang, 2005). Religion discuss various teachings about man's relationship with God Almighty others, and with nature around (Depdiknas, 2000).

Haniman (2000) also adds that the debriefing of religious values can prevent teenagers from various forms of delinquency. Increasing and strengthening the appreciation of religious values can be used as a beacon of hope that can inhibit the occurrence of problem behavior, especially in the middle teens. Lasmono, Hartanti, and Pramadi (1997) also added that with the religious atmosphere as the practice of reading scripture or fasting, will lead to the establishment of a positive personality. As we can see the value of religious education can be the stressed point which could be use as conflict resolution.

Christie, Wagner, and Winter, (2001) also adds in conflict resolution, the aim is not to avoid conflict but rather to deal with it in a way which minimizes the negative impact and maximizes the positive potential inherent in conflict within the framework of the values of peace. That is, both the solutions which are sought, and the means by which they are sought, are judged against the criteria of being *against* violence, dominance, oppression, and exploitation, and *for* the satisfaction of human needs for security, identity, self determination and quality of life for all people. Based on this, the research conducted to determine the influence of religious values education, sensation seeking, and parenting styles against juvenile delinquency behaviour, and how the religious values education might be use for the conflict resolution.

METHODS

Subjects

The research's subjects were taken based on specific characteristics, ie. Male and female middle adolescence within the age range 15-18 years. The sample used is a male and female students who attend high school. Researchers conducted a survey to several schools and select schools that have pupils behaving delinquen.

This study uses a nonprobability sampling technique. The sampling type is the type of sampling used by convenience sampling technique (based on convenience sampling). This technique is used by researchers to based on several considerations regarding the efficiency, effectiveness, and facilitate research.

Measurement of Research Variables

Measurement of The Urge of Sensation Seeking Variables

Measuring instrument of the urge sensation seeking consists of 4 dimensions. The first dimension of thrill-seeking impulse is an adventure thrill-seeking, which is a desire to do challenging physical activity. The second dimension of thrill-seeking impulse is seeking experience, namely the desire for new experiences. To third dimension of thrill seeking impulse is dishinbition, ie search sensation through social activities freely without any restrictions. The fourth dimension of thrill-seeking impulse is boredom susceptibility, namely the rejection of the things that are routine.

Table 1
Dimension of Sensation Seeking

Dimension	**α Cronbach**
thrill an adventure seeking	0,721
experience seeking	0,752
dishinbition	0,705
boredom susceptibility	0,731

Measurement Parenting Styles

This measure parenting tool using Baumrind's theory (1991) which consists of two dimensions, namely: (a) Parental Responsiveness / Acceptance is a response to the way children accept and support the child, and (b) Parental demandingness is a level of parental expectations and demands of parents to child's behavior is responsible.

Table 2
Dimension of Parenting Styles

Mother

Dimension	**α Cronbach**
Respon	0,869
Demanding	0,806

Father

Dimension	α Cronbach
Respon	0,933
Demanding	0,820

Measurement Value of Religious Education

The measure value of religion education which consist of eight dimension. First, the dimensions of this faith is manifested in attitude do good, deep religious knowledge, practicing regularly. The second operational definitions are grateful to embodied in the attitude of prayer in any condition, enjoying all the gifts, avoiding envy attitude. The third operational definitions are shame that embodied the attitude to live up to the norms, avoid arrogant attitude. The fourth operational definition is fairness embodied in the attitude to think and act in truth, make decisions that are not biased. The fifth operational definition is hearts that are firmly embodied in attitude and action of the words with deeds, not easily influenced, have a permanent establishment, has strong faith in the truth. The sixth operational definition is comity embodied in the attitude of obeying regulations, respect for others, self-deprecation avoid themselves from other people.

The seventh operational definition of self-control is embodied in the attitude of being able to control emotions, have patience, and used to do the job thoroughly and carefully. The eighth operational definition is the responsibility embodied in the attitude of avoiding prejudice attitude, not like throwing the blame on someone else, dare to risk, used to complete the task on time.

Table 3
Dimension Value of Religious Education

Dimension	α Cronbach
faith	0,650
grateful	0,742
shame	0,608

fairness	0,411
firmly	0,647
comity	0,537
self-control	0,558
responsibility	0,619

Measurement Juvenile Delinquency

The first operational definitions is deliquent behaviour that manifested in physical fights, and caused persecution. The second operational definition of delinquency behaviour is causing materials damage and lost such as vandalism, stealling, and extortion. The third operational definition is rage against the status as running away from home, parents argue, cheat, come home late at night. The fourth operational definition of delinquency behaviour which has no caused to other parties such as smoking, drug abuse, alcohol use, sex before marriage.

Table 4
Dimension of Juvenile Delinquency

Dimension	**α Cronbach**
delinquency manifested in physical fights	0,737
delinquency causing casualties materials	0,821
against the status	0,845
delinquency caused no casualties other	0,788

RESULT

From the calculation of the value of regression is also value R = 0.469, coefficient of determination R^2 = 0.220, the value obtained from squaring the correlation coefficient (0.469 x 0.469). It also showed that 22.0% contribution of X1, X2, X3 on Y while the rest influenced by other factors (100% - 22.0%). Thus there are significant boost sensation seeking, parental upbringing and education of values on behavior in middle adolescents delinquency.

Furthermore, regression analysis can also be observed that the value of F = 10.129 and p = 0.000> 0.05 means there is the influence of variables X1, X2, X3 to Y. Furthermore, the data obtained Sensation seeking has a value of t = 4.223 and p = 0.000> 0.05 means unacceptable H0 and H1 is accepted. So there is a significant effect of sensation seeking to behavior delinkuensi. Furthermore, the data obtained also the value of religious education has a value of t = -5.045 and p = 0.000 unacceptable means H_0 and H_1 is accepted. So there is a negative and significant effect of education on behavior delinkuensi value. While the value of t for all the good parenting mothers and fathers result is no significant effect.

R ²	*F*	*p*	*t*	*p*
0,220	10,129	0,000	4,223 (Sensation seeking)	0,000
			-5,045 (value of religious education)	0,000

Dependent Variable: Juvenile Delinquency

CONCLUSION, DISCUSSION, LIMITATION AND SUGGESTIONS

CONCLUSION

Based on the data analysis has been done on the effect of sensation seeking urge from peers, parenting styles, religious education to delinquent behaviour and moral values can be concluded that **there are significant influence to delinquency behaviour roots from sensation seeking urge from peers, parenting styles, religious values**. This suggests that the three independent variables (urge of sensation seeking behaviour from peers, parenting styles and religious values education) has significant influence on the dependent variable (juvenile delinquency).

DISCUSSION

Based on the analysis of data taken together indicate no effect of the urge of sensation seeking, parenting styles on delinquent behavior and religious values. Although the independent variables together, but after giving effect seen in isolation from the influence of test variables turn out to be a significant influence, but some are not.

From the data processing resulted in three main points. First, there is the influence of sensation seeking to boost delinquency behavior. In this case indicates that the higher boost of sensation seeking among peers within the subject, the higher gathering owned delinquency behavior. Conversely, the lower the urge of sensation-seeking subjects who possessed the lower the subjects on delinquency behavior. The results are consistent with the statement Geldard and Geldard (2000) which states that teenager delinquency behaviour influenced from peers in their environment.

In general, the activities undertaken by the youth in the gang-related delinquent behavior. Various forms of behavior that do tend to disturb the peace of society such as vandalism, driving at high speed, listen to loud music without considering the environment, drug abuse and sexual deviant behavior It is also expressed by a variety of studies showing that adolescent deviant behavior is heavily influenced by peer group (Hu, Flak, Hedeker, & Syddiqui, 1995; Michaell & West, 1996; Wang, Flitzheugh, Eddy, & Fu, 1997). Various forms of irregularities committed by juveniles is the result of peer pressure. This happened because of the influence to found sensation seeking to determine young people to choose the form of the activity in sensation seeking along with peers (Ediati, 2004).

The second thing that could be obtained which contained influences of parenting styles to delinquency behavior. The influence of parenting was obtained when this variable in the regression together with the urge of sensation seeking and educational value. But when viewed from different test results (t) partially (separate / tested one at a time) generated from the results of the regression test can be seen that the effect produced by the parenting styles with various forms of the delinquency behavior was not significant compared with the urge of searching for sensation and religious values education. This is in line with the statement Ediati (2004) that in terms of psychosocial development in adolescents there is the urge to seek sensation that culminated in adolescence. At this time especially young adolescents tend to associate the behavior which they will be supported by a group of peers. When a person form delinquency behavior, it is purpose to gain recognition, acceptance and attention from others, especially from their peer group (Sudarsono, 1995). It can be concluded that the study subjects can be seen the influence of peers is stronger than the influence of the values of the parents.

The third results that can be obtained from this study is that there is a significant effect of education on delinquency behavior it is from religious values education. These variables are shown to have the strongest effect compared with the urge of sensation seeking and parental upbringing. Besides the influence of the value shown Beta (B) and Test different (t) in the regression test showed the value of minus (-). This shows that the higher the value of religious education within the subject, the lower the subjects of delinquency behavior. Vice versa, the lower the value of religious education, the higher the subject 's delinquency behavior . This is in line with the statement Haniman (2000) which revealed that the debriefing of religious values can prevent teenagers from various forms of delinquency. Increasing and strengthening the appreciation of religion can be used as a beacon of hope that can inhibit the occurrence of problem behavior, especially in the middle teens. Lasmono, Hartanti, and Pramadi (1997) also added that with the religious atmosphere as the practice of reading scripture, fasting, will lead to the establishment of a positive personality.

LIMITATION

This study has several limitations, namely the proportion of the study sample. Researchers initially wanted to try to explore the phenomenon of juvenile delinquency in various high school students who have a tendency to behave delinkuen by taking samples from various representatives in the five regions of Jakarta. However, because of not obtaining permission from the school attended by some researchers then finally just a sample obtained from both the Jakarta area alone, namely SMK A of East Jakarta and SMK B of South Jakarta. Thus if you want to generalize this study may represent only delinquency behavioral phenomena in both the Jakarta area.

SUGESSIONS

Suggestions Relating to Theoretical Benefits

This research can provide benefits to the field of educational psychology, especially for the field of education, especially psychology of religious education, social psychology, family psychology and adolescent psychology. Suggestions for researchers themselves that researchers are increasingly recognizing the importance of teaching values contained in religious education to establish better manners. Advice from researchers to the field of adolescent psychology is critical during adolescence is a time to determine their destiny. For that, by directing the behavior of adolescents to participate in religious education it is expected that adolescents obtain religious values can be internalized in his life. Thus, the behavior of teenagers will avoid delinquency various forms of behavior that would harm themselves and society in general . In addition, researchers also suggested that in adolescents there is a boost in self-sensation seeking adolescents . Therefore, adolescents also need to be given various positive activities while fulfilling the urge sensation seeking in self.

Suggestions given to the field of social psychology and psychology education, especially religious education. Education in the social environment is an important factor for the development of personality of students to be better person. By creating a conducive atmosphere, intensive religious education it will make teens buliding habbit of good manners. This can be the prevention from delinquency behavior. Education on the basis of morality is also very important to give to the students, not just education that teaches a variety of science against the backdrop of the reasoning alone. While the suggestions relating to family psychology that applying democratic parenting teens will reduce delinquency behavior (especially delinquency victim and against the state of matter). For the application of proper discipline from parents will build mental self-discipline in adolescents to avoid juvenile delinquency.

Suggestions for Further Research

Suggestions for further research that needs to be examined is about taking an adequate number of samples. In this study, although there are enough number of subjects (222 subjects), but that number represents only two Jakarta area alone. Therefore, further research suggested by researchers to conduct first approach to those schools that have students behave juvenile delinquency in various areas of Jakarta that have not been

covered in this study. Thus if a sample can be obtained from the school in Central Jakarta, North, West and it will mewaikili Jakarta area in general.

Another suggestion for further research on the place of research. Researchers also suggested to conduct research in other areas outside Jakarta. Thus the results of these studies will further complement the existing research and may be a recommendation for the National Education Ministry for handling juvenile delinquency programs in the future. It also needs to consider cultural factors in the development of measuring instruments, measuring instruments, especially the urge sensation seeking. In subsequent research can be conducted by making a new item measuring or with the culture in Indonesia is different from American culture as thrill-seeking impulse measuring instrument used is an adaptation of the measuring devices used in America.

Suggestions Relating to Practical Benefits

Advice given to institutions engaged in education as well as school principals and religious education teachers to develop a better religious education. With the intensive development of religious education in the school environment will make the school can improve the quality of education in schools as well as a better gain trust from the community to provide the best service in the field of education.

Religious education is recommended not only achieve cognitive students only, but is no less important religious education should also be able to touch the realm of affection to be more sensitive to the social environment and also comes with actions (psychomotor). So the students are also involved in practices that inculcate religious values forming students who have a good mindset, a feeling that is sensitive to the surrounding environment, and lots of action to help and assist others. This suggestion is particularly intended for the Ministry of Education as a driving force to make the curriculum in religious education. Thus, the purpose of education is to educate the students can be accomplished as well as possible and keep the teens to fall into a variety of juvenile delinquency.

The next suggestion is also intended for parents to be able to understand the psychological aspects of their children so that every child needs can be fulfilled and free from delinquency behavior. Caution and good education can lead children to become better. Parents have an important role to instill moral values more than the teachings of the religions practiced in their respective families. In addition, parents also play a role as a friend to his children to listen to any complaints and monitor the activities and behavior in order to be better.

The last suggestion for students who behave delinquent should be to try to explore and practice the values that exist in religious education in order to change behavior for the better. This can be achieved by finding positive activities such as attending boarding lightning, retreats, meditation, or actively take charge in their respective places of worship. If there is a boost in self-sensation seeking adolescents, there may be a good idea to follow a variety of search activities sensation but remains in positive terms such as activities, nature lovers, rock climbers, youth, and sports. Thus creating a young generation in the future the students will direct their behavior becomes aligned with the prevailing norms and can achieve the best performance in school so useful to the family, nation, and state.

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The Growth of Science in Developing Nations: A Discourse in Intercultural Philosophy

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Abstract

Conceiving science in national contexts seems a conceptual absurdity. This sense of absurdity derives from the positivists idea of scientific objectivity. Scientific objectivity has two components: intersubjectivity and epistemic reliability. Intersubjectivity means that scientists achieve consensus about the conclusions they reach. Epistemic reliability means that scientists get it right about the world. In sum, scientific objectivity means "that scientific knowledge should be justifiable independent of anybody's whim" (Popper, 1975, p.44). It means that the element of the person of the scientist does not enter into scientific investigation. There is no bias in science. This implicates the internationalism and universalism of science. But Feyerabend's (2000,p.493-502) "theoretical pluralism", "methodological opportunism", "anarchism" or "anything goes" constitutes a denial of the positivists' objectivitistic conception of the scientific method. Against the backdrop of Feyerabend's conception, we can discuss science in national contexts – in developing nations, for instance. This is the objective of this paper. For clarity and brevity, the tool applied for this discourse is the center-periphery dichotomy intellectual construct. This construct reveals that the growth of science in developing nations is imperialistically tied to the development of science in developed nations.

Introduction

Science has been conceived in a wide range of senses. Close analysis, however, reveals that the use of the word is sometimes so empty that it really signifies nothing in the intellect. When a fan, for instance, says that his team plays scientific soccer; no real meaning is conveyed by this assertion. Some other times the use of the word is merely honorific, that is, science is used to confer dignity on the activity qualified. This appears to be the case of a barber who says he gives scientific haircut. In both cases one is misled about the real definition of science. There are many other instances of misleading use of the term.

In the history of the march of civilization, two main senses of science are decipherable. One sense is loose. Science in this sense is the systematic pursuit of knowledge. This sense of science is inclusive of all the academic disciplines: philosophy, theology, history, physics, chemistry, and biology. Science and knowledge are in this regard co-terminus.

Another sense of science is as significant as it is strict. This sense became current with the 17th century revolution in science. Against the backdrop of this revolution, science becomes the institutionalized (scientifically methodic) system of inquiry. "The discovery of explanations built into the logical structure of nature" (Burth, E.A. 1945, p.15). The empirical or experimental natural sciences become paradigmatic of science (Holton, 1986, p.283); that is, the microphysics of atomic theory and quantum theory, the chemistry of hydrogen, molecular biology (genetics) become the models of science. Science becomes those activities associated with scientific communities and scientists such as Robert Boyle, Galilei Galileo, Isaac Newton, Albert Einstein. Science in this sense becomes restricted to those disciplines that try to explain the "perceptible phenomena of this world. In this sense, philosophy, theology, history, and such disciplines their subject-matter are not amenable to experimental treatment and their body of knowledge cannot be couched in mathematical language are expelled from the domain of science. In this sense, science and philosophy, *prima facie,* embark on journeys in opposite directions. This is the sense of science adopted for the purpose of this paper.

Features of Science

Conceived in this sense, science has striking and significant features. One such defining feature is that science is universal. According to the universalist ethos of science "the acceptance or rejection of knowledge claims is totally independent of the personal attributes – sex, race, nationality, religion, or social class – of those who make them" (Crawford, 1992, p.29). This has aptly been called by Ziman (1974, p.11) "the public and consensible" feature of scientific knowledge. This means that what goes by the name science must be published and tested by other competent and disinterested individuals and found universally acceptable. Scientists work cooperatively checking and cross-checking each other's contributions to ensure agreement, generalizability, and reproducibility of results. Science aims to achieve a consensus of rational opinion across the widest possible spectrum of experts. It aims to achieve inter-subjective agreement among relevant experts regarding scientific knowledge-claim. Science is therefore, essentially or inherently, international or

supranational. That is, it is not encumbered by the conflict of values as obtains in cultural expressions. Science is a social and corporate enterprise. There is and can only be one scientific community.

The universality of science derives from the scientific method. According to this essentially logico-inductive or the positivists' conception of scientific method; "science proceeds in a series of well-defined and clearly separated steps. First we find the facts (or phenomena). Then we derive laws. Finally we devise hypotheses for explaining of the laws" (Feyerabend, 1999, p.212). This implies that there is a logic of scientific discovery; a system of rules that must be adhered to uncompromisingly if one hopes to achieve successful result in a scientific investigation. It also means that science proceeds in objective standards independent of history, circumstances, politics, military, psychology, idiosyncrasies, religion or prejudices. The positivists' view suggests that the scientific method is a perfect method rigidly applied come what come may. Experiment becomes the hallmark of science. Non-rationalistic forms such as speculation and imagination are expelled from the foundation of the Universalist ethos of science as mentioned earlier.

It is consequently absurd, obviously a conceptual contradiction, to talk of science in the context of nationalities. To talk of Nigerian biology, American physics, German chemistry, British astronomy, is to deny the so much vaunted universalism of science and scientific internationalism.

Scientific Relativism

The crux of this paper is to talk about science in national contexts, an approach rendered tenuous by our conception of the scientific method and the feature of scientific universalism. The question then is, how is it possible to talk about science in the context of nationalities? How can we discuss the development of science in a developing nation such as Nigeria? Is the idea of national scientific community not a contradiction of the conception of science as essentially international? Can science be relative?

One way of making it possible to talk about science in relative terms is to deny the positivists cannon of a unique and universally applicable scientific method. This is exactly what they do those who conceive science as socially constructed. One of the most vocal in this camp is Paul K. Feyerabend (1999, p.126). According to him, the history of the development of science shows that "there is no method, and there is no authority." He thus means, he explains, that the only thing constant about scientific method which every scientist adheres to is "anything goes." Contrary to the position of the positivists, the scientific method seldom proceeds in accordance with any logical demands; that is, the so-called steps in the scientific method has each occasionally been violated in the history of scientific research. Anarchism rather than steadfastness appears to be the rule in scientific research. Against this backdrop, Feyerabend suggests his own "positive methodology for the empirical sciences." He calls this positive methodology "theoretical pluralism." According to Feyerabend's theoretical pluralism, we should apply in scientific research a plurality of mutually inconsistent theories, playing them off one against another so as to uncover their weakness. This method is based on the recognition of the human origin of explanatory

systems and that theories can only be fallible guesses that ought to be improved through critical comparison one with another.

Theoretical pluralism means to show that there are no generally valid rules, that no general methodology which is independent of historical circumstances, psychological dispositions, and religious orientations, guide our scientific steps uncompromisingly.

Theoretical pluralism means to assimilate science and art (Newton-Smith, 1981, p.125). It means to demonstrate that science is merely one of the many traditions. Their subject-matter is generally agreed to be ineffable. They have no rules, no method, and no logic. Art is the expression of the private opinion of the artist. If the artist strikes a note in a wide and broad spectrum of people, this is accidental not necessarily his objective. Art is based on genuine differences of taste, feeling, and culture. There is no dispute about taste, and you cannot experience other peoples feeling. The existences of irreconcilable schools of thought, the multiplicity of viewpoints, indicate that in art consensus is not a criterion and there is no urge to achieve it. Avant-gardism is not simply permissible; it is irresistibly admissible in art. These are precisely what excite Feyerabend about art and he urges that science should emulate those. He is also excited by the fact that art has managed to resist the vociferous demands of reason; excited by art's pluralism, its use of the method of multiple representations and the freedom of artistic creation (Feyerabend, 1999, p.7).

In equal terms, he deplores what he calls the "monistic" ideology of science which he says inhibits freedom of thought. He therefore admonishes scientists to emulate these features of art strongly hoping that when this is done human knowledge and freedom will be improved.

The implication of Feyerabend's theoretical pluralism is science-art assimilation leading ultimately to relativism in science. If science becomes relative, it becomes something like poetry. He writes that science is simply one of the so many pastimes humans have invented to amuse themselves. It is one of the "supermarkets" just like art or religion from which humans select what they want (Feyerabend, 1999, p.7). If the assimilation of science and art is executed as Feyerabend endeavours to do, then science becomes inherently culture bound or national.

The history of the development of science does not, however, support the relative conception of science. On the contrary, the history of science is replete with examples of scientists who have as their official philosophy positivism, the logico-inductive conception of the scientific method, the view that science arrives at truth by logical inference from empirical observations. Science has many successes and fruitful results to show for adopting this philosophy. Science is not relative; it is not inherently national and so we cannot base any discussion of science in a developing nation on that ground.

Science in Developing Countries

If science is not inherently national, how can we talk about national differences in scientific development? In actual fact how can we talk about science universalism and internationalism on the one hand and nationalism on the other? How can we talk about the development of science in national context?

The notion that socio-cultural conditions (religion, class structure, and language, type of government, library, and facilities for intellectual work, public understanding of science, and the value placed on science) govern the development of science, though it has been there since the industrial revolution, became accentuated after the World Wars. Since the world wars, especially the World War II, science and the industrial state are involved with each other in a symbiotic and synergetic relation. This means that science is now used to achieve national goals, aspirations and pride, in turn the development of science is influenced by national characteristics. Consequently science loses its autonomy – a definitive feature which, at its inception in the 16th/17 centuries insulated it from and or made it independent of national needs and concerns. Against this setting, we can now talk of national sciences. We can now talk of science in developing countries without fear of conceptual contradiction.

The development of science in developing countries, like African countries, has the best chance of being clarified and understood if examined in the light of the analytic construct, the center-periphery dichotomy. According to this intellectual construct, the world of science is divided into two, the center (or centers) and the periphery. Today, the scientific centers are the industrialized nations of Europe and North America; Japan not excluded. The periphery is constituted of developing nations of Africa, South America, Middle East and Asia. In this construct, periphery means inferiority and dependence. Scientific development in the light of this construct is basically a process of diffusion and transplantation of models from the center to the periphery. All that the peripheral countries can hope to do is to copy the models or the organization of scientific work at the center and thereby adopt its work orientations. The relation between the center and the periphery is best described as cultural or scientific imperialism. The center will always occupy a top monopolistic and independent position; while the periphery will occupy low and dependent position.

In the same light of center-periphery dichotomy, science in developing countries is characterized by imported concepts, procedures, and methods. Thus there is in the developing countries the problem of imitating or copying scientific ideas and high technologies from developed or industrialized nations. Developing countries apply already existing knowledge developed in scientific communities of developed countries to their problems and depend on technologies transferred therefrom. The implication is the absence of knowledge of the ecology of developing countries. There is the problem of technology transfer. Scientists in developing nations should tackle problems relating to their situation instead of replicating research done in developed nations. There should also be appropriate technology rather than high technology transferred from abroad. The idea of doing research in universities in peripheral countries simply because a prestigious university at the center has the idea, needs some data, or wishes to test something out, is antithetical to the development of science in peripheral countries. Scientific imperialism is executed sometimes in the name of overseas funding. A lot of money is given to do research for the donor country. The creative energy of a young man from a developing country is spent day and night toiling to provide for somebody so far away and on an issue not relevant to him instead of concentrating on what is relevant to his situation.

It is a feature of science in developing countries that there is low value placed on it. By this we mean that the relevance of science is not fully appreciated by individuals,

policy makers and governments. It is either they don't understand what the scientists are doing or they are impatient for the results, which usually take long to come. A comparative study of science or religion or engineering, or administration, shows that any of these has more value than science in most developing countries. In Nigeria for instance, government funds pilgrimages to Holy lands more than scientific researches. In developing countries, scientists get more recognition outside science. That is, on maturity as a scientist, one gets appointed as an administrator, a minister, or such a responsibility that takes one away from science. Thus within developing countries, there is brain drain from the scientific community of developing countries to other areas or scientific research institutions and universities abroad. The reason for this kind of brain drain is found in the center-periphery dichotomy but sometime in the fact that governments in developing countries mostly fail to provide enabling environment for trained scientists to carry on their research back home. There are institutional problems. Extended family setting is an entanglement and is time consuming. It leaves little time for research. The equipment when available is either rudimentary or primitive. Support staffs (technicians) are either not there or not well trained. In highbrow universities where scientific researches are supposed to be going on, you find that there is no electricity, no running water, no books, and no periodicals. There is often political instability which restricts scientific research. And over and above there is usually little or no funding.

Current advances made in electronic communications have given us networking technologies such as the internet, mobile phone technology, Voice Over IP Telephony (VOIP), satellite communications, e-mail, video-conferencing, browsing, e-library and a lot of others still in their infancy. Communication is the age-mark of this age. But this is as far as industrialized nations are concerned. There is still the problem of communication within and without the scientific community of developing nations. Scientific activities in developing nations are isolated. There are scientific ideas and technical know-how that can be shared within and without the scientific community of developing nations. There ought to be more communications between scientists and when this is achieved, you will discover that there is a lot of scientific information that may be of use both to other parts of the developing and developed nations. Closely allied to the above is the lack of genuine cooperation between developed and developing countries in scientific matters. There should be mutual exchange of visits and information. The relationship should not be missionary in which developed countries are on top and developing countries below.

Conclusion

We started with noting the two major senses of science: the loose sense which is co-extensive with knowledge; and the strict sense which is an institutionalized (scientifically methodic) system of inquiry. In this sense, the natural sciences are paradigmatic of science. This is the sense of science adopted in this paper.

The striking features of science conceived in this sense are universalism and internationalism. These derive from the positivists' conception of the scientific method as an objective, well defined and standard procedures adhered to uncompromisingly. Science is thus 'consensible'; that is, it is generalizable and reproducible in the widest possible spectrum of experts. The implication is that science is supernational; and apparently a conceptual contradiction to talk of national science or science in developing countries.

P.K. Feyerabend, however, denies the existence of scientific method, as the positivists want us to believe. He says that the method observable in the history of scientific research is “anything goes”. He thus advocates “methodological opportunism or anarchism”. Persuasive as Feyerabend’s scientific relativism may be, his view is not supported by the history of science.

The notion that socio-cultural conditions govern the development of science became accentuated during the World Wars. Against this background we can then discuss science in national contexts without fear of conceptual contradiction. To do this discussion we applied the intellectual construct of center-periphery dichotomy. According to this construct, the development of science in developing countries is inextricably tied to science in developed countries. This renders science in developing countries mere replications of science in developed countries and makes advancement near impossible.

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Indonesian Primary School Students' Perceptions on Academic Help-seeking Behaviour

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Abstract

When students face academic difficulties and seek help it is considered to be an adaptive behaviour. However, studies indicate that some students are reluctant to adapt and seek academic help when they need it. Education in Indonesia is slowly moving from a teacher centred to a student centred focus. Under a student centred focus, students should have a much more central role in the processes of their learning. This study aims to investigate Indonesian primary schools students' perceptions of academic support available to them and their own academic help-seeking behaviour (AHS). Fifty five students from five primary schools in Jakarta participated in focus group interviews. QSR NVIVO 10 software was used to identify the main themes that emerged from the data. Results indicate that students find it difficult to ask for academic help even though they believed that they should ask for help when they need it to improve their academic success. Student identified factors that support and inhibiting AHS are presented. The study also confirms that teacher's behaviours are a significant influence on students AHS. The impact of peers and students' own internal factors on AHS are also considered. Listening to the students' voices about their experience of asking for academic help provides a better understanding of the nature of AHS. Also this study provides guidance to facilitating a more conducive and effective environment for students' AHS in Indonesian schools; and this in turn may provide some directions for other contexts.

Keyword: academic help-seeking; primary school students; students' perceptions

Introduction

Many students encounter academic difficulty when they are trying to understand new materials, and undertaking tasks such as exercises in class, and doing assignments and homework. When students face such difficulties, it is useful for their learning if they are first aware that they need assistance (Newman, 2000) and then in recognising their need request help from their teachers or peers. This behaviour is considered to be adaptive behaviour (Karabenick & Knapp, 1988; Nelson-Le Gall & Glor-Sheib, 1985; 2000). Their behaviour is described as adaptive because the students have to adjust their behaviour from their normal approach of being reluctant to seek help to a proactive approach in seeking help.

Many studies have found that some students are reluctant to seek academic help when they need it (Butler, 1998; Newman & Goldin, 1990; Ryan, Gheen & Midgley, 1998; Ryan, Hicks & Midgley, 1997). Students who are reluctant to seek help also rarely take an active role in their own learning, in particular, when they face learning challenges and difficulties. When students do not seek help when they need it, they are at a significant disadvantage in their learning and academic performance compared with other students (Ryan & Pintrich, 1997; Ryan, Pintrich, & Midgley, 2001).

Why is it important for students to seek help? In order to answer this question we need to remind ourselves of what learning is. Learning occurs within a learner; it is the learner that is the active person in the process of learning (Biggs, 2003). Clearly though learning also often involves teaching, which is a process of facilitating learning through the provision of guidance and information by the teacher. However, it is the learner that needs to make sense of and incorporates new information and skills. Impediments to learning can occur at a number of stages in the process, but critically, if the learner is not able to incorporate new things (learning), then clearly learning has not occurred. In learning, a student often identifies and uses resources; particularly human resources such as their teachers and their peers. One of the things that teachers often do is to provide scaffolding and encouragement for students so they can further access resources to facilitate their learning (Rasku-Puttonen, Eteläpelto, Arvaja, & Häkkinen (2003).

When students face learning difficulties they often use problem-solving approaches (Marais, van der Westhuizen, & Harm, 2013). Students are faced with problems of understanding, and need to make choices about what to do about the problem. Ignoring the problem is avoidance, and this rarely results in learning. In order to learn, when problems that prevent learning emerge, students need to be able to identify and solve such problems. They often do this on their own, but they are also often challenged to engage and collaborate socially with others sharing their own and drawing on others knowledge and opinions (McCaslin & Good, 1996).

Education in Indonesia is undertaking significant reformation. This is in part driven by the Indonesian Government implementing policy aimed at improving the quality of learning process and services, to achieve better learning outcomes (Depdiknas, 2007). These changes in education in Indonesia are bringing about a paradigm shift from a teacher centred approach into a student centred approach with a strong emphasized on learning inquiry (Harsono, 2006; Marsigit, 2006). Under a student centred approach the student has a much more central role in directing and controlling the processes of

their learning. It requires active learning (Biggs, 2003) and participatory learning (Warhurst, 2006) as opposed to traditional modes of "instruction" (McDermott, 1997). There is a change of focus and Teachers and students have different roles under this new paradigm. In bringing about a paradigms shift, it is not unusual for there to be resistance and difficulties (Bjork, 2004; Marsigit, 2006; Richards, Gallo, & Renandya, 2001; Yeom, Acedo, & Utomo, 2002). Despite positive Government policy, traditional systems and processes of education in Indonesia are well entrenched historically and culturally. This entrenchment is across the whole of society including parents, employers and students, and teachers in particular have difficulty in undertaking the paradigm shift required.

We have observed in other Indonesian classrooms, when teachers asks students whether the students have any difficulties in understanding the materials or not they rarely get a reply or response. Students usually just sit passively and wait for the teacher's instructions. Teachers too are well established in using teacher centred approaches in their teaching and rarely facilitate interactive sessions with students (Bjork, 2004; Kristiansen & Pratikno, 2006). However, under a student centred learning approach, students must be actively engaged in the learning process (Motschnig-Pitrik & Holzinger, 2002). Students need to be able to monitor their own learning and actively seek help as they need it, and in this process it is important for them to be able to ask questions. There is lack of research on the topic of academic help seeking behaviour in Asia and in particular in Indonesia and this study contributes to the literature on this topic and provides an opportunity to better understand the changing nature of education in Indonesia.

This study investigated student academic help-seeking behaviour in the classroom, and aims to understand student behaviour in their natural setting. It captured the different views of students about academic help-seeking. Specifically, it explored on 6-year primary school students' perceptions of their own behaviour related to academic help seeking behaviour in Jakarta Indonesia.

Methodology

Data was collected from September 2012 through to January 2013 in East Jakarta, Indonesia. The study used a qualitative approach in exploration of students' perceptions about their academic help-seeking behaviour; primarily through focus group interviews. These interviews captured the participants' point of view about the importance of help-seeking behaviour for them.

Participants

Fifty five students (male = 26; female = 29) across five primary schools participated in eleven focus group interviews in this study. The participants of this research were from sixth grade primary schools. The average age of these students in this study was 11.14 years old.

Data collection and analysis

Data was collected through semi-structured focus group interviews. Students were in groups of six to seven and under the guidance of the research discussed a series topic about students' academic help-seeking behaviour. Both closed and open-ended

questions were used in this process and the discussions were recorded using an audio recorder. QSR NVIVO 10 software was used to organise and analyse the digital data. Some examples of interview questions that were used are: 1)"What did you do if you have problems with your learning process?", 2) "What is it about a teacher that makes it difficult to ask him/her for help? Tell me about it"

Data analysis involved a close examination of student responses at various levels from the broad topic level down to specific examples and nuances. Coding related to a response by a group of students and by individual student, often down to a word or phrase level. The coding of these data sets resulted in hundreds of code tags, which were then further refined in groups allowing the different main themes to emerge. That is, the themes emerged from the data (Saldana, 2009).

Results and discussion

Major themes regarding students' perceptions on academic help-seeking that emerged are: *the nature of academic help-seeking; the role of teachers; peers factors* and *students' personality*. Details of each theme are described as follows. Pseudo-names are used in this paper.

The nature of academic help-seeking

Students indicated that asking for academic help when they need it is important to them. As the participants in this study were students at sixth grade they were very concerned about the National Exam that they were due to undertake in a few months. Their answers to questions in the interviews reflected this situation. Generally they wanted to get a high score so that they could continue their schooling. Most of the students contended that they do need to approach their teachers or other people that might help them to help them solve academic problem. As quoted from one participant, "*For us it is also [important] so that we can understand how to solve a problem…So that we can get the highest NEM score.* (FGI-1: Aditya, 19/11/12).

Students also said that they recognise that seeking academic help and support is important to them because it can help them improve their understanding of subject materials. Some stated that by asking questions they would be in a better position to solve similar problem in the future; increase their own understanding and knowledge and to satisfy their curiosity. Some students also indicated that asking questions is important because it might help them to get a better mark that will lead them to better academic achievement. However, although they were aware of the importance of seeking help, many of these students were still reluctant to ask for academic help from their teachers even though their teachers gave them the opportunity to ask for help. One participant said: "*I never ask for help to my teacher, ever"* (FGI-5: Karimah, 10/12/12).

This study found that the reasons for not asking help varied from being "*afraid of their teacher*" to "*I do not ask for help because I am lazy*". Another student stated that "*she does not know what to ask"*. Another said that he was being *lazy*. One participant confessed that she felt *shy* to ask for help in the classroom. From all the reasons that students gave in the focus group interviews, the researcher categorized them into three main themes which were: the role of the teachers, the role of peers and the students' own internal factors. Each of these themes will be described in the next section.

Student may have different attitudes towards academic help-seeking and reasons to or not to seek academic help when it is needed. Some students did not ask for help even though they could not solve the problems on their own. According to Nelson Le-Gall (1982), the decision whether or not students asked for help is based on the cost-benefit that might apply to the student. If the cost outweighs the benefit then they will be unlikely to ask for help. The characteristic from the sixth grade students is that they start to find out and realize of social comparison with their peers. Since seeking academic help involved an interaction with other people, therefore students would likely start to think about the risk before asking help from other (Butler, 1998).

The role of teachers in students' academic help-seeking

Previous studies have mentioned that teachers have significant roles in students' academic help-seeking (Butler, 2006; Le Mare & Sohbat, 2002; Oortwijn, Boekaerts, Vedder, & Strijbos, 2008). One of the important roles emerged in this current study was their support and responses to students' questions. Other studies have also found this to be the case (Karabenick & Sharma, 1994; Kozanitis, Desbiens, & Chouinard, 2007). Another essential factor that was found in this current study, related to students' academic help-seeking, was the teachers' characteristics, and this is also identified by Le Mare & Sohbat (2002) as an issue in their study.

Teachers' support and responses to students' questions

During the interviews the students noted when their teachers provided a good answer to their questions they will most likely ask more questions as stated by one student, "*Because the explanation is clear so that we can understand easily* (FGI-1: Evi, 19/11/12). Furthermore, student valued a teacher who is always willing to answer their questions seriously, "*Because he (always) answered students' questions without being angry, seriously and not just joking"* (FGI-2: Rio, 19/11/12). Students also noted that teachers who respond nicely and with respect were favourable, *If we ask something she respects our questions.* (FGI-1: Aditya, 19/11/12). Moreover, students like it when their teacher re-explains slowly things that they do not understand making sure that they comprehend the content and the principles (FGI-2: Rio, 19/11/12).

However, students also noted that some teachers gave them negative responses when they had difficulties, which made them reluctant to seek academic help at the time. When asked about how teachers answer their questions one student replied, "*Well, yes sometimes when I want to ask the teacher…she said to me, "You can find it in your book, you should be able to do it by yourself"* (FGI-2: Lisda, 19/11/12). Another participants explained that the teacher's explanations sometimes were unclear, "*Sometimes (the explanations) made us dizzy (frustrated)"* (FGI-1 and FGI-6: Ulfa, Fani, 19/11/12). One participant said that he was afraid of being laugh,"…*because if I were mistaken (I was afraid of being) laugh…*" (FGI-4: Gunawan, 10/12/12). Several students worried that their teacher will angry to them if they asked questions (FGI-1: Ulfa, 19/11/12). Another student complained that their teacher made fun of their questions such as, "*So that when I want to ask something he makes a joke and then I forgot what I want to ask.* (FGI-9/10: Arif, 14/12/12).

Some students also recognized "don't disturb me" message from their teachers. Students shared that sometime they wanted to ask for academic help, however they

saw that their teacher was busy at her/his desk and did not and did not want to be disturbed and the students were reluctant to ask for academic help from their teachers under such circumstances. A quote from one of the participants, ”*Sometimes we have been asked to come forward. Sometimes we were ignored; she [just] concentrated on her works and her laptop…* (FGI-2: Eni, 19/11/12). These kinds of messages were interpreted by the students as their teachers did not want to be interrupted by their questions. A study from Babad et al. (1991) explained that students were able to detect through teachers' nonverbal behaviour (teacher immediacy) and recognized whether or not their teacher truly care about their students. Richmond (2002) indicates that teacher immediacy behaviours actually can be of benefit to the teacher in gaining their students trust by showing to their students that they are competent and care. When teachers gain students' trust their students are more likely to feel comfortable to ask for academic help and engage more on the learning processes.

Teacher's characteristics

Another important factor emerged in this study was teachers' characteristics. Students identified what kinds of teachers' characteristics encouraged or did not encourage their academic help-seeking behaviour.

Characteristics such as *"tough and stern teacher"* or when teachers *made fun of their question* and *scary* can undermine students' academic help-seeking behaviour. Furthermore, some students also noted that some of their teachers demonstrated *ignorance*; *lack of communication* and *having [a] loud voice* which likely inhibit them asking for academic help. Often students feel that their teachers *did not appreciate their questions* as stated followed, *"My teacher ignore my questions, I feel that she did not appreciated me"* (FGI-1: Ahmad, 19/11/12). Another student seemed to have a sense that their teacher was always busy with themselves such as leaving the class or busy with their own tasks (FGI-1; Evi, 19/11/12),"…*Mrs Diana often leaving our class for a workshop, or busy with her own task in her desks"*.

Teachers' characteristics that students' viewed as being easy to approach were**:** nice, clever; understanding, friendly and caring. Another student stated that having a close relationship with their students is important for their teacher; as is smiling; being humorous in class. They also perceived that a teacher who *was relaxed and not too formal* as being easy to be approach and a *patient* teacher helped them be comfortable. Other students pointed out that being *firm*, *thorough* and having a *broad knowledge* are important characteristics. One student stressed that having access to senior teachers with more capabilities and experience was important as stated below:

> *For example, if this teacher age is 21 years old than his/her experience is only a little. That will be different from the teacher that older with much more experience.* (FGI-9/10: Ridwan, 14/12/12).

This study found that teachers' behaviour, both verbal and non-verbal, influence students' academic help-seeking. The way teachers responded to students' questions are important to enhance students' academic help-seeking behaviour. These findings are in line with a study from Karabenick and Sharma (1994) who found that teachers' support of college students' questions influenced the way in which students formulate questions. Furthermore, a study on undergraduate students from Kozanitis et al (2007) showed that teachers support and responses directly determined students instrumental

help-seeking approaches. Both of these studies from Karabenick and Kozanitis were conducted in quantitative approaches. The research described in this paper captures the students' voices and because of this provides rich exemplars and deeper understanding of students' perceptions of their teachers' responses two their academic help seeking needs.

This current study also reveals that students asking for academic help from their teachers also depend on the teachers' characteristics. Some of the results in this study were similar to the results from Le Mare and Sohbat's study (2002). According to Le Mare and Sohbat there are ten categories of teachers' characteristics that students identify, which are willingness, competence, reaction to self and others, expectation, global personality, relationship with children, predictability, the teacher's mood, familiarity and the teachers gender. In our study we identify seven categories which were willingness (*my teacher ignore my questions*), competence (*broad knowledge*), reaction to self and others (*make fun of my questions*), expectation (*you can find it on your book*), global personality (*nice, patient, tough, stern*), relationship with children (*lack of communication, close to students*) and teacher's mood (*bad mood*). However, our study also identifies that the age of the teacher is also an important factor for some students. Some students perceived that the more senior their teacher is the more capable they are of teaching and providing answers to questions that student asked.

Based on the findings above it is critical for the teachers to avoid behaviour that might interpreted by their students as being in different or disrespectful towards them. Teachers should build good relationships with their students, and communications including body language is a critical component in this process. A student makes the decision to ask for academic help from their teachers based on their perception of how the teacher will respond to the request. In seeking academic help students undertake a form of cost-benefit analysis. If that perception is that their teacher will be indifferent to the request or not provide them with the caring support that they need, they will be unlikely to proactive engage in academic help seeking from their teacher.

The role of peers in students' academic help-seeking

The impact of peers plays an important role in students' decision of whether or not they seek academic help (Nelson-Le Gall, 2006; Newman, 2002; Oberman, 2000; Roussel, Elliot, & Feltman, 2011; Shim & Finch, 2013). Students in this current study were in their early adolescence and there is much literature that indicates the impact of peers on academic help seeking for adolescent children (Erickson, 1968 cited inTrucco, Wright, & Colder, 2013).

From the interviews it was found that students preferred to ask academic help from their friends rather than from their teachers. One student noted, "*I feel more comfortable and the answers are more complete"* (FGI-10: Barry, 14/12/12). Some students who are more capable can be a learning resource for other students. One student in an interview recounted how another more capable student took on the role of teacher in work groups:

> *Well yes, sometimes she becomes our teacher when we study together.*
> (FGI-1, Evi, 19/11/12)

Another benefit that students derived from their peers was they gained new

information from questions asked by other students. They recognised that they also can get help when other students ask their teachers for help. Moreover, students identified their classmates as a learning resource and characterized some other students as *smart, serious, calm, can explain how to solve problems, unselfish* and *humble.* Newman and Gauvain (1996, cited in Newman 2000) noted that peers can act as a learning resources and an alternative helper when students either cannot approach their teacher or the teacher is unavailable.

This current study found that peers are a significant influence on academic support and in the provisioning of academic support. This study shows the need to support students gaining benefit from students helping themselves to maximalise their opportunities of academic help from peers. Since students are more comfortable seeking help from their classmates, teacher should reconsider this fact. Teachers can help in facilitating peer-to-peer academic support, and where this results in improve student learning outcomes teacher teachers also benefit. Teachers can provide a learning environment that decreased this anxiety. Study from Ryan and Pintrich (1997) showed that students in low achievement still eager to ask for academic help when they perceived that the classroom stressing more on mastery than performance goal orientations. One approach to such facilitation can be by teachers choosing teaching methods that enhance student interactions. Peer-to-peer tutorial methods provide students the opportunities to learn from each other in order to completing a task. Group work provides flexible interaction between students where they can express and communicate their need of academic help a lot easier and more comfortably. According to Newman (2000) commenting on student in higher classes, this method also gives students a chance to share their thoughts, goals and strategies. Furthermore, Newman also notes that these opportunities were useful to develop questioning skills needed in asking academic help.

Students in our study were concerned about what their friends thought about them. Many of them stated that the reason that they do not ask for help to their teacher in the classroom was merely because they were afraid of the response that they might get from their classmates. Some of them were worried about being laugh at or ridiculed by their friends if they ask the wrong questions. "*I do not ask because I feel shy when my friends look at me, how come my other friend already know (that matter) and I am the one who do not know so I feel shy and I do not ask"* (FGI-10" Lara, 14/12/12).

This is in line with previous studies that mentioned students were masking their inability and not asking their teachers in the classroom because they were afraid that their classmates will see them as inadequate in the particular subject matters. Students perceived that the cost of asking academic help outweighed the benefit, therefore they did not ask for help (Karabenick & Knapp, 1991; Newman & Goldin, 1990; Ryan & Pintrich, 1997).

As students naturally compare their academic performance with their peers, they become concerned about their self-worth and their image (Middleton & Midgley, 1997). The feedback that they gained from their classmates was often perceived as a threat in the competitive classroom environment (Ryan & Pintrich, 1997). Under such threat students were reluctant to openly admit their academic needs and there need for academic help in the classroom (Newman, 2002). Other research also points out the importance of peer acceptance (Ryan & Shin, 2011), social approval from classmate

(Ryan et al., 1997) and the desire to look 'cool and popular' (Ryan & Shim, 2006, 2008).

Academic help-seeking strategies involved not only cognitive ability but also the need to approach other (teacher or peer) people. Asking for academic help might be seen as embarrassment and the risk of receiving negative responses from their classmates hinder these students to performing one (Newman & Goldin, 1990).

In summary, peers played an important role in the development and support of students' academic help-seeking behaviour, and peers provided a valuable resource for student academic help. The students' interviews suggested that there were number of factors that determined from which classmates a student requested help. Students in this study preferred to ask academic help form their peers. Therefore, teachers should be able to provide learning activities that allowed students interact with their classmates in solving problems.

Students' personality

A student's personality was one of the factors identified in this study that impacted academic help-seeking. Students who actively engaged in asking for academic help, especially from their teachers reflected the following characteristics: They are 1) active; 2) brave and confident; 3) smart; 4) have a large vocabulary; 5) are curiosity; and 6) they are diligent.

A study from van der Meij (1990) stated that in order to ask for academic help students need to have adequate prior knowledge. This current study identified students who ask academic for help are generally characterised as smart and capable students. Several students he did not actively in gauging academic help seeking did so because they did not know what to ask because they lacked prior knowledge related to the content material.

This study also found some characteristics of students that might be barriers in students' academic help-seeking behaviour. The first characteristic that was identified through the interviews is that students considered themselves as *shy*. One of the reasons why most of the students do not ask for help was because they were too shy to raise their hand and ask for help. One student responded "…*I feel a little shy to ask to my teacher [for help] …"* (FGI-4: Dedy, 10/12/12). Such shy students are reluctant to seek academic help even when they are aware that they need it.

A study from Coplan and Armer (2007) found that facing a new social situation made young shy students nervous and also worried about how others might evaluate them. Furthermore, even though these students would like to approach other people they were strained by social fear and anxiety (Coplan, Prakash, O'Neil, & Armer, 2004). This might explained why some students felt shy in approaching other people for help especially their teachers.

A study from Exley (2005) in Indonesia mentioned that students in Indonesia were described as "typically passive, shy and/or quiet learners". Another study from Paulhus et al (2002) also found that the East Asian students reported higher rates of shyness compared to European heritage students. Students from East Asian seem to be the most shy and are *afraid of being wrong* and *afraid of being judged*.

Students' awareness and skills related to academic help-seeking

From the interviews this study also found that one of the factors that made students' reluctant to seek academic help was the lack of students' awareness that they had a problem and their lack of skills related to engaging in academic help-seeking behaviour.

Many students admitted that many times they do not know what to ask. One student said: *"I don't know what to ask to my teacher"* (FGI-5: Malik, 10/12/12). Another stated, *"Suddenly, I [am] blank (lost word) when I want to ask"* (FGI-10: Eca, 19/12/12). The other participant said, "*I am afraid that I ask the wrong questions*" (FGI-1: Andre, 19/11/12).

According to Nelson Le-Gall cited in (Stahl and Brome, 2009) there are a five step model of students' AHS included (1) the awareness of the need of assistance; (2) deciding to seek help; (3) identifying potential helpers; (4) eliciting help and (5) evaluating the behaviour. The first step for students to ask for help is the need to ask academic help from their teachers or their peers.

This study found that many students tend to not ask for academic help since they do not know how formulate a question properly or even know what to ask. This may be related to their understanding of the learning material.

van der Meij (1994) describes that the first step, being aware of the need for help, is often a stage of confusion. Students feel a gap between their prior knowledge and the new information that they are receiving. Having an awareness of a problem or a gap in understanding improves in students with increasing age (Newman, 1994). Students' growing awareness leads them to decisions as to whether or not to ask for academic help. However, even though they are aware of a gap some students still do not ask for help since they do not have enough skills engage in the process of asking for help. Teachers also may not help by providing guidance and structure that encourages and facilitates help seeking. Teacher-centred classroom structures (Harsono, 2006) provide little opportunity for students to take an active role in the learning process including them proactively asking for academic help. Encouraging teachers to reduce their dominance of classroom activities and getting them to encourage their students' engagement directed towards seeking help will further increase their students' awareness about the need for academic help-seeking.

Conclusion and implication

This research identifies that academic help seeking is a complex issue. Many reasons are identified why students may or may not engage in seeking academic help. Engaging in academic help seeking depends on many factors such as teachers' behaviour, peers and the students' personality. Students in this study perceived that asking academic help is an important behaviour. However, still many of them did not ask for help.

A dominant finding of this research is that teachers play a central role in facilitating or not facilitating academic help seeking. Academic help seeking requires students to take an active role in the process. In many cases in Indonesia the classroom environment needs to further undertake change from teachers centred to learner

centred so that children can more actively engage in activities in the class. Teachers need to give students more opportunity to ask for help in the classroom, and to achieve this teachers need to give students more guidance on what to ask, how to ask, and where and when to ask for academic help. In bringing about this process teachers too need to be helped in their understanding that when students receive help, even from their peers, and consequently achieve better learning outcomes that this benefits the teacher as well.

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The Influence of Sekentei and Significant Others on Seeking Help toward Psychological Services

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Abstract

The under-utilization of mental health services is salient in Japan, implying that those seeking psychological help can be inhibited through various reasons. One of the obstructive factors may be *Sekentei*, a Japanese concept referring to the need to conform to social norms and customs, and to avoid shame and maintain a respectable social appearance. On the other hand, it can be expected that *Sekentei* can be facilitative if significant others have positive views about seeking psychological help, and the individuals has high *Sekentei* concerns. The present research investigated the influence of *Sekentei* and the recommendation of significant others on help-seeking intention toward psychological services. We aimed at determining the effects of *Sekentei* and significant others, and their interaction effect, exploring the potential of facilitating help-seeking through *Sekentei* and suggestions from significant others. A questionnaire was distributed to 273 Japanese undergraduate students. Factor analysis showed that Help-Seeking Intention was composed of the subscales of Help Needs, and Seeking Help without Hesitation. *Sekentei* negatively influenced Seeking Help without Hesitation, while suggestions from significant others positively influenced Help Needs. Furthermore, the two-way interaction effect of *Sekentei* × suggestions from significant others on Seeking Help without Hesitation was significant. These results indicated that: 1) high concern about *Sekentei* leads to hesitation toward help seeking; 2) suggestions from significant others facilitate recognition of need for help; 3) suggestions from significant others can moderate the negative effect of *Sekentei* on help seeking intention. This research determined the influence of *Sekentei* and significant others on help-seeking toward psychological services, and a means to moderate the negative effect of *Sekentei*.

Key Words: help-seeking intention, *Sekentei*, recommendation of significant others

Logo-bibliotherapy on People Suffering from Myasthenia Gravis

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Abstract

Background: Someone once said that life is what happens to a person while he/she is being busy making other plans. But what happens when what he/she plans is interrupted by the diagnosis of a chronic disease like Myasthenia Gravis? This is one of the common dilemmas of patients diagnosed with Myasthenia Gravis. How the patients feel, how well they can cope is determined by many factors such as who will be around to help them (medically, physically and emotionally), how severe the symptoms they are experiencing and how long are they going to endure the disease that has been bothering them.

Objectives: The purpose of this study is to help particular patients to find the meaning in life through Logo-bibliotherapy which eventually help reduce the suffering such as depression that may interfere them from finding cure of the disease.

Methods: The researcher utilized the Pretest-Posttest Control Group Design to determine the effectiveness of the Intervention Program in alleviating the depression level, life regard, purpose in life of selected Filipino suffering from Myasthenia Gravis. Uriate et al., (1992) cited that this experimental design involved two groups of participants, both were randomly assigned to control group and experimental group. The two groups were pretested on the Beck Depression Inventory, Purpose in Life and Life Regard Index and post tested with the same test instruments as the pretest after the intervention program has been administered. Only one group was given the intervention treatment program.

Results: Myasthenia Gravis patients gain hope and optimism after undergoing logo-bibliotherapy. Moreover, patients are enlightened that they are capable to search the purpose in continuing to live a fulfilling life

Conclusions: Results showed that Logo-bibliotherapy is effective to Myasthenia Gravis patients for they are not cognitively impaired.

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Introduction

Myasthenia Gravis (MG) is a chronic autoimmune neuromuscular disease characterized by varying degrees of weakness and fatigability of the skeletal (voluntary) muscles of the body. It derived from Latin and Greek language that literally means "grave muscle weakness" (Conti-Fine BM, Milani M, Kaminski HJ, 006).

Myasthenia Gravis can be classified as either ocular or generalized (Muscular Dystrophy Association, 2004). Ocular myasthenia is when the disease confines itself to the eye muscles while generalized myasthenia on the other hand affects the muscle groups.

The spectrum of severity of the disease is broad, ranging from mild extraocular muscle weakness to severe, life-threatening generalized weakness. Different people experienced difficulties with different muscle groups thus severity may fluctuate, and reaction to treatment can vary as well. In addition, the course of the condition in every patient varies but in most cases progressive. Both studies of Kernich and Kaminski (1995) and Evoli et al., (1996) revealed that seventy-five to ninety percent of patients with ocular involvement progress to having generalized myasthenia disease when it affected the patient (Hopkins LC, 1994).

The symptoms of myasthenia gravis include drooping of one or both eyelids (ptosis); blurred or double vision (diplopia) due to weakness of the muscles that control eye movements; unstable or waddling gait; weakness in arms, hands, fingers, legs and neck; change in facial expression; difficulty in swallowing; shortness of breath; and impaired speech (dyasthenia).

The psychological aspect of Myasthenia Gravis (Paul RH, Mullins LL, Gilchrist JM, 2009) can be categorized into two areas: (1) the effect of patient's psychological health on the expression of their disease, and (2) the effect of disease on the psychological health of the patient. The study further indicated four major factors believed to foster good psychological adjustment to the patients, such as (1) the patients feeling of control over one's physical condition, (2) managing the uncertainty, (3) intrusiveness inherent in the illness, and (4) adequate social support.

Twork et al (2010), study revealed that despite prolonged life-expectancy among MG patients, health-related quality of life is low. The outcome resulted mainly from impaired mobility and depression. Most often than not, MG patients are not able to participate fully in daily life, mainly due to their muscle weakness. The persistent experience of weakness may negatively influence' patients' perceived quality of life especially among individuals from whom demands of work, family, and other responsibilities require significant physical involvement (Paul RH et al., 2001, Padua L et l., 2001). Mg patients felt extreme loneliness, burden to the family, discouraged with their future, loss interest in their life, and life become meaningless.

Logo-bibliotherapy

It is in this knowledge therefore that this present study attempts to determine the effects of Logo-bibliotherapy in the depression level and meaninglessness of selected Filipino suffering from Myasthenia Gravis. The basic hypothesis is that such patients could be helped to cope with the depression created by their poor prognosis and to establish new perspectives on the meanings and purpose in their lives.

Logo-bibliotherapy, the word logo came from the term logotherapy is a meaning-centered psychotherapy that draws from the tradition of existential philosophy and is grounded in the professional work and extraordinary life experiences of its originator, Dr Victor Frankl, Literally, logotherapy means "therapy through meaning". "Logos" in Greek means not only meaningful but also spirit (Frankl, 1963, p.160)

Frankl (1963) believed that the patients never really despair because of the suffering in itself. Instead, their despair stems in each instance from a doubt as to whether suffering is meaningful. A person is deemed ready and willing to shoulder any suffering as soon and as long as he/she can see meaning in his/her suffering. "He/ She who has the why to live for can bear with almost any how" (Friedrich Nietzsche in Frankl, 1963 p.121).

The purpose of this study is not to prove that other psychotherapies and medical assistance are ineffective, rather it aims to help particular patients to find the meaning in life which eventually help reduce the suffering such as depression that may interfere them from finding cure of the disease.

Several studies have been performed to attest the effectiveness of Logo-bibliotherapy in helping alleviate suffering of the aged, students, drug addicts, those with terminal illness, paralyzed patients, etc. but nothing was conducted that focused on the suffering and finding meaning in life of patients with myasthenia gravis.

This pioneering effort of the researcher to apply Logo-bibliotherapy to these depressed individuals, despite unforeseen difficulty and challenges on the part of the former, is not only based on theories, concepts/ principles underlying her chosen field of inquiry, but above all, it is founded on the researcher's faith, hope, love and commitment to God and people. To understand fully what is myasthenia gravis and to be able impart it to the public with hopes that this study will help in a way to alleviate the pains and suffering the myasthenics is undergoing, is not only taken for this researcher's as a study to be accomplished, but a mission to be fulfilled.

Methodology

Research Design

The researcher utilized the **Pretest-Posttest Control Group Design** to determine the effectiveness of the Intervention Program in alleviating the depression level, life regard, purpose in life of selected Filipino suffering from Myasthenia Gravis. Uriate et al.,

(1992) cited that this experimental design involved two groups of participants, both were randomly assigned to controlled group and experimental group. The two groups were pretested with Beck Depression Inventory (BDI), Purpose in Life (PIL) and Life Regard Index (LRI) and post tested with the same test instruments as the pretest after the intervention program has been administered. Only experimental group was given the intervention treatment program.

It is usually the preferred method used in true experimental design to measure change and compare participant groups because it allows the administrator to assess the effect of the experimental manipulation by looking at the difference between the pretest and posttest. The experimental design permitted the comparison of the participants' depression level, life regard, purpose in life before and after the intervention sessions thru the use of Beck Depression Inventory (BDI-II), Life Regard Index (LRI), Purpose in Life (PIL).

The t-test for independent was used for the comparison between the experimental and the control group in terms of the sufficient difference between the pretest and posttest scores as measured by the BDI, LRI, PIL.

The symbolic presentation of the Pretest-Posttest Control Group research design in this study is the following:

R O1 x O2
R O3 x O4

Where:
R = Participants were assign to their group randomly.
O1 = Experimental Group Pretest (the group where the intervention program was administered)
O2 = Control Group Pretest (the group where the intervention program was not adminstered)
O3 = Experimental Group Post test
O4 = Control Group Post test
X = Intervention sessions

By using the Pretest and Posttest Control Group Design, the author was able to compare the respondents' level of depression, life regard, and purpose/meaning in life before and after the intervention session through the use of BDI-II, LRI, and PIL test.

The independent variable was the proposed intervention program which was Logo-bibliotherapy anchored by Logotherapy, while the dependent variables were the level of depression, life regard and the purpose/meaning in life of the participants.

Research Participants and Sampling Technique

There were thirty participants included in the study. The thirty participants were the total number of adult inflicted with myasthenia gravis, an autoimmune neuromuscular disorder that affects the muscle (serious muscle weakness). All the participants were the patients of Dr. Marita B. Dantes, Head of Neurology Section of National Kidney Institute in Quezon City and from the Outpatient department (OPD) Neurology Pavillion of Philippine General Hospital, Manila.

The participants were male and female ranging from twenty (20) to sixty (60) years old. Aside from the physiological complains of myasthenia gravis patients such as dropping of the eyelids, blurred or double vision, slurred speech, weakness in the arms and legs, chronic muscle fatigue, they also complained on difficulty in sleeping, loss of appetite, intense loneliness, neither motivated nor having drive in life.

The thirty participants were randomly assigned to two groups, control group and experimental group. The thirty participants of the study were comprised of MG patients. This was also limited to those patients living in Metro Manila, Bulacan, and Cavite only.

Research Instruments

Beck's Depression Inventory (BDI)

BDI was a 21-item instrument designed to assess the severity of depressions in adolescence and adults. It was widely accepted instrument in clinical psychology and psychiatry for assessing the intensity of depression in psychiatric patients and for detecting possible depressions in normal populations.

The 21 symptoms and attitudes assessed by the original BDI include: 1) mood, 2) pessimism, 3) sense of failure, 4) self-dissatisfaction, 5) guilt, 6) punishment, 7) self-dislike, 8) self-accusations, 9) suicidal ideas, 10) crying, 11) irritability, 12) social withdrawal, 13) indecisiveness, 14) body image change, 15) work difficulty, 16) insomnia, 17) fatigability, 18) loss of appetite, 19) weight loss, 20) somatic preoccupation, and 21) loss of libido.

BDI has been used for 35 years to identify and assess depressive symptoms, and has been reported to be highly reliable regardless of the population. It has a high coefficient alpha, (.80) its construct validity has been established, and it was able to differentiate depressed from non-depressed patients. (Aaron T. Beck, Robert A. Steer, and Gregory K. Brown 2002). A large number of studies have indicated that the BDI can differentiate psychotic patients from normal (Steer et al, 1986). BDI can differentiate between Dysthemic and major depressive disorders and also can differentiate between generalized Anxiety disorders and major depressive disorders.
The BDI had concurrent validity in that it tends to agree with other measures of depression. It was also high on construct validity. An obvious way to judge validity of a test is to observe the person in real life situations. If the person scores as suffering severe

depression then this should be observable in their behaviour. BDI-II was introduced specifically to bring it into line with the DSM-IV diagnosis. BDI-II is seen as having higher content validity than its predecessor BDI-1A.

Reliability—Beck et al (1996) gave the test to 26 outpatients during two therapy sessions one week apart. The test-retest concordance was a very high 0.93. The test was also high on split-test reliability (0.85). Most studies carried out on reliability find that the BDI was a reliable test of depressive severity.

Table of Norms for Beck's Depression Test

Interpretation of Raw Scores	Beck's Depression Test
Considered normal	9-May
Mild to moderate depression	18-Oct
Moderate to severe	19-29
Severe depression	30-63

The Purpose in Life Test (PIL)

The test was an attitude scale constructed from the orientation of Logotherapy (Crumbaugh and Maholick's 1964; Crumbaugh, 1969). Purpose in Life (PIL) test was designed to measure an individual's experience of meaning and purpose in life. It consisted of Parts A,B &C. In this study only Part A will be employed because it is only portion of the instrument that was objectively scored. The test was done in consideration of the participant's physical condition. Part B & C was energy draining for the myasthenia gravis patients who experienced fatigability. Part A of PIL was usually reliable enough to detect the meaninglessness and for most research purposes, parts B & C were ignored. Although they had proved to be helpful in individual clinic use, where therapists and counselors had examined the content in relation to material brought out in the interview, so far, attempts to quantify them had added objective information to that furnished by Part A (Crumbaugh & Maholick, 1969).

Part A of the PIL consisted of 20 statements, each had responded by indicating personal agreement or disagreement on a 7-point scale. And total scores therefore, ranged from 20 to 140, Scores of 91-below defined the significant level of "lack of meaning and purpose in life".

Validity—In validating the PIL, Crumbaugh and Maholick found that the test significantly distinguished patient and non-patient populations and also showed a consistent progression of scoring from the one group one would expect the highest scores (junior league females and Harvard summer school graduate students) to the lowest (hospitalized alcoholics). Both construct and criterion (or concurrent) validity of the PIL had been assessed. Crumbaugh (1968) predicted correctly, from the standpoint of construct validity, the order of the means of four "normal" populations: N1 Successful business and professional personnel (M=118.90, N=230, S.D. = 11.31); N2 Active and leading Protestant parishioners (M=114.27, N=142, S.D.=15.28); N3 College

undergraduates (M=108.45, N=417, S.D.=13.98); and N4 Indigent nonpsychiatric hospital patients (M=106.40, N=16, S.D.=14.49).

The (odd-seven) reliability index of the PIL as determined by Crumbaugh and Maholick (1964) was 81 computing for the Pearson Product-Moment Correlation of Coefficient (N=225, 105 "normal" and 120 patients) and computing for the Spearman-Brown it was corrected to be .90. Crumbaugh (1968a) showed similar relationship for another sample at .85 computing for the Pearson Product-Moment Correlation of Coefficient (N=120 Protestant parishioners; non-patients) and computing for Spearman-Brown it was corrected to .92.

The Purpose-in-Life Scale had proved useful in the following situations: In individual counseling of students, in vocational guidance and rehabilitation work, and in treatment of both in-and-out patient neurotics.

The Life Regard Index (LRI)

The LRI, based on the concept of positive life regard, was developed by Battista and Almond in an attempt to provide a simple non-biased measure of meaning in life. The test was composed of 28 items with a 5-point scale, and was divided into two subscales, Framework and Fulfillment. The Framework scale (FR) measured the ability of an individual to see his life within some perspective or context, and had derived a set of life-goals, purpose in life or life view from them. The Fulfillment scale (FU) measured the degree to which an individual sees himself as having fulfilled or as being in the process of fulfilling his framework of life-goals. Each scale was composed of 14 items, half-phrased positively, half negatively to control for response set. The sum of these two scales comprises the Life Regard (LRI) Scale and was included to evaluate its uses as an overall indicator of positive life regard.

Note: The "Framework (FR)" and the "Fulfillment (FU)" scores were not separately cited in the discussions of the result since there were no equivalents of these parts in the PIL. The "LRI" or the sum of the FUL & FR was the score considered in the interpretation with the PIL.

Validity & Reliability—A number of empirical findings attest to the reliability and validity of the LRI. Battista and Almond (1973) reported a test-retest reliability for the index of r=0.94. The results of his psychometric analyses of the Life Regard Index included a mid- correlation of social desirability (accounting for only 40% of the variance) and the differentiation of 14 top subjects (1.5 standard deviation above the mean on LRI) from the bottom 14. Battista and co-author Almond concluded that the PIL test and the LRI were measuring the same underlying construct. Greenblatt (1976) tested the Hebrew version of the LRI and established with an interval of 2 weeks a test-retest reliability of r=0.79. Cronbach alpha estimates of internal consistency of the scales were reported by Debats (1990), which ranged from 0.79 (FR), and 0.87 (FU) to 0.86 (Index). Chamberlain and Zika (1988), Orbach, Illuz and Rosenheim (1987), and Debats (1990) assessed the factorial validity index of the instrument. These studies showed that factor

structure of the exploratory analysis reflected the rational construction of the scale reasonably well.

Battista and Almond (1973) found the discriminant validity of the Index by discriminating high scorers as persons who significantly showed (a) more fulfillments of their ultimate life-goals and (b) score higher on the Purpose in Life (PIL) test (Crumbaugh & Maholick, 1964). Furthermore the LRI discriminated high scorers as persons that were happier and more satisfied with their lives than low scorers (Debats, 1990). One study (Chamberlain & Zika, 1988b) demonstrated substantial significant relationships between LRI scores and score on two other measures of meaning in life, the PIL (Crumbaugh & Maholick, 1964) and the Sense of Coherence (SOC) scale (Antonovsky, 1979), supporting the construct validity of the LRI. Score on the Index furthermore related in predicted ways to self-esteem, observer ratings of meaningfulness, openness and defensiveness, number of psychiatric visits, family background and work measures, environmental fit, and goals (Battista & Almond, 1973); degree of integration of personality (Orbach et al., 1987); religiosity, positive affect and life satisfaction (Chamberlain & Zika, 1988b); fear of personal death factors i.e. loss of social identity and self-fulfillment (Florian & Snowden, 1989); previous education, philosophy in life and emotional well-being (Debats, 1990), and effective coping with crises in the past (Debats, Drost & Hansen, 1995).

Norms of the PIL and LRI in this Study

INTERPRETATION OF RAW SCORES	PURPOSE IN LIFE TEST (PIL)	LIFE REGARD INDEX
Lack of clear meaning and purpose in life (Significant level of meaning in life)	91 and below	143 and below
Indecisive range (Uncertain definition of meaning and purpose)	92-112	144-164
Indicates the presence of definite meaning and purpose in life	113-140	165-196

The Intervention Progarm

The logotherapeutic sessions with the participants included the following therapeutic methods: Modification of attitude, Appealing technique and Socratic dialogue. These methods were based on Paul Wong's reformulation of Frankl's Logotherapy and Lukas (1984). se purpose of their existence.

Sampling Procedure

The researcher will use purposive sampling; the samples were randomly selected because the participants reflect a specific purpose of the study.

These were the criteria used in selecting the participants: the participants were Filipino suffering from Myasthenia Gravis, age 20 to 60 years old. The Myasthenia Gravis participants came from Class I to class III, a widely clinical classification created by the Myasthenia Gravis Foundation of America (MGFA).

Classification of Myasthenia Gravis:

Class I: Any eye muscle weakness, possible ptosis, no other evidence of muscle weakness elsewhere.
Class II: Eye muscle weakness of any severity, mild weakness of other muscles.
Class IIa: Predominantly limb or axial muscles
Class IIb: Predominantly bulbar and /or respiratory muscle
Class III: Eye muscle weakness of any severity, moderate weakness of other muscles.
Class IIIa: Predominantly limb or axial muscles
Class IIIb: Predominantly bulbar and/ or respiratory muscles

Data Gathering Procedure

Structured Interview

After selecting the participants whose depression level was high, > 30 based from the Beck Depression Inventory II, negative life regard from the Life Regard Inventory, and low level of purpose in life from the Purpose in Life test. The participants were interviewed about how they feel, their life, the sickness, their family, their coping, their economic status, their future plans.

The selection procedure presented the criteria that served as the basis in identifying qualified participants in the study.

The author's objective for this study was to find 30 qualified respondents who were Filipino suffering from MG patients who first took the pre-test. All respondents had regular check-up with a neurologist of the National Kidney Institute, Quezon City, Dra Marita B Dantes and the other doctors in PGH. The study was limited only to adult patients living in Metro Manila, Bulacan and Cavite whose age ranges from 20- 60 years old and possessing high level of depression and low level of purpose and meaning in life.

Before deciding on this study, the author had sought the opinion from resource people; neurologists, psychotherapists and people who conducted research using logotherapy and bibliotherapy, for some advice and insights on how to effectively conduct the study.
In addition, an initial coordination with a neurologist, Dra Marita Dantes, was made to discuss the purpose, methodology and procedures of the research. The author also personally solicited from the good doctor, information about the patients who have been diagnosed and were undergoing check-up.

After which, the author coordinated with the referred patients and with their families for the schedule, the interview and implementation of the study.

To date, the Philippines has no national registry of the disease yet. Japan is the only country in Asia who has performed a national survey to determine the prevalence of myasthenia gravis patients in their country. The lack of public awareness of the disease resulted to many undiagnosed MG patients. The country still has no special ward for MG patients. Our well known hospitals in Metro Manila only offer a out-patient clinic for the regular check-up of MG patients and confinement if needed under the care of the neurologist. Although there exist a Myasthenia Gravis Society in the country, only limited meetings and interactions between MG patients have been carried out.

Moreover, due to low prevalence of the disease in the program, a significant level of depression (those who will score 30 and above) and purpose and meaning in life (those who score 91 & below in PIL and those who will score 143 & below in LRI) will be chosen as respondents of this study.

After the interview and the pretest, the findings were thoroughly analyzed and the researcher did propose intervention anchor to Logotherapy and bibliotherapy that were address to the utmost needs of the participants and rendered this Logo-bibliotherapy to the 30 participants in the experimental group. The experimental group received eight sessions of intervention, while the control group received no intervention. After the intervention, respondents were given a similar post-test of BDI, PIL and LRI to measure the effectiveness of the intervention employed in

Results

Table 1

Pre-test Score of the Control Group

	Mean	SD	Verbal Description
Depression	36.67	4.17	Severe depression
Life Regard	46.6	9.92	Lack of clear meaning in life
Purpose in Life	50.87	8.58	Lack of purpose in life

Legend: Beck's depression test: considered normal (5-9); mild to moderate depression (10-18); moderate to severe depression (19-29); severe depression (30-63).
Life regard: lack (143 and below); indecisive (144-164); definite (165-196).
Purpose in life: lack (91 and below); indecisive (92-112); definite (113-140)

Table 2

Pre-test Score of the Experimental Group

	Mean	SD	Verbal Description
Depression	42.07	7.89	Severe depression
Life Regard	51.4	7.16	Lack of clear meaning in life
Purpose in Life	47.4	7.23	Lack of purpose in life

Legend: Beck's depression test: considered normal (5-9); mild to moderate depression (10-18); moderate to severe depression (19-29); severe depression (30-63).
Life regard: lack (143 and below); indecisive (144-164); definite (165-196).
Purpose in life: lack (91 and below); indecisive (92-112); definite (113-140).

Table 3

Difference in the Pre-test Score Between Control and Experimental Group

	Difference		t	p-value	Ho	Cohen's d
	Mean	Std. Error				
Depression	-5.4	2.3	-2.34	0.03	Reject	0.86
Life Regard	-4.8	3.16	-1.52	0.14	Do not reject	-
Purpose in Life	3.47	2.9	1.2	0.24	Do not reject	-

df = 28

Ho is there is no difference between the pre-test score of control and experimental group.

Table 4

Score of the Control Group After Receiving No Intentervation

	Mean	SD	Verbal Description
Depression	35.4	8.1	Severe depression
Life Regard	45.2	6.69	Lack of clear meaning in life
Purpose in Life	50.47	7.2	Lack of purpose in life

Legend: Beck's depression test: considered normal (5-9); mild to moderate depression (10-18); moderate to severe depression (19-29); severe depression (30-63).
Life regard: lack (143 and below); indecisive (144-164); definite (165-196). Purpose in life: lack (91 and below); indecisive (92-112); definite (113-140).

Table 5

Score of the Experimental Group After Receiving the Intervention program

	Mean	SD	Verbal Description
Depression	4.6	3.56	Normal depression
Life Regard	166.07	5.68	Definite meaning in life
Purpose in Life	113.13	3.78	Definite purpose in life

Legend: Beck's depression test: considered normal (5-9); mild to moderate depression (10-18);moderate to severe depression (19-29); severe depression (30-63). Life regard: lack (143 and below); indecisive (144-164); definite (165-196). Purpose in life: lack (91 and below); indecisive (92-112); definite (113-140).

Table 6

Difference in the Post-test Score between Control and Experimental Group

	Difference		t	p-value	Ho	Cohen's d
	Mean	Std. Error				
Depression	30.8	2.28	13.49	0	Reject	4.92
Life Regard	-120.87	2.26	-53.36	0	Reject	19.48
Purpose in Life	-62.67	2.1	-29.85	0	Reject	10.9

df = 28

Ho: There is no significant difference between the post-test score of control group and experimental group.

Result is reject the Ho that there is no significant difference between the post test score of control group and experimental group.

Ho: Logo-bibliotherapy is not effective in alleviating depression on people suffering from myasthenia gravis.
Result: Logo-bibliotherapy is effective on alleviating depression among Myasthenia Gravis

Discussion

The myasthenia gravis looks normal with all the sense organ intact, upper and lower extremities moving, and yet they can't move for a longer time than normal people. The reason is the immune system of the MG is creating abnormal antibodies that attack the acetylcholine receptors at the neuromuscular junction. Acetylcholine is responsible for the contraction of different muscles for vision, chewing, swallowing, breathing and movement of extremities.

MG patients who are married confessed feel very incapable to satisfy the needs of their partner Meanwhile, in gatherings, MG patients do not interact with relatives and friends since they talk with sound coming from nose called nasal twang, they are hardly understood by people. Also, summer time is very horrible for MG patients, breathing is the utmost problem, they cited they they are like fish that is not on their water habitat but like near death experience. Oxygen is very thin that they feel it is not enough to keep them alive. They also collapse while doing works. Moreover, they are also prone to bone fractures and dislocations and painful cramps due to weakening of the muscles.

Consequently, these experiences bring depression to MG patients, they lose the hope of living. They think they are burden and worthless as a person in existence. They lose their purpose in life, purpose of his remaining years of life. Also, since depression may cause other illnesses and complications, MG patients might develop certain diseases and even cancer.

Logo-bibliotherapy is anchored to Logotherapy by Victor Frankl. Participants belong to the experimental group received the said psychotherapy. They were made to realized that they were not a victim of circumstances! They might have the symptoms but he is not the symptoms. They were able to find meaning within their "meaning triangle". 1. Creativity (creating a work or a deed). 2. Experiencing a value (by experiencing something or encountering someone). 3. Change of attitude towards unavoidable suffering.

Conclusion

When we experienced tragedy, misfortune, sickness, and other calamities strikes one's lives, stress, depressions, frustrations and many other debilitating emotions will surely set in. The situation will cause a feeling of hopelessness, no purpose in life, unmotivated. The spirit to live is dying.

After administering Logo-bibliotherapy, the MG participants found their purpose of their existence. Usually it's their family that they wanted to be with and renewed trust in GOD. Motivated to live their lives to the fullest and they can still do little things to make their family happy which is the creativity in meaning triangle.

In my study, all the participants in the experimental group had shown significant changes of attitude after the Logo-bibliotherapy program. For them, all is not hopeless and they have still many purposes to live on as long as they have breath. Therefore I conclude that Logo-bibliotherapy is effective.

Recommendation

Logo-bibliotherapy is not limited to MG patients only. In fact, anyone can undergo this therapy especially those who are experiencing depression, anxiety. People who experiencing existential vacumm, boredom, loosing purpose in life, meaningless of one's being.

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Health Anxiety and Somatic Symptoms in Young Adulthood

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Abstract

In young adulthood most people begin to realize the meaning of health. The amount of costs to be incurred for the treatment of a person when they are suffering from a disease also affects a person's health concern. According to Taylor and Asmundson (2004), most of the people feel anxious about their health. Anxiety about health can differ from one person to another. Through this study it can be seen general overview of health anxiety for young adults in Indonesia, especially Jakarta.

Participants in this study consisted of 263 people, aged between 20-40 years (M = 27.23 , SD = 5.50). Participants come from different educational level and various backgrounds. Researcher used Short Health Anxiety Inventory (SHAI; Salkovskis, Rimes, & Warwick, 2002), Patient Health Questionnaire Somatic Symptom Severity Scale (PHQ-15; Kroenke, Spitzer, & William, 2002), and State-Trait Anxiety inventory (STAI; Spielberger, 1983). For data analysis researcher used the pearson product moment correlation. The result showed significant correlation between health anxiety and somatic symptoms. Similarly, there is a significant correlation between state-trait anxiety and health anxiety.

Keywords: Young Adulthood, Health, Anxiety, Somatic Symptom

Introduction

There are various methods for people in order to keep a good health. For example , by taking vitamins. There are a variety of multi vitamins sold in the Indonesian market. The advertisements on television showed the importance of vitamins in human life. Through these ads , one in the given information that the body's resistance to disease can be prevented by consuming vitamins offered .The daily life activity, like work and to spend more time on the road in Jakarta, and others seem to cause some people feel the need for the presence of other than food intake daily in consumption like vitamins. By taking vitamins most people expect that a healthy body is well preserved. This is certainly to avoid diseases that can lead to disruption of daily activities such as those mentioned above.

In young adulthood (aged 20 to 40), a person begins to realized about the meaning of their health when they got health problems. Health issues especially pertinent to young adults are addressed, with emphasis on factors that influence the health and fitness of people in this age category. Behavior patterns such as diet, exercise, smoking, and drinking alcohol can affect health. Other health factors include socioeconomic status, level of education, gender and ethnic status (Papalia, 2001). After completing formal education level of high school, college or university, generally young adults entering the work live. It explained that young adulthood is a time to reach peak performance. With so many activities undertaken during this period, it is possible for people in young adulthood health impaired. According to Santrock (2008) accidents, suicide, and homicide are the leading causes of death among adults aged 20 to 34. Between 35 and 44 accidents, cancer, and heart disease are the top 3 causes of death. AIDS is the seventh leading cause of death between ages 20 and 24, sixth for adults between 25 and 34, and fifth for adults between 35 and 44. The amount of costs to be incurred for the treatment of a person when he is suffering from a disease also affects a person's health concerns.

Most of the people feel anxious about their health (Taylor and Asmundson, 2004). It explained that this anxiety varies, there are appropriate and some are excessive or maladaptive. With a sense of anxiety for his health, a person can be motivated to seek proper medical treatment. For example, someone who is experiencing shortness of breath with a history of asthma, of course, will prepare him for the use of drugs associated with the illness he suffered. Maladaptive anxiety occurs when anxiety is not in proportion to the perceived medical risks faced. Low anxiety when facing a high risk and high anxiety when faced with a low risk can be called maladaptive anxiety (Taylor & Asmundson, 2004). For example, excessive anxiety about something that seems minor, like spots or itching. Health anxiety is fear and belief, based on interpretation, or perhaps more often misinterpretation of bodily sign and symptoms as being indicative of a seious illness (Luckock & Morley, 1996; Warwick, 1989 in Asmundson, Taylor, & Cox, 2001). The sign or symptoms may extend from the vague and generalized to specific. Most often include pain, gastrointestinal, and cardiorespiratory (Barsky & Klerman, 1983 in Asmundson, et. Al, 2001).

Anxiety about health consists of three major aspects. There are health worries, sensitivity to something or unusual changes in the body, and fear of the consequences of a disease (Salkovskis, Rimes, & Warwick, 2002). Anxiety about the health can be influenced by several factors, including genetics, family background, life events that

cause stress, socio-cultural aspects, the belief about the illness, cultural differences, as well as the media information about some illnesses (Taylor & Asmundson, 2002).

Mental disorder that is often associated with health anxiety. However, hypochondriasis occurs in someone who has a fear that he was suffering from a serious disease based only mild symptoms in the body. These disorders can be classified in maladaptive anxiety on health. Anxiety about health can differ from one person to another. Through this study it can be seen the description of health anxiety on people in young adulthood and the correlation with their subjective somatic symptoms.

METHOD

Participants

The participants were young adulthood with aged between 20-40 years located in Jakarta, Indonesia. The technique sampling was convenience sampling.

Material

The researcher used 3 inventories. First, Short Health Anxiety Inventory (SHAI; Salkovskis, Rimes, & Warwick, 2002). The inventory contains 18 items that assess health anxiety on 4 point scale. Higher score means higher levels of health anxiety. Cronbach alpha coefficients was 0.846.

Second, Patient Health Questionnaire Somatic Symptom Severity Scale (PHQ-15; Kroenke, Spitzer, & William, 2002). There are 15 item to measure the prevalence of the most common body symptoms that experienced in the last 4 weeks on a 3 point scale. Cronbach alpha coefficients was 0.902.

Third, State-Trait Anxiety inventory (STAI; Spielberger, 1983). The inventory divided into 2 form, Y1 to asses state anxiety and Y2 to asses trait anxiety. It contains 40 items on 4 point scale. Cronbach alpha coefficient were 0.856 for Y1 and 0.824 for Y2.

Additionally, the participants filled the demography question such as age, religion, and ethnic background.

Procedure

The participants completed the questionnaire individually. Participants were given the questionnaire and asked to read the instruction of questionnaire. Then they were told that his /her answers were only used for this research and were confidential. So, they were assured that he/she can freely give responses as they felt in the questionnaire. Approximately they took 30 minutes to complete.

Data Analysis

The data was collected and analyzed by pearson product moment correlation.

RESULTS

Participants

The 263 participants aged between 20 – 40 years old (M=27,23, SD= 5,5). There are 123 mens and 140 women. The participants last education were varies from junior high school to master degree.

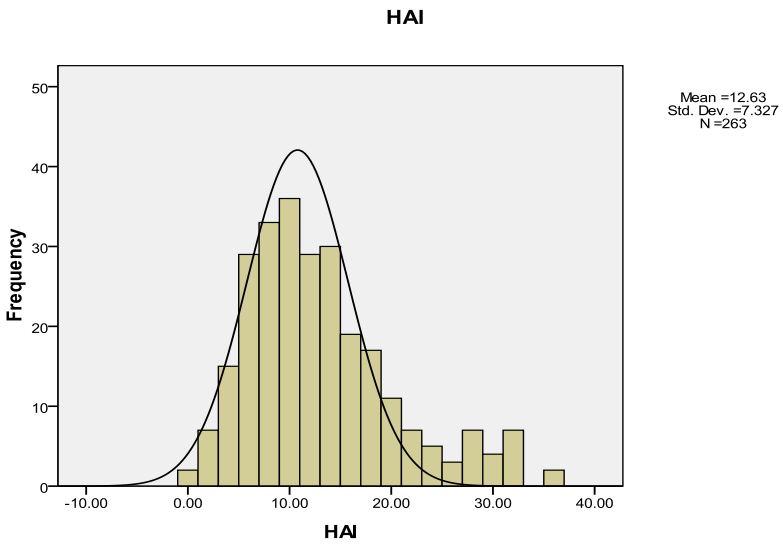
N	263
Mean	27,23
Median	26
Mode	23
Std. Deviation	5,5

Table 1. Participants

Health Anxiety

SHAI obtained 12.63 for the mean. The lowest score was 0 and the highest score was 35.

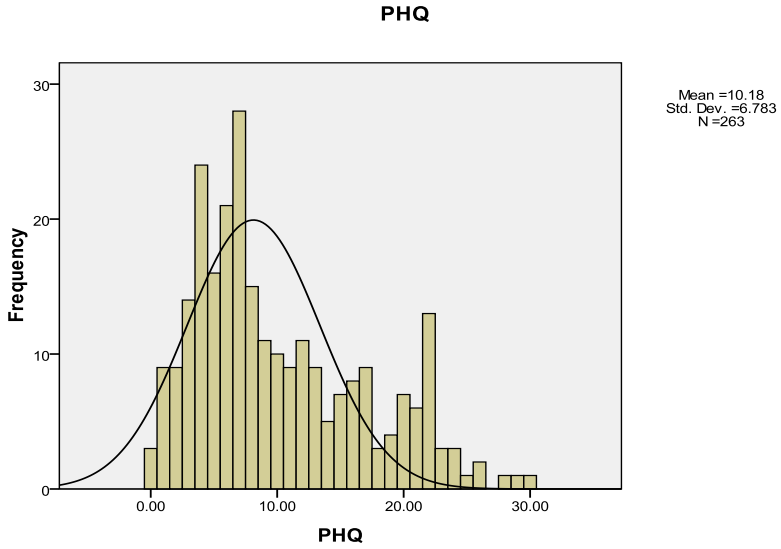
Picture 1. Health Anxiety Histogram



Somatic Symptoms

The PHQ-15 obtained 10.18 for the mean. The lowest score was 0 and the highest score was 30.

Picture. 2 Somatic Symptoms Histogram



The frequencies and percentages from each somatic symptoms found that headaches was the common symptoms in young adulthood.

Somatic Symptoms	Frequencies	Percentages
Stomach pain	161	61%
Back pain	176	67%
Pain in your arms, legs, or joints (knees, hips, etc.)	152	58%
Menstrual cramps or other problems with your periods*	103	74%
Headaches	185	70%
Chest pain	122	46%
Dizziness	168	64%
Fainting spells	87	33%
Feeling your heart pound or race	111	42%
Shortness of breath	99	38%
Pain or problems during sexual intercourse	56	21%
Constipation, loose bowels, or diarrhea	131	50%
Nausea, gas, or indigestion	161	61%
Feeling tired or having low energy	187	71%
Trouble sleeping	149	57%

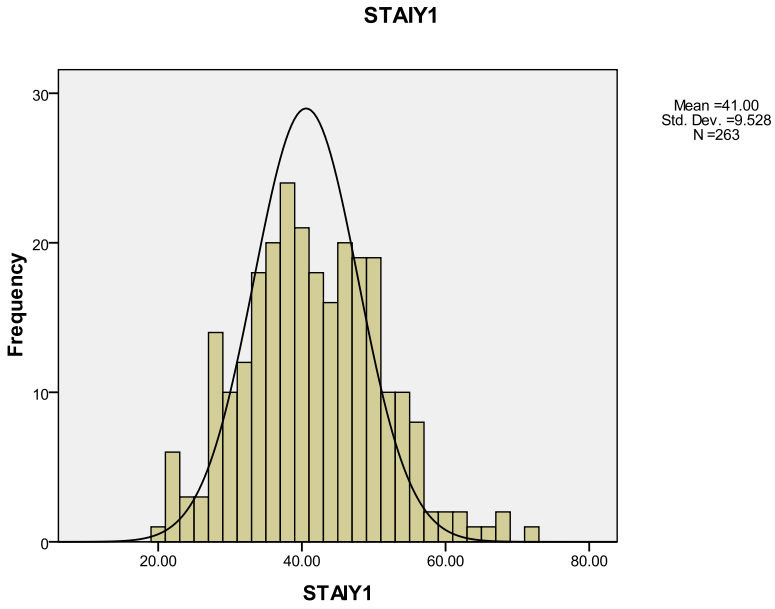
*women only

Table 2. The frequencies and percentages of the somatic symptoms

Trait-State Anxiety

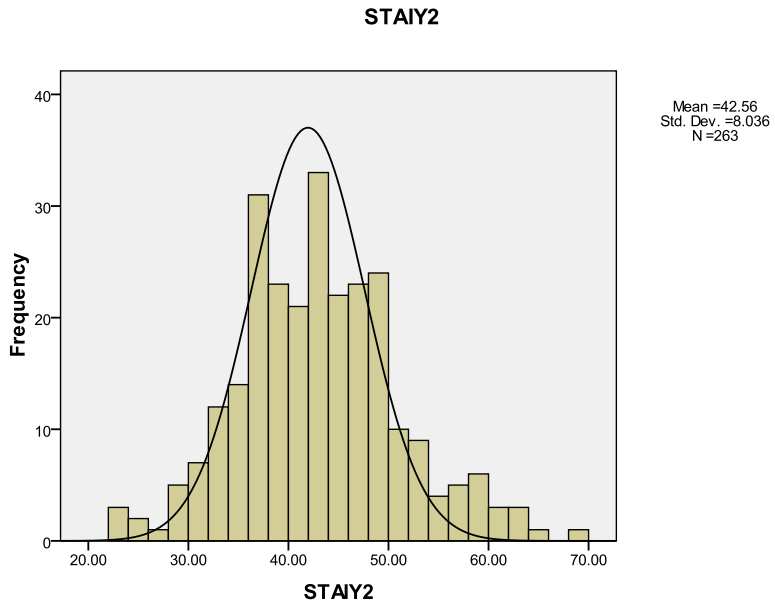
The STAI Y1 obtained 41 for the mean The lowest score was 30 and the highest score was 71.

Picture 3. State Anxiety Histogram



The STAI Y2 obtained 42.56 for the mean The lowest score was 23 and the highest score was 68.

Picture 4. Trait Anxiety Histogram



Correlations and t-test

Table 3. Correlation between health anxiety and somatic symptoms, and health anxiety between state-trait anxiety

Correlations				
	SHAI	PHQ-15	STAI-Y1	STAI-Y2
SHAI	1	.286**	.464**	.425**

**. Correlation is significant at the 0.01 level (2-tailed).

The result showed significant correlation between health anxiety and somatic symptoms. Similarly, there is a significant correlation between state-trait anxiety and health anxiety.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
shai	Equal variances assumed	2.142	.145	.587	261	.558	.53200	.90663	-1.25325	2.31725
	Equal variances not assumed			.584	251.743	.559	.53200	.91029	-1.26077	2.32476
Staiy1	Equal variances assumed	.032	.858	-.824	261	.411	-.97033	1.17818	-3.29027	1.34962
	Equal variances not assumed			-.826	258.855	.410	-.97033	1.17520	-3.28449	1.34384
Staiy2	Equal variances assumed	.220	.639	-1.049	261	.295	-1.04187	.99297	-2.99712	.91338
	Equal variances not assumed			-1.053	259.666	.293	-1.04187	.98922	-2.98979	.90605

Table 4. Independent sample test between men and women

In additional analysis there is no significant differences between men and women in health anxiety. Also, there is no significant differences between men and women in trait and state anxiety.

CONCLUSION AND DISCUSSION

This research showed that the higher level of health anxiety, the higher level of subjective somatic symptoms. Symptoms of minor ailments can lead to disproportionate health anxiety if the person overestimates the seriousness of the sensations. It is quite common for health-anxious people to misinterpret these sensations or symptoms as indicators of a disease (Taylor & Asmundson, 2004).

There is moderate association between negative emotion and measures of both health anxiety and clinical hypochondriasis (McClure & Lilienfeld, in Asmundson, Taylor, & Cox, 2001). The anxiety facet of negative emotion emerged as the strongest predictor of health anxiety. From this research can be concluded that being an anxious person means feel anxious with every aspect in lives, including about the health.

Some studies showed women more feel anxious about their health than men (Faravelli, et al., 1997; Gumbiner & Flowers, 1997; Hernandez & Kellner, 1992 in Asmundson, et al., 2001). This research find different result. There is no significant differences between men and women in health anxiety and also the trait-state anxiety. The fact that women are more responsive to most potential health threats than men may provide a basis for the stereotype (Shumaker & Smith, 1994; Wingard, Cohn, Cirillo, Cohen, & Kaplan, 1992 in Asmundson, et al., 2001).

Additional analysis from this research found that headaches (70%), feeling tired/having low energy (71%), back pain (67%), and dizziness (64%) were common subjective somatic symptoms in young adulthood. For the women, menstrual problem (74%) was the common somatic symptoms. However, young adulthood is the healthiest time of life with fewer colds and respiratory problems than in childhood and few chronic health problems. According to Santrock (2008) it is a good time to promote good health like eating habits, regular exercise, and diet.

The participants in this research was not from medical or clinical setting. To draw the conclusion about hypochondriasis tendencies should be considered carefully. Further research should considered by doing deep interview toward the person who had high level of health anxiety. Another research to find out about the health anxiety in middle adulthood and older person participants. And also the participants from medical or clinical setting shoud be considered either.

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A Study on Quality of Life in Male to Female Transgender

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Abstract

The objective of this study was to examine Transgenders' quality of life. Samples were 120 Transgenders in Chonburi province, Thailand, derived from accidental sampling. The research instrument was WHOQOL - BREF - THAI, which was a measuring tool of quality of life developed from the concept of 'quality of life' with Cronbach's alpha coefficient reliability 0.8406, and the validity of 0.6515 when compared to WHOQOL - 100 (Thai edition) which was formally recognized by WHO.

The results were:
1. Overall, Transgenders in Chonburi province as samples reflected a middle quality of life. And when considering each aspect, it was found that most aspects had a middle quality of life except for environmental aspect with a good quality of life. It corresponded to the results of the classification of Transgenders by gender (transgendered or not transgendered) and marital status (single or in relationship) which had a good quality of life in environmental aspect.
2. When considering the point average of Transgenders 's quality of life classified by occupation, the result said that office workers had better quality of life than others with the middle quality of life.
3. When considering the point average of Transgenders 's quality of life in Chonburi province classified by life span, the overall revealed that every life span had a middle quality of life. And when looking at particular aspect, it is said that the life span of 36 - 40 had a good quality of life in most aspects except for social relationship with a middle quality of life.
Keywords: Transgender , Quality of life

Introduction

In the past, the records of western travelers, missionaries or even scientists often mentioned behavior across gender and homosexuality as “dirty", “abnormal”, and "unacceptable”. The only acceptable behavior is “Female” and “Male”.However, these studies have had a major shift in the 20th century.

Anthropologists have been interested in studying issues of homosexuality as follows: Transgenders are women born in men’s bodies, however in their minds they know are women and would play and act like women since they are young.

The norm of the society such as men must wear pants and be strong, but when the body and mind are not in unison, this creates conflicts. Therefore, plastic surgery is the only hope to get transgenders out of the conflicts within their minds and society.

Although Thailand is known as a haven for people with a variety of sexual norms, Thai transgenders have been a chronic problem in Thai society. They believe that they must transform themselves to be women as much as they can. They are led to believe that a woman will get more rights and opportunities in Thai society and will not be looked down on as a clown.

As mentioned, it can be seen that the concept of sex education has changed. Sex change operations for women and men are acceptable. However, there is no study in terms of quality of life and their social status after the sex change.

Researchers are interested in studying the quality of life of transgenders. This study will be a practical guide for teachers, counselors, psychologists as well as individuals who wish to help improve the life of transgenders in the future.
Research objective: To study the quality of life of transgenders.
Expectation: Knowing of the quality of life of transgenders.
Hypothesis: How are the factors in physical, psychological, social relationships, environmental related to the life of a transgender?

Area of Research:
1. Population comprised of transgender in Chonburi province.
The population in the study is a random sampling of 120 people.
The variables studied:

1. Variable criteria includes the physical, psychological, social and environmental relationships

2. Variable predictive factors are age, gender, occupation and status.

Theory in research

Having a high quality of life is defined as having a good life, happiness and satisfaction in physical, mental, social, and emotional aspects. There are 4 categories for values and life goals of the individuals.
1. Physical domain is the recognition of a person's physical condition which affects their daily lives, such as being in a good health, being well, no pain or even being able to deal with pain.
2. Psychological domain is perceived as self- image, self-esteem, self-confidence, concentration, memory and decision-making.
3. Social relationship is perceptions of their relationships with others; both getting help from others and assisting others in society which including their intimate relationship.

4. Environment is the awareness how surroundings affects their lives such as they can live freely, safely and stably.

Instrument used in research

The World Health Organization Quality of Life in Thai edition (WHOQOL - BREF - THAI) which is a measurement of the quality of life. It has been developed from the concept of quality of life by evaluating the mental habits (Subjective) which is embedded in culture, society and environment.

The World Health Organization Quality of Life in Thai edition has been developed from the World Health Organization Quality of Life of 100 items by selecting only 1 question each from 24 categories includes 2 questions from the section on quality of life and general health overall. Besides, the researcher has revised and updated the WHOQOL-BREF and tested it to meet the standard.

Data collection
1. The focus group was questioned by the researcher.
2. Screening all questions and answers which helped with analysis of the data.
Data Analysis

Quality of life scores ranging between 26-130 points.

When they combined scores of all focus groups, the score can be compared with the level of quality of life as follow:
26-60 points represents poor quality of life.
61-95 Points represents moderate quality of life.
96-130 points represents good quality of life.

The levels of quality of life are separated into different categories as below.

Categories	poor	Moderate	Good (Quality of life)
1. Physical	7 - 16	17 - 26	27 - 35
2. Psychological	6 - 14	15 - 22	23 - 30
3. Social relationship	3-7	8-11	12-15
4. Environmental	8 - 18	19 - 29	30 - 40
The average quality of life is	26 - 60	61 - 95	96 - 130

Conclusions
Basic Data Analysis
Table 1 General data analysis.

Information	**Amount(persons)**	**Percentage**
Sex		
- No sex reassignment surgery yet	104	86.7
- Had sex reassignment surgery	16	13.3
Total	120	100
Occupation		
- Self-employed	16	13.3

- Labor	26	21.7
- Student	17	14.2
- Hospitality	15	12.5

Table 1 General data analysis.(continue)

Information	**Amount(persons)**	**Percentage**
- Cabaret Show	41	34.2
Total	120	100
Status		
- Single	90	75.0
- In relationship	30	25.0
Total	120	100
Age		
- 20-25	44	36.7
- 26-30	40	33.3
- 31-35	26	21.7
- 36-40	8	6.7
- 41-45	2	1.7
Total	226	100

Table 1 shows there are more transgenders who have not done the sex reassignment surgery than ones who have done it. Moreover, the study shows there are more singles than ones in a relationship.
The majority of them work in show business and are between the age of 20 to 25.

Table 2 Average score analysis for the quality of life of transgenders in Chonburi Province.

Categories	Average score	Level of the quality of life
- Physical domain	25.6	moderate quality of life
- Psychological domain	22.1	moderate quality of life
- Social Relationship	10.8	moderate quality of life
- Environment	31.9	Good quality of life
Overall	90.35	moderate quality of life

Table 2 shows that the transgenders have an average rating of moderate quality of life overall in physical, mental, social relationships and the environment.
Average score analysis of the quality of life by sex and status as shown in Table 3-6.

Table 3 shows the average score of the transgender's quality of life in Chonburi who have not had their sex changed yet.

Categories	Average score	Level of the quality of life
- Physical domain	25.5	moderate quality of life
- Psychological domain	22.2	moderate quality of life
- Social Relationship	10.8	moderate quality of life
- Environment	31.9	Good quality of life
Overall	90.3	moderate quality of life

Table 4 shows the average score of the transgender's quality of life in Chonburi who have had their sex changed.

Categories	Average score	Level of the quality of life
- Physical domain	26.0	moderate quality of life
- Psychological domain	21.7	moderate quality of life
- Social Relationship	10.8	moderate quality of life
- Environment	31.8	Good quality of life
Overall	90.4	moderate quality of life

Table 3 and 4 show the quality of life of transgenders in Chonburi (both ones who have had a sex change, and ones who have not had the operation) have average rating of a moderate quality of life except for the environmental quality of life which is above moderate.

Table 5 the average quality of life of single transgenders in Chonburi.

Categories	Average score	Level of the quality of life
- Physical domain	25.2	moderate quality of life
- Psychological domain	22.0	moderate quality of life
- Social Relationship	11.0	moderate quality of life
- Environment	31.8	Good quality of life
Overall	89.9	moderate quality of life

Table 5 the average quality of life of single transgenders in Chonburi

Categories	Average score	Level of the quality of life

- Physical domain	25.2	moderate quality of life
- Psychological domain	22.0	moderate quality of life
- Social Relationship	11.0	moderate quality of life
- Environment	31.8	Good quality of life
Overall	89.9	moderate quality of life

Table 6 the average quality of life of transgenders who are in relationship in Chonburi.

Categories	Average score	Level of the quality of life
- Physical domain	26.8	moderate quality of life
- Psychological domain	22.9	moderate quality of life
- Social Relationship	10.0	moderate quality of life
- Environment	32.1	Good quality of life
Overall	91.8	moderate quality of life

Table 5 and 6 show the quality of life of transgenders in Chonburi who both are single and in relationship have average rating of a moderate quality of life except for the environmental quality of life which is above moderate.

Table 7 the average quality of life of transgenders in Chonburi by occupation.

Categories	Occupation											
	Corporate Employees		Self-employed		Labor		Student		Hospitality		Cabaret Show	
	Score	Level	Score	Level	Score	Level	Score	Level	Score	Level	Score	Level
Physical	29.2	Good	26.6	Moderate	24.7	Moderate	23.6	Moderate	27.0	Good	25.6	Moderate
Psychological	24.0	Good	22.5	Good	22.2	Good	21.6	Moderate	21.9	Moderate	22.0	Good
S-Relationship	12.4	Good	10.8	Moderate	11.5	Moderate	11.7	Moderate	10.5	Moderate	9.9	Moderate
Environment	33.8	Good	34.6	Good	32.0	Good	31.1	Good	31.9	Good	30.8	Good
Overall	99.4	Good	94.4	Moderate	90.4	Moderate	88.0	Moderate	91.3	Moderate	88.3	Moderate

Table 7 shows the average quality of life of transgenders in Chonburi Province by occupation has a rating of a moderate quality of life overall excluding private companies' whose employees have a good quality of life.

Considering in physical factors, almost every profession has a moderate quality of life excluding private companies' employees and the hospitality workers who have good quality of life.
Besides, the majority of professionals have a good quality of life in psychological factors except for students and hospitality workers who have a moderate quality of life.

In the social relationships, we found that nearly all professions have a moderate quality of life except private companies' employees who have a better quality of life. However, all occupations have a good environmental quality of life.

Table 8 the average quality of life of transgenders in Chonburi Province by age

Categories	Age									
	20-25		26-30		31-35		36-40		Hospitality	
	Score	Level	Score	Level	Score	Level	Score	Level	Score	Level
Physical	24.4	Moderate	26.6	Moderate	25.7	Moderate	27.0	Good	25.0	Moderate
Psychological	21.9	Moderate	22.9	Moderate	21.2	Moderate	23.5	Good	19.0	Moderate
S-Relationship	10.8	Moderate	11.4	Moderate	10.1	Moderate	10.1	Moderate	10.0	Moderate
Environment	30.6	Good	33.4	Good	31.2	Good	32.9	Good	33.0	Good
Overall	87.6	Moderate	94.3	Moderate	98.3	Moderate	93.5	Moderate	87.0	Moderate

Table 8 shows the average quality of life of transgenders in Chonburi Province is moderate in every age range.
Almost all ages have a moderate quality of life in physical and psychological factors except the 36-40 age range that has a good quality of life. On the other hand, the quality of life in social relationships at every age is moderate and in environmental at all ages are good.

The result of the research

The study of the lives of transgenders in 4 aspects; physical, psychological, social relationships and environmental, the researchers found that the key issues that should be discussed and detailed are the following.

1. The transgender in Chonburi Province are the focus group. They have a moderate quality of life overall, except in the environmental quality of life which is good. This means the focus group feels or perceives that they live freely, independently, securely and have stable lives. They can commute, work, and get benefits from health and social work services.
2. For the research in quality of life of transgenders by occupation, we found that the private companies' employees have the better quality of life when compared with other professions. They feel more secure in their jobs than others.

3. Considering the average quality of life of transgenders by age range, the majority have a moderate quality of life. However, we found that in the 36-40 age range they have a good quality of life in almost every aspect except for the social relationship which is moderate.

Suggestions

The researchers would like to offer a few suggestions for practice and research in the future:

1. Study in different kinds of focus groups ,such as Gay/Lesbian, by using the same query.
2. Study with a larger focus group in order to find more variety.
3. Should set a new benchmark which will help to apply the results and the relationships in variables factors.

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Coping Ability of Adolescents at Baromarajonnani College of Nursing Nopparatvajira.

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Abstract

The purposes of this study were to examine the coping styles and factors among freshmen in Nopparatvajira nursing colleges. The sample consisted of the students in Barommarajonnani College of Nursing Nopparatvajira (n=95). The instruments of this study were general questionnaires and the Coping Scale.

1. First-year college students reported average level Problem – Focused Coping. Social Support seeking and Avoidance strategies.
2. Female students reported higher scores in Problem – Focused Coping. than male students at the $p<.05$ level.
3. Students who come from good-relationship families reported lower scores in Social Support seeking than those poor-relationship families. Moreover, students from poor-relationship families reported higher scores in Social Support seeking Than those from average-relationship families. and those from separated- relationship families at $<.05$
4. Students who come from over-protected families reported higher scores in Social Support seeking than those from child neglect- families. Moreover, students who come from child neglect- families reported lower higher scores in Social Support seeking than those from stricted- families and those who have been nurtured with proper freedom.

Key Words: Coping ability , Adolescent

Introduction

Children and youth as a resource that is vital to national development . The community consists of children and youth with quality. With the growth of body, mind and thought and wisdom. Would affect the ability of developing countries . On the other hand , if children and young people in trouble. Both emotional Behavior and social interaction Barriers in developing countries , there are a lot. Because children and youth is an important index to predict the future of the nation.

Erik H.Erikson divided the human life of the 8 stages and the teenager said . "The age of discovery is not inconsistent with the identity of their own " (identity vs. Identity diffusion) Eriksen believes that this stage was during the conflict. Crisis look worse than the other. It is a transition period between childhood and adulthood. If you can not resolve the crisis with great teenager , he will become a child with a confused identity and become adults with personality disorder not stable. In addition, Eriksen said . These teens ages loneliness . Is himself stupidly decided not nervous . Feel that they abandoned I might become addicted thugs irresponsible both to themselves and society.

Schmidt Petersen and Bullinger says that coping is a continuation of the idea. Emotions and behaviors to deal with the needs of both internal and external, which are evaluated as individuals beyond their ability to manage it.

People have different coping styles vary depending on the nature and experience of the individual. Model developed coping strategies that will effectively help children and youth can.

Face various problems in daily life as well. And also to reduce imbalances within the mind properly.

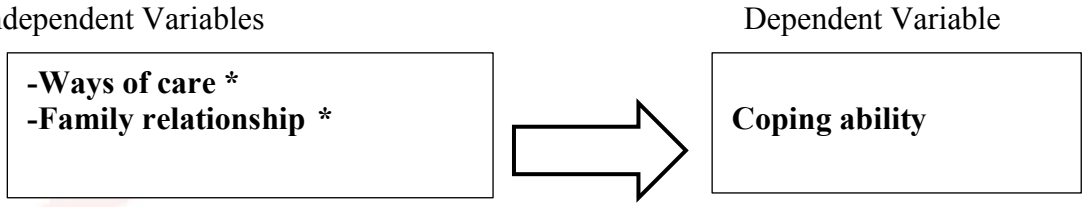
First year students in Baromarajonnani College of Nursing Nopparatvajira is another group of adolescents that have the diversity in behavior, emotion, and society. This group of teenagers is required to adjust themselves to the society, education system, and living in the college of nursing which sometimes causes much tension and suffering.

The study of coping strategies of these students will help more understand about characteristics of how to use coping strategies of students. Because no survey of this topic has been conducted here, so the researcher is interested to do in order to help those involved understand the causes, features, and behavior of teenagers under intensive care. This can be useful in terms of care, support, and problem-solving skill development and proper adjustment for these youth. This will also bring about the qualified personnel as a force to develop the country in the future.

Research Objectives

1. To study coping ability of 1st year students of Baromarajonnani College of Nursing Nopparatvajira.
2. To explore factors that affect coping of 1st year students of Baromarajonnani College of Nursing Nopparatvajira.

Conceptual Framework



Benefits of research

1. The data from the study will allow agencies understand the causes coping strategies Problems and behavioral characteristics of students in their care increases. This is helpful in terms of understanding of the students. And be able to plan for the care, management, promotion and development solutions that are tailored to these students further.

2. The data from this study can be used in planning and coordinating with the network at all levels. Parents, teachers, administrators and institutions. Including personnel, public health To cooperate in the promotion and development solutions that are tailored to these students further.

Method

Research Method : Survey Research
Samples : 95 first year students of Baromarajonnani College of Nursing Nopparatvajira

Instrument

The test used in this research consisted of 66 items and was translated by the researcher. It was derived from that of 'way of coping' created by Lazarus and Folkman (1984). Cronbach's alpha coefficient reliability was equal to 0.94.The test was composed of 3 categories as following:

- coping-directed
- Seeking social support
- Escape-Avoidance

Data Analysis

Statistics for this study :
1. The data were analyzed statistically by using SPSS to describe the nature of factors: personal factors, family factors, and environment factors. Statistics used was percentage, mean, and standard deviation (SD).
2. Analyze the data about coping of first year students of Baromarajonnani College of Nursing Nopparatvajira classified by factors studied by using one way ANOVA, and Independence-Samples t-test.

Result

Table 1 Level of coping ability

Coping ability			
Coping-directed Mean = 99.39 SD =10.87			
Social-support seeking Mean = 27.60 SD =4.85			
Escaped Mean = 64.14 SD =11.50			

From the table 1, it was found that students overall used coping-directed strategies, social-support seeking strategies, and escaped strategies in an average level of 70.4%, 70.4 %, and 68.3 % accordingly.

Table 2 Ways of care

Ways of care										

*P<.05

From the table 2, it was found that the point average of coping strategies in social-support seeking have a statistical significantly difference at .05 level.

Table 3 Relationship in the family

Relationship in the family										

Escaped	63.39	11.38	67.13	11.72	65.10	11.92	66.12	11.51	.436	.727

*P<.05

From the table 3, it was found that the point average of coping strategies in social-support seeking have a statistical significantly difference at .05 level.

Discussion

Depends on the topic of discussion, Students' coping ability used coping-directed strategies, social-support seeking strategies, and escaped strategies at the average level. Explained by the theory of Lazarus and Folkman (1982) , coping depended more on the context of problems or circumstances than the characteristic of personality which was permanent. Generally, people will use problem-directed coping in case that it is able to be controlled by themselves and frequently use emotion-directed coping as long as they find the problems unable or too difficult to control.

Factors that involved the capability of students' coping were ways of care; families with overprotection used social-support seeking strategies higher than those with other ways. The researcher considered that because of overprotection, students were not given self-problem-solving practice, it resulted in lacking of that. When they faced unfamiliar problems, they used social-support seeking strategies. If they are not given the problem-directed coping practice, and when they don't get any support or response as they need during the difficult time, it, of course, results in daily adjustment and coping capability also balance in their mind. Finally, it may cause mental illness corresponding to the research conducted by Needle, Su, and Doherty (cited in Eastwood Atwater) (1992) saying that youths from divorce families had high consequent adjustment problems; boys had those of juvenile delinquency, criminal, drug use, alcohol consumption, and sexual intercourse trail; whereas girls had less.

Suggestions

1. For application : Enhancing program should be organised on Coping Ability Adolescents.
2. For research : Counseling program should be developed to train workers who work in Counseling Center in order that they can be professional counselors.

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Understanding experiences of caregivers of adolescents with an intellectual disability and a mental illness: Initial findings in a Singaporean sample

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The present study explored the experiences of caregivers of adolescents with an intellectual disability (ID) and a mental illness (MI). Current research has highlighted the increased vulnerability of persons with ID to having MI and the complex nature of their needs. The current trend of deinstiutionalisation of persons with ID increases the significance of the role of the family caregiver, but little research has been conducted to understand the needs of the family caregiver and the impact of the caregiving. Exploring their experiences can contribute to a better understanding of their needs so that they can be better supported by appropriate services and professionals. Two parent caregivers were interviewed and their experiences were analyzed using interpretative phenomenological analysis (IPA). Initial findings in terms of various master themes were identified in areas such as emotions and coping styles. Areas for further research and clinical implications are discussed.

It is well-established that people with intellectual disability (ID) are more likely to have a diagnosis of a mental illness (MI) than those of the general population (Azam, Sinai, & Hassiotis, 2009). The estimated prevalence rate of ID from worldwide epidemiological studies is between 1% and 3% of the general population (King, Toth, Hodapp, & Dykens, 2009; Maulik & Harbour, 2010). While the worldwide prevalence rates of MI are reported between 12.2% and 48.6% in the general population (World Health Organisation, 2000), studies have shown prevalence rates of MI to be as high as 60.0% in the ID population (Cooper, Smiley, Morrison, Williamson, & Allan, 2007; Emerson & Hatton, 2007; Kishore, Nizamie, Nizamie, & Jahan, 2004).

Despite its notable prevalence, there is disproportionately less attention and research on mental illness in the population with ID than those in the general population, resulting in a lack of understanding of individuals with a dual diagnosis of ID and MI (ID-MI; Azam et al., 2009; Bouras & Holt, 2004).

Persons with ID and MI

Individuals with both diagnoses of ID and MI (ID-MI) are described to have a dual diagnosis (Turner & Moss, 1996) which can result in complex needs due to the distinct differences of both conditions and their interactions. ID is identified in an individual during the development years prior to the 18 years of age with impairments of general mental ability, an IQ of below 70, that impacts the conceptual, social, and practical domains of adaptive functioning (American Psychiatric Association, 2013). In contrast, MI according to the DSM-5, is a “clinically significant or psychological syndrome or pattern that occurs in an individual … [and that] is associated with present stress… or disability… or with a significant risk of suffering” (American Psychiatric Association, 2013).

Caregivers of Persons with ID-MI

With the increasing trend of deinstitutionalization of individuals with ID in many countries such as US, UK, and other parts of Europe (Beadle-Brown, Mansell, & Kozma, 2007; Kozma, Mansell, & Beadle-Brown, 2009), there is a rise in number of persons with ID staying with their families (Martínez-Leal et al., 2011; Prouty &

Lakin, 2000). This increases the significance of the role that caregivers play in the lives of individuals with ID-MI.

Consistent evidence in the literature highlights positive outcomes of caregiving on persons with ID-MI who live at home. Research on the general population have noted that well-supported family caregivers helped increased their relative's drug compliance and reduced relapse rates (Chien, Norman, & Thompson, 2006; Dixon et al., 2001). Borthwick-Duffy (1994) found less serious behavioural problems in persons with ID living in parental homes than in institutions. Other studies reported improvements in areas such as adaptive functioning, peer relationships, self-determination, choice and quality of life (S. Kim, Larson, & Lakin, 2001; Kozma et al., 2009).

While there are generally positive outcomes for persons with ID-MI staying with at home with family caregivers, negative effects on caregivers have been shown in most studies. Some studies have noted that caring for a child with ID and MI who is living at home is associated with a higher level of family burden (e.g., Irazábal et al., 2012) with factors that include finding the situation as stressful, having a lack of effective strategies and having insufficient resources to cope with the demands of caregiving (Eisenhower, Baker, & Blacher, 2005; Maes, Broekman, Dosen, & Nauts, 2003).

Theoretical Perspectives of Caregiving

There is no theory of caregiving known in the literature that is specific to the ID-MI population. Nonetheless, there are theories about caregivers from the separate ID and MI research that provide frames of reference to better our understanding of the caregiving experience.

The transaction model of stress and coping (Lazarus & Folkman, 1984) has frequently served as the basis for research into caregiver stress and coping in families of children with intellectual or physical disabilities (Hassall, Rose, & McDonald, 2005). Caregivers of people with disability may perceive their situation as stressful when they lack effective strategies or sufficient coping resources (Lazarus & Folkman, 1984; Maes et al., 2003). Another model that is used within the ID and MI literature is a stress and coping paradigm by Pearlin, Mullan, Semple, and Skaff (1990). The model describes caregiver stressors as linked directly to the individual and the disability or arising from the demands of the caregiving role itself, and identifies social supports and caregiver mastery or self-efficacy as mediators of stress (Pearlin et al., 1990). Using this model, studies have shown that behaviour problems of the adults with MI have shown to increase caregiver stress (e.g., Webb et al., 1998) while others used this model to look at different types of coping methods of caregivers (e.g., H. W. Kim, Greenberg, Seltzer, & Krauss, 2003).

Both models effectively conceptualise the experiences of caregivers and the relationships between the influencing factors of caregiver stress. But as neither model was developed from the ID-MI population, its utility is limited to understand this population. The transactional model of stress and coping was adapted from general family coping and stress research while the stress and coping paradigm was first

developed to explain caregiver stress in the elderly population. It is possible the two theories might not have included factors and concepts that can be unique to caregivers of persons with ID-MI that makes it difficult to get an in-depth understanding of caregiver experiences.

Current Research in Experiences of Caregivers of Persons with ID-MI

Existing research with caregivers of persons with ID-MI is fairly limited to a handful of studies. Quantitative studies have shown that caregiving burden is highest in families of persons with ID-MI followed by those with children with MI and ID separately (Irazábal et al., 2012; Martorell, Gutiérrez-Recacha, Irazábal, Marsà, & Garćia, 2011). This suggests that the interaction of ID and MI generates a higher impact on the family functioning than when presented separately. Studies regarding caregiver support indicate that families of children with ID-MI do have unmet needs such as respite care and practical help, but are reluctant to seek help due to influences self-perception of own resources and perceived lack of severity of problem (Martorell et al., 2011).

Qualitative research have centred mostly on caregivers' experiences with external agencies (e.g., psychiatric in-patient hospital) in receiving support for their children (Weiss, Lunsky, Gracey, Cannius, & Morris, 2009). The main themes that have emerged are confusion over diagnosis, dissatisfaction with mental health services, lack of effective treatment, and feelings of helplessness.

Although these studies have given insight into the complex nature of stress and burden that caregivers face at external settings, few focused on the home context of caregiving and on adolescents. This is an essential aspect to look at as most individuals with ID and MI are now being cared for at home, especially in an Asian country such as Singapore where Asian values of families looking after their children are still upheld (Wong, Yeoh, Graham, & Teo, 2004). Furthermore, the stage of adolescence has the highest prevalence rates of MI within the general and ID populations (McIntyre, Blacher, & Baker, 2002).

A qualitative study by Faust and Scior (2008) did focus on the home aspect of caregiving of adolescents with ID-MI. They found that caregivers were burdened by constantly managing challenging behaviours of their relatives and at times felt helpless. The authors, however, noted that three out of their seven participants' care recipients were staying at residential homes or external settings at the point of the interviews. The period of time away from home was not revealed hence the authenticity of the participants' responses during the interviews is rendered questionable.

This emphasizes the need to understand more about the home experiences of these caregivers and the meaning of giving care to their adolescent relatives. It is with

intention that such understanding can aid in development of programmes that can better support caregivers, resulting in more positive outcomes for these individuals.

Hence, the present study aims to explore the experiences of caregivers of adolescents with ID-MI within the home context.

Method

Study Design

A qualitative approach, specifically Interpretative Phenomenological Analysis (IPA), was employed to understand the richness of the caregivers' experiences. IPA is selected over other types of qualitative approaches (e.g., grounded theory) as IPA is concerned with the detailed examination of the human lived experience (Smith, Flowers, & Larkin, 2011). As this is an exploratory study that specifically examines the in-depth experiences of caregivers at home, IPA enables this by allowing experiences to be expressed in their own terms instead of aligning them to predefined category systems (Smith et al., 2011).

Participants

This project was part of a larger ongoing study that focused on exploring caregivers' experiences of providing care for adolescents and young adults with ID-MI in requirement for a Master thesis. Two participants were recruited based on being identified as the main caregivers of adolescents from 16 to 22 years old who have both formal diagnoses of intellectual disability and a mental illness, and who reside at home with their caregiver. The main caregiver is defined as the person who is the main source of support for the adolescent on a regular basis at home. They met the requirements of the selection criteria namely the caregiver being conversant in English. Details of the participants' demographics are listed in Table 1.

Table 1. Demographics of Respondents

Respondent	Relationship to child	Age of parent	Highest level of education	Occupation	Ethnicity	Age of child	Type of mental illness
A	Mother	46	Primary 5	Homemaker	Indian	19	Obsessive Compulsive Disorder
B	Mother	51	Post-secondary	Manager	Chinese	17	Schizophrenia

Participants were recruited mainly based on their shared experience of being a caregiver of an adolescent with ID-MI, as the focus of IPA is to select a sample that "'represent' a perspective, rather than a population" (Smith, Flowers, & Larkin, 2009, p. 49). IPA emphasizes the importance of the homogeneity of the sample and the sample used for the research study is considered homogenous because
the participants represent the phenomenon of being a caregiver of adolescents with ID-MI.

While additional information such as social economic status or ethnicity would allow a better understanding of this phenomenon, it is not necessary to control for these variables from an IPA perspective because the focus is on the phenomenon and not the population.

Procedure

Recruitment of caregivers was from a post-secondary vocational school that catered to individuals with mild intellectual disability from the ages of 16 to 22 years old. An introductory letter detailing the purpose of the research study and the researcher's contact was mailed to each potential participant identified by the school psychologist. Interested participants made individual appointments with the researcher at an agreed venue of their choice (e.g., home, school). Written informed consent for the study and audio recording from the parents/guardians were obtained before the interview commenced. The researcher emphasized confidentiality of the participants' information. A demographics form was used to collect participants' bio data such as age, occupation, age of child and type of mental illness. All participants were reimbursed for their transportation costs and were presented a $20 grocery voucher as a token of appreciation at the end of the interview.

Interviews

A semi-structured interview schedule comprising open-ended questions was utilized, in line with the theoretical framework of IPA (Smith, 1995). The interview schedule inquired about several areas of interest for discussion such as the experience for caring for an adolescent with ID-MI at home and the meaning of being a caregiver. The participants were encouraged to share their feelings and opinions with minimal interruptions from the interviewer. Each interview lasted between 45 and 60 minutes. The interviews were audio-taped and transcribed, with all the participants' names changed for confidentiality purposes.

Ethical considerations

Prior to conducting the study, ethics approval was sought from the James Cook University Human Research Ethics Committee. All participants were debriefed after the interview and given contact details of two organisations that catered to caregiver support and counselling.

Analysis

The data were analyzed using IPA (Smith, Flowers, & Larkin, 2009; Smith & Osborn, 2003). The researcher is interested to find out what it is like to be experiencing events from the participants' point of view. The meanings that the participants attribute to their experiences are of paramount importance to the researcher and according to symbolic interactionism, a major theory underpinning IPA which describes how people interact through use of language (Denizen, 1995), these meanings can only be acquired through a process of interpretation. IPA therefore aims to bring about a more holistic understanding of an individual, by both empathizing with the person and by making sense of their experiences through interpretative analysis (Smith & Osborn, 2003).

Each transcript was examined in detail and three types of comments or notes (descriptive, linguistic and conceptual) were noted down in the margins of the

transcripts by the researcher (Smith et al., 2009). Descriptive comments involved the content of the participant's narrative while linguistic comments focused on the participants' use of language. Conceptual comments entailed capturing the participants' narratives at a more abstract level. After the comments had been noted down, the researcher interpreted these comments based on her understanding of the entire transcript and her own experiences, and listed down her interpretations as emergent themes, which are phrases that represent the psychological essence of the text in a concise manner. As the focus of IPA research is not to obtain an objective but a subjective view of a phenomenon, this particular interpretation by the researcher represents one of the many possible and acceptable interpretations (Smith et al., 2009). The emergent themes were then clustered into different groups based on similarity in meanings and each individual group represented a particular theme. This process was performed for the two transcripts.

Validity in IPA studies is usually assessed through conducting an independent audit trail (Dallos & Vetere, 2005; e.g., Smith et al., 2009). The author's supervisor conducted the audit trail by checking through the research data in a sequential progressive manner from the raw data to the final write-up. Themes from the raw data were discussed between the author and the supervisor during supervision. By conducting an independent audit trail and checking that a coherent progression could be observed through the chain of evidence, the quality and validity of the research study are increased and the final report is ensured credible (Yin, 1989).

To increase the rigour of this study, the author kept a reflective journal throughout the process of the study to record reflections of her own experiences during the study that were discussed with the supervisor. This helps in the understanding and awareness of how the author's preconceived notions and past experiences throughout the study may affect her interpretation of the interviews, as shown in other studies (e.g., Koch, 2006).

Results

In this section, results will be presented as common sub-themes of each participant derived from the qualitative analysis, followed by relevant quotes from the participants to highlight key points of the themes. The sub-themes present an account of how the participants feel and experience caring for their child and the impact it has on themselves. The sub-themes emerged from the qualitative analysis from the two participants are presented in Table 2 for an overall view.

While these sub-themes will be further analysed in more detail once the full sample of six is collected, the common sub-themes that came across from the two participants will be shown in the following sections. These common themes were extracted by identifying similarities in words, phrases or conceptual meanings between the sub-themes of both participants. This could lead to an indication of these being master themes for the whole sample but may change in light of more results from the bigger sample of six participants.

Table 2. List of Sub-Themes

Participant A	Participant B
• Comparison with other children • Care compounded by taking care of another child with special needs. • Inconsistency and unpredictability of child's behavior • Child's behaviour is intentional to parent • Child's capability vs child's choice • Thinking of cause of child's behavior • Sense of frustration • Feeling stressful • Suffering • Helplessness and disempowerment • Uses avoidance/ distraction to cope • Suppression of emotions	• Struggle with multiple demands • Difficulty in providing care • Managing activities of caregiving • Control over child's behaviours • Finding explanations • Negative feelings of caring • Worry • Reliance on self as a coping resource • Dependent on external support • Child's progress of mental illness • Problematic relationships with relatives • Problematic sibling relationships • Expectations of self • Expectations of child • Physical effects of caring • Dissatisfaction with services • Lack of knowledge and skills

Difficulty in Managing Responsibilities

Both participants shared about their struggle to manage the practical and material aspects of caregiving such as helping their child in activities of daily living while carrying out their household chores. Participant A shared:

> I have to cook at home and then look after the needs of my son also, so I have to take care of the house and erm and everything and erm… So suddenly my daughter is doing that, I feel quite stressful.

Participant B expressed her struggle in finding time to help her child because of the multiple responsibilities she has as a working mother. She talked about sacrificing her work commitments and future career goals as a way to spend more time with her child:

> I change from job to job to find one that is hopefully I can balance my work and with [my] child. My next job I'm going to get a big pay cut. I mean as parents we are willing to sacrifice.

Emotional Distress

Providing care to their children has a considerable impact on the participants' emotions, with participants indicating an array of negative feelings attached to various aspects of caregiving such as frustration, sadness and worry. Participant B shared on how managing her child's behaviours impacted her emotionally:

> Sometimes once a while she will go back into her own world and start talking to herself. Then I will snap her out, scold her and she will come back and

> continue reading… [I am] very frustrated, sometimes I tend to scold her.

The frustration from Participant B in this extracted quote could be seen as a result of her managing her child's behaviours but also appears to be an automatic emotional reaction of seeing her child demonstrating non-typical behaviours.

Beyond the emotional aspects of daily caregiving, there seemed a sense of emotional burden related to the overall experience of being a caregiver. Participant A reflected on the significance of herself still caring for her daughter who is a young adult:

> I find that [caring for my daughter], it is very stress because she is big enough to look after herself you know, to care [for] herself. [ ] I feel sad 'cause other children they go to send themselves to school. They will do it themselves. But when I see my daughter is a bit different so I feel very sad.

Finding Explanations

Both participants had brought their children to a psychiatrist for an assessment after which a diagnosis might have been given as an explanation for the behaviours. Interestingly, Participant A still sought for plausible explanations and reasons for the occurrence to understand their children's behaviours. Participant A shared on her experience of her daughter's sudden behaviour of shouting at home:

> My thoughts are why she is doing that to … I don't know what happened to her. Suddenly she's behaving like that. Er.. is there anything preventing her or not. Im not very sure. So there is quite not good for me. I am very upset by this.

To Participant A, the lack of salient explanations for the unpredictability of the behaviour might have led her to think about the possible reasons of her behaviour. Participant B, on the other hand, readily used the diagnosis to make sense of the behaviour, for example Participant B:

> She's like in a different mode. Sometimes she will ask a lot of questions, sometimes she is totally by herself [in her own world]. So it could be because of her mental problem.

However, Participant B continued to share in the later part of the interview a sense of self-blame and took responsibility for her daughter's condition:

> It is my responsibility, I mean of course, like a lot of mothers also say, give birth to this child, don't know what we have done wrong to make her, you know, not normal. So I think all the mothers the same [ ] like we have done something wrong.

This could reflect Participant B's inner emotional conflict of harbouring a sense of guilt and self-blame while trying to explain for her daughter's diagnosis.

Control Versus Helplessness Over Child

During the interviews, both participants indicated a sense of wanting control over their children's behaviours. Both felt that the child had no control over her behaviours and was rather seen as helpless as times, as aptly said by Participant A:

> Because my two… both children are special needs and they need more care for themselves 'cause if they are normal children they can get better… but my children need help.

Participant B similarly shared:

> I told her, I say I know you have an invisible partner but please, when you're outside, don't talk to yourself. Everybody will stare at you and laugh at you, why are you talking to yourself? So she's aware but sometimes she's like, she can't help it. She can't control her feelings that well.

The perception that the child is seen as helpless at times and not having the capability to control their own behaviours might have led Participant B to gain control over their behaviours by employing strategies and use of discipline approaches to curb their behaviour that leads to a power struggle. Participant B resorts to using verbal punishment as a way to control her daughter's behaviour of talking to herself:

> Hmm, sometimes once [in] a while she will go back into her own world and start talking to herself. Then I will snap her out, scold her and she will come back and continue reading. Hmm, its sometimes abit frustrating because on off she will be in and out of her world and sometimes she can't focus.

In contrast, Participant A expressed helplessness in controlling her daughter's behaviour where it seemed a challenge to find practical solutions in managing the behaviour.

> Cause she erm… when she behaves like that I feel that she's out of control… erm… sometimes I don't know what to do, I feel helpless. Erm… I don't know how to ask for help.

From this, Participant A's sense of disempowerment could also be a result of her own perception that her daughter's behaviour cannot be controlled which makes her feel powerless to control the behaviour.

Positive versus Negative Coping Style

Both participants shared different ways of coping while providing care to their children. Participant B showed active coping by seeking practical help from others such as family members and hiring a domestic helper.

> I got my mum's help and she is very understanding although she cannot help much but at least she help me to take care of my 2 elder ones. The younger one… we have a helper … This one was quite good. Ah… so this is her fourth year with us. This is the only maid that remains. My daughter also sticks to her and they are like buddies.

Participant B also expressed her determination to cope despite the challenges stemming from her responsibility as a mother:

> Because she is my daughter, no matter what [I] still have to cope. Cannot cope

also must cope.

On the other hand, only Participant A subscribed to using distraction and avoidance as a way to cope with the level of stress that she feels.

> I don't think much of the things of my children so I don't get myself stressed too much and I do housework and I keep my... I guess I just forget what is happening… Not to think [about] my children, what they are, what my daughter is doing.

Discussion

This study provides an understanding into the home caregiving experience of two parents of adolescents with MI and ID. The sub-themes will be discussed in relation to existing research followed by a discussion on the clinical implications of the study, limitations of the current study, and possible areas for future research.

Both participants highlighted how they are affected by the caregiving experience in the areas of juggling multiple responsibilities and experienceing emotional distress. They discussed about the struggle to manage the various activities of daily living for their child with ID-MI, helping their child to manage the behaviours of MI, while having their own work and family commitments. Struggling with multiple responsibilities is evidenced to be one of the main types of caregiver burden and is seen to be stressful, as reflected in some studies that looked into factor of caregiver burden (e.g., Martorell et al. 2011). Participant B dealt with the struggle by sacrificing her work commitments by taking time off from work or changing jobs to spend more time with her child. This finding extends previous studies of caregiving burden (e.g., Maes et al.; 2003; Martorell et al., 2011) as it provides an understanding in what caregivers do to manage their struggle.

The emotional distress related to caregiving such as frustration and worry resulted from the constant meeting of the child's daily needs, such as preparing for school and meals, and the daily management of their behaviours. This highlights the complexity of needs that this group of adolescents present due to the co-existence of two different and distinct conditions and the increased emotional burden of caregiver in the ID-MI group in comparison to individual groups with ID and MI (Maes et al., 2003).

During caregivers' interviews, the impact of caregiving was discussed. One issue that was repeatedly raised was finding explanations of their children's behaviours to make sense of their situation. Both participants were initially confused with their child's behaviour and were not able to makes sense of what they saw in their child. This is a similar finding to that in Faust and Scior's (2008) study where they noted that parents struggled to understand and felt confused when behaviours that are not typical or characteristic of their child's ID were displayed.

But unlike the parents in Faust and Scior's (2008) study whose feelings of grief and shock were re-triggered from past memories of receiving the diagnosis of ID, the two participants responded to their confusion by searching for plausible explanations for the behaviours. It could indicate that the caregivers is this study are comparatively more active in their pursuit of explanations in the spate of crises rather than being

reflective of past feelings and memories. Theoretically, this is in line with Lazarus and Folkman's (1984) transactional model where people are constantly appraising their transactions with their environment and continually making cognitive and behavioural efforts to handle demands.

Caregivers' experiences centred around gaining control of their children's behaviours and the strategies used. While Participant B talked about struggling to control her child's behaviours by using various approaches (e.g. scolding), Pariticpant A expressed feelings of helplessness in knowing what to do which may have stemmed from her perception that such behaviours cannot be controlled.

Differences in coping strategies were also indicated between the two participants. While Participant B shared about active coping strategies such as seeking help from others that reflected similar results in previous studies (e.g., Douma, Dekker, & Koot, 2006) about finding practical help as a popular active coping strategy, Participant A used distraction and avoidance to cope with the stress she faced in managing her daughter's behaviours.

Clinical implications

As previously mentioned, this current study is part of a larger ongoing study, hence its findings at this stage at best can only suggest some clinical implications about how caregivers of persons with ID-MI can be better supported.

Caregivers' frustration of not being able to make sense of their children's challenging behaviours and their search for various explanations imply much is to be done in regards to provide adequate levels of psycho-education at the point of diagnosis at the mental health clinics. Psycho-education through brochures, pamphlets, and extensive face-to-face discussions with professionals can help caregivers to better understand the diagnoses and the related behaviours. Having a comprehensive mental health guide and informational booklet have been found to be useful by caregivers especially when it provides holistic information in caring for the child in terms of practical tips and lists of contact numbers for continued caregiver support from various agencies (Gratsa et al., 2007). Emotional distress experienced by caregivers in the current study years after diagnoses highlight the potential role of allied health professionals such as counsellors and psychologists to provide counseling support to caregivers not just at the time of the diagnosis but also regularly throughout life of the child.

Limitations

The limitations of this study is primarily linked to the limitations of the method used in the study. As previously mentioned, IPA was chosen as an ideal qualitative method to explore and analyse the richness of the caregivers' experiences through audio-tape interviews. As this study was conducted in Singapore, made up of people with different ethnicity and linguistic backgrounds, there were limitations in using interviews to explore their experiences. While being able to converse in English, Participant A and B noted that their first language was not in English but in Tamil and Mandarin respectively. As such, it is possible that the participants were not able to express their thoughts and feelings in precise ways as they would like to. Hence, the choice of words they used in the interviews were limited to their exposure to English, their educational level, as well as the amount of opportunities they had in speaking English.

Future research

The small sample size of this study and presence of researcher bias as the result of the interpretative nature of IPA limits the generalizability of this study. Nonetheless, this study is exploratory in understanding the experiences of these caregivers in which future research can entail quantitative approaches in a larger sample to provide objective results. Quantifying the data could also allow other researchers to replicate the study and to study the phenomenon more objectively to further understand this unique group of caregivers.

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Cognition for eating behavior of Thai's consumer: the mirror of public health policies

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Abstract

Now, Thai's consumers especially who lived in the main cities have an active concern on eating behavior, but are they know the true concept of healthy deeds? The survey results showed that more of consumers mentioned only to eat healthy food and nutritional drink, but ignore other of eating manners. Moreover, in 2012 Thailand government announced the success of public health campaign with increasing rate statistic of long expected aged with good health corrected by WHO. In 2002, Thailand has this rate about 60.1 years and continuously raised to 62 years in 2009. This rate grew up than others countries in Asia such as Brunei, Malaysia and Indonesia, however it got smaller than the developed countries. Contrast with this elevated rate, a lot of consumers think that they still have more illness and unhealthy cognition. This study aimed to test the healthy-eating behavior by using 398 surveys and focused on the high education consumers who lived in economically cities. The results showed that consumers thought that healthy-eating meant eating more vegetables or fruits (3.57 points), concerning in eating with healthy cognition (3.47 points) and having 5-categories food group (3.30 points). This behavior demonstrated that more buyers still had wrong perception by not concerns to reduce consumption on alcohols and cigarettes or avoid the chance of infection. Furthermore, this behavior showed that government still not successfully achieved the goal of good public health policies and also worked hard to stimulate the true cognition about healthy concern by giving the information on both higher education group and others.
Keywords: Eating-behavior, Healthy cognition, Public health policy

1. Introduction

More than half of the world's population now lives in urban areas (State of the world population, 2007). Urbanization implies "considerable changes in the ways in which people live, how they earn their livelihoods, the food that they eat, and the wide range of environmental factors to which they are exposed" (Phillips DR, 1993). There is an underlying assumption that urban populations will be healthier than their rural counterparts and that urbanization equates with modernization. However, this is rarely true. Research about the features of urban areas that influence health had been relatively sparse, but often indicated the increasing of health hazards (Judd,&et al., 2002). This means that there are some factors affect to the health of people especially for who lived in the main cities.

A conception regarding rural versus urban health was the idea of a changing in eating behavior cognition for civilization people. Nowadays, economic environment in the main cities has rapidly changed with high competition in workforce, rush-hour time, frequency stress and problematic lifestyle. This causes more people cannot have proper actions of eating. Some of them do not have full stuffs per day or eat foods that have less nutrition or take a shortest time (about 10-15 minutes) per meals. These irregular dinning behaviors contributed to symptoms such as weight concern, body shape anxiety, excessive hungry and dyspepsia that finally led some people to be the eating disorder patients (Killen, et. al. 1994; Wondwerich, Connolly&Stice, 2004). This unhealthy behavior has been suggested that a so-called "toxic environment" where highly palatable and calorically dense foods are very visible and easily available contributes to these difficulties in weight regulation and to the high prevalence of obesity (Hill&Peters, 1998; Wadden, Brownell,&Foster, 2002).

Government should be the main agent to provide the health information to the social and resolve this undesirable circumstance. Social security deeds are the cognitive policy that gives people to have full action about the eating behaviors. However, each country has different concept to implement this policy.

In this decade, the ministry of public health of Thailand is the main agent to implement the healthy cognition campaigns with social security planning. The objective of these public health campaigns is to countermeasures against nutritional issues that prevent the people from the disease. The promotions such as "5 food group: partner of good child", "Every day eat breakfast", "Diabetes: protect our future", "Low salt 50%", "Reading before eating: vitamins has both sides", "Changing behaviors for healthy: reducing sweet fat and salt, eat more vegetables", "Vitamin C: benefit that you do not know", "Fiber: Good for your health", "Amino acid from protein", "Time for drinking water: increasing potential of your health", "Washing hand healthy campaign", "Giving liquor means cursing", etc. are starting at 2002 until now. However, the results about the effect of these campaigns to consumer health do not directly reflect to the implementer.

WHO is the organization to observe the health system in each country and monitor the successful of public health policy. It provides the statistics about long expected aged with good health to tell the situation of people's health. If the rate is increasing that means people who lived in that country would be healthier than the past. For Thailand, this rate about 60.1 years in 2002 and continuously raised to 62

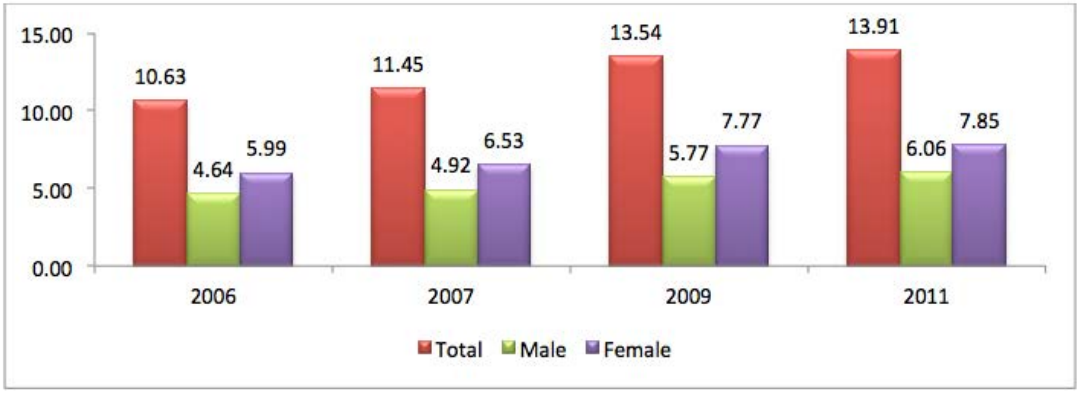
years in 2009. This rate grew up than others countries in Asia such as Brunei, Malaysia and Indonesia, however it got smaller than the developed countries.

Table1 shows long expected aged with good health (Years)

Country	Long expected aged with good health					
	2002			2009		
	Average	Male	Female	Average	Male	Female
Sri Lanka	61.60	59.20	64.00	63.00	61.00	65.00
Thailand	60.10	57.70	62.40	62.00	59.00	65.00
Indonesia	58.10	57.40	58.90	60.00	60.00	61.00
Maldives	57.80	59.00	56.60	64.00	64.00	64.00
India	53.50	53.30	53.60	56.00	56.00	57.00
Bhutan	52.90	52.90	52.90	55.00	54.00	56.00
Myanmar	51.70	49.90	53.50	50.00	48.00	52.00
Bangladesh	54.30	55.30	53.30	56.00	56.00	55.00
Nepal	51.80	52.50	51.10	55.00	55.00	55.00
Singapore	70.10	68.80	71.30	73.00	71.00	75.00
Brunei	65.30	65.10	65.50	66.00	66.00	67.00
Malaysia	63.20	61.60	64.80	64.00	62.00	66.00
Philippine	59.30	57.70	61.50	62.00	59.00	64.00
Vietnam	61.30	57.10	62.90	64.00	62.00	66.00
Lao	47.00	47.10	47.00	54.00	53.00	54.00
Cambodia	47.50	45.60	49.50	53.00	51.00	55.00
Japan	75.00	72.30	77.70	76.00	73.00	78.00
Canada	72.00	70.10	74.00	73.00	71.00	75.00
Iceland	72.80	72.10	73.60	74.00	71.00	75.00
Sweden	73.30	71.90	74.80	74.00	72.00	75.00
Switzerland	73.20	71.10	75.30	75.00	73.00	76.00
World	**-**	**-**	**-**	**59.00**	**58.00**	**61.00**

Source: WHO, World health report, 2003. WHO, World health statistics, 2010.

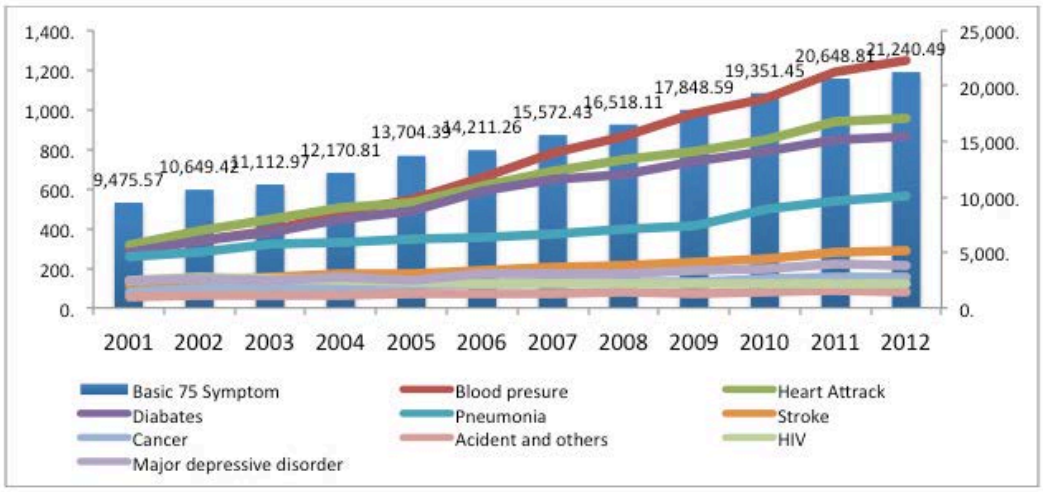
With this rate, Thai government announces for the successful campaign on public health policy, but it is contrast with another rate that corrected the health cognition by other source. For example, national statistical office (NSO) in Thailand assessed the data about cognition of unhealthy and illness, the result showed that in year 2006, there are 17.71 percent of total population (10.63 million people) still thought that they had unhealthy and illness. This ratio went up to 18.48 percent of total population (11.45 million people) in year 2007, 21.49 percent of total population (13.54 million people) in year 2009 and 21.73 percent of total population (13.91 million people) in year 2011. The data demonstrated that a lot of consumers thought that they still had more illness and unhealthy cognition.



Picture 1 shows amount of people that have unhealthy and illness cognition in 2002-2011(Million persons)

Source: National Statistical Office, Thailand

Like NSO information, the ministry of public health of Thailand accumulated the diseases' facts during 2001-2012 aimed to evaluate the health behavior of people in the country. The outcome explained that the rates of person who got the important diseases such as blood pressure, heart attack, diabetes and pneumonia were increasing. However, there were some of diseases that its rate had little grew up; such as stroke, cancer, accident and others, HIV and major depressive disorder. This means that there is some uncontrolled factors affected health of people. When determined the cause of diseases, the consequences told that eating-behavior is a major factor stimulated this illness. So, the research question is "Are people knowing the true concept of healthy deeds?"



Picture 2 shows ratio of people who have diseases in 2001-2012
(Thousands persons per 100,000 populations)

Source: the ministry of public health, Thailand

From the important action of eating behavior, this study aimed to determine the cognition of eating attitude and behavior to reflect the cognition of consumer. Next, the comparison procedure with the recognition rate of each public health policies that used to show the effect of each policy. Finally, this study tested the difference behavior of person categorized by group aimed to demonstrate the way to increases cognition of eating behavior by health campaigns that would be applied to social security system in the future.

2. Data and Methodology

To show the cognition of eating behavior reflected with the public health campaign. First, this study found the proper questions to verify the cognition of eating behavior that were concerned with basic pattern of healthy dinning. These questions came from variety source such as discussion outcome in seminar of Ministry of Health in Thailand, other studies such as food rule measure (Brown, et. al., 2012), eating behavior pattern (Hathaikarn and Amporn, 2007). Next, the Delphi technique with policy makers was used to match these questions with the public health campaign. In this step, each subject could be adjusted its content to reflect the policy. Then, the survey was conducted in sampling group. In this procedure, it initially asked about these eating behavior topics and latterly it asked the retention of health policy implemented by government. Finally, this study needed to understand all kinds of eating attitude and rearranged it to classify their behavior with content analysis method. If analysis of insight cognition was correctly interpreted, it would facilitate to see the effect of public health campaign that would be supported the cognition on eating behavior of people and then the outcome would lead to figure the policy in the future.

This study used questionnaire of 398 surveys and focused on people who had high education and lived in economically cities. The objective of this survey is to consider urban population behavior and attitude on eating behavior. Cronbach's alpha (a measure of internal consistency or how closely related a set of items are) was used to assess the inter-item reliability for this survey) The Cronbanch's alpha test of this survey is about 0.706, suggesting that the items had a relatively high degree of internal consistency (note that a reliability coefficient of 0.70 or higher is considered “accepted” in most social science research (Hair, et. al., 2006). The alpha's score measured acceptable for an explanatory analysis, indicating that the factors in the questionnaire are inter-related.

To analyze the health public policy, this study used in-depth interview of each participant aimed to explain the recognition rate of campaign and learnt more in deep detail of consumers' cognition on eating behavior. Furthermore, it is required to make sure that the information obtained is not just basic or general data, but it is from consumer insight.

For questions that used in this study, there are six subjects imitate with public heal policies that mainly implemented between year 2002-2013 and still demonstrated in social media. Table 2 showed the description of each question and its mirror toward public health policies.

Table 2 shows Survey questions and public health policies

Question	Description	Public health policies
Q1	I’m a person who is concerning to	“Washing hand healthy campaign”, “Everyday

Question	Description	Public health policies
	behave with healthy cognition	eat breakfast" and "Time for drinking water: increasing potential of yours health"
Q2	I choose to have a meal with 5 food groups	"5 food group: partner of good child"
Q3	In each meal, I'm preferring to eat more fruit and vegetable	"Eat more vegetables"
Q4	I'm selecting and eating healthy food with vitamin, fiber and amino acid that good for your health	"Vitamin C: benefit that you do not know", "Fiber: Good for your health" and "Amino acid from protein"
Q5	I avoid to eat a disadvantage food and drink or something such as coffee, alcohol, food with high in fat or/and sweets and scorching meat that cause unwanted diseases	"Reducing sweet fat and salt", "Diabetes: protect our future" and "Giving liquor means cursing"
Q6	I find myself preoccupied with though about ingredient and nutrition in everything I eat	"Low salt 50%" and "Reading before eating: vitamins has both sides"

These questions have capability to test the healthy-eating behavior of consumers in the market. Each question would be rated in scored that demonstrated the respondent healthy concerned. These scored are 5-always, 4-often, 3-sometimes, 2-rarely and 1-never. The result is derived from the highest mean score of factors of eating-behavior based on the respondents answer.

3. Findings

The study collected the survey that 144 respondents were male (36.2%) and 254 respondents were female (63.8%). Most of them had age between 21-40 years (80.2%), graduated with a Bachelor's degree (63.3%) and income per month between 10,000-50,000 Baht (69.7%). To classify the basic health of each sample, this study asks about what kind of disease that each respondent would be risk to plug in. The outcome demonstrated that more of them (53.52%) had no risk of disease, and then followed by kidney's diseases (20.35%), blood pressured (13.07%), diabetes (11.31%) and others.

The results in table 3 can be conducted that the sampling group has given the degree of moderate in healthy-eating cognition with the mean of 3.31 while giving the often level for preferring to eat more vegetables or fruits in each meals with the mean of 3.57; Concerning in eating with healthy cognition is considered as the often level (Mean= 3.47); Having 5-categories food group is considered as the sometimes level with the mean of 3.30; Carefully to educating the ingredient and nutrition of every food and drink is considered as the sometimes level with the mean of 3.27; Keeping away from disadvantage or unhealthy food and drink is considered as the sometimes level with the mean of 3.21; Frequency selecting and eating healthy food with vitamin, fiber and amino acid that good for your health is considered as the sometimes level with the mean of 3.07.

Table 3 shows Healthy-eating cognition of sampling groups and retention rate of public health policies

Questions	Avg. (Points)	S.D.	Level	Public health policies	Recognition rate (%)
Q1	3.47	0.75	Often	"Washing hand healthy campaign"	**75.13**
				"Everyday eat breakfast"	31.73
				"Time for drinking water: increasing potential of yours health"	39.09
Q2	3.30	0.86	Sometimes	"5 food group: partner of good child"	**70.81**
Q3	3.57	0.94	Often	"Eat more vegetables"	**80.20**
Q4	3.07	1.06	Sometimes	"Vitamin C: benefit that you do not know"	21.83
				"Fiber: Good for your health"	11.42
				"Amino acid from protein"	3.05
Q5	3.21	1.02	Sometimes	"Reducing sweet fat and salt"	41.88
				"Diabetes: protect our future"	33.76
				"Giving liquor means cursing"	**97.46**
Q6	3.27	1.1	Sometimes	"Low salt 50%"	**62.94**
				"Reading before eating: vitamins has both sides"	27.66

Source: Survey results

To imitate these results with the campaign, "Giving liquor means cursing" has highest recognition rate, which is equal to 97.46 percent. These great rates came from the long time in conducting this campaign and frequency appeared in the television media. However, when analyzing the perception in eating behavior, it shows in the sometimes level. This means that some consumers think the drinking an alcohol does not harm their body or it's not an important factor to get a disease to their wellbeing. The in-depth interview result shows that there are some factors such as traditional of community and emotional in the situations that make a difficult action to follow the healthy rules. To sum, this campaign cannot promote the successful message on healthy eating-behavior to the consumers.

The interesting point is the campaign "Eat more vegetables" that has recognition rate equal to 80.20 percent. Comparing with healthy cognition, the behavior of preferring to eat more fruit and vegetable is in the often level. This means that this campaign is successful to motivate people to act in healthy conscious. To analyze with in-depth interview demonstrates that vegetable and fruit are the symbol of healthy regime, so when this campaign sends the message, people can be completely get it and perform it in the proper way.

"Washing hand healthy campaign" is the one campaign that people can be recognized which rate is equal to 75.13 percent. This high rate come from reason that this campaign has frequency broadcast in the Influenza A(H1N1) epidemic period. So, it has directly linkages with healthy concern. Then, it motivates people to worry about their healthy cognition due to the healthy eating- behavior would be stimulated, too. Concerning to behave with healthy cognition has been behaved in the often level.

There is some public-health promotion related with education curriculum. "5 food group: partner of good child" is the one promotion to be an example. The recognition rate of this campaign is about 70.81 percent. Compared with others, this policy has the longest period in broadcasting (about 30 years ago). In primary school, this concept have been plug-in the health-education course, so children would be

more concern to have 5-foods groups in each meal. However, the cognition of having 5-foods groups in each meal has sometimes level. This means that there are some factors that would be effect this perception. Lifestyle-changing and high-competitive in workforce are the main factors that affect this eating-behavior. Some of respondents answers that they do not have more time to think what they are eating or do not capability to consume their meal in the proper ways (sometime they are eating in the meeting rooms, in the cars and take 5-10 minutes to finished their meal). However, they are concerned this eating-behavior caused more disease, but they do not have ability to solve them. This means that some campaign that they know it is good for healthy, but they do not do it well.

"Low salt 50%" is the public health policy that directly aims to reduce the kidney's diseases. The recognition rate of this campaign is about 62.94 percent. However, it creates sometimes level of motivation in caring about ingredient and nutrition of food that consumers want to eat. This means that this campaign is not successful to warning people to have good behavior of eating. Therefore, other public health policies even if they have medium recognition rate, but all of them cannot have an efficiency to motivate people to concern their healthy eating-behavior.

To summary this cognition concept, the outcomes of this survey could be demonstrated that most of sampling people still have wrong perception that neither concern on eating healthy food with vitamin, fiber and amino acid that good for your health, thinking about ingredient and nutrition nor reducing consumption on alcohols and cigarettes or reducing the chance of eating infection. These show the unsuccessful motivation promoted by campaign. Then, government should be reconsidered in these actions and conducted the new era of public health policies to promote the better beneficial to the populations.

Next, to investigate what group has more serious in healthy eating-behavior, this study used ANOVA test to measure the difference of cognition in each group of people. It provides cut-off scores by F-test for statistic significantly healthy cognition and characteristics of samplings. The characteristics classify in five dimensions by gender, age, education, income and diseases' risk. One-Way ANOVA analysis between the eating-behavior and characteristics of samplings was executed. The objective of the analysis is to find out whether there is significant difference between the dimensions of each group. The outcomes of the analysis were presented in Table 4.

Table4 shows difference of Healthy-eating cognition of sampling groups by characteristics (Points)

	N	Healthy-eating cognition													
		Q1		Q2		Q3		Q4		Q5		Q6		Total	
		Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig
Gender															
Female	254	3.52	0.04**	3.32	0.51	3.63	0.06*	3.15	0.03**	3.33	0.00**	3.37	0.01**	3.39	0.04**
Male	144	3.36		3.26		3.45		2.91		2.99		3.08		3.18	
Age															
<= 20	16	3.0	0.06	3.3	0.6	3.2	0.16	3.1	0.15	3.4	0.43	3.0	0.4	3.2	0.16

	N	Healthy-eating cognition													
		Q1		Q2		Q3		Q4		Q5		Q6		Total	
		Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig
years		6	*	8	0	5		3		4		6	9	2	*
21-30 years	175	3.43		3.23		3.50		3.02		3.16		3.21		3.26	
31-40 years	144	3.47		3.34		3.58		3.00		3.19		3.26		3.31	
41-50 years	39	3.62		3.31		3.74		3.13		3.18		3.44		3.40	
>= 51 years	24	3.71		3.50		3.88		3.58		3.54		3.54		3.63	
Education															
< secondary	8	2.75		2.88		2.63		2.13		2.88		2.75		2.67	
Secondary	25	3.36		3.56		3.72		3.56		3.56		3.36		3.52	
Bachelor	252	3.46	0.04**	3.27	0.22	3.56	0.04**	3.06	0.01**	3.15	0.22	3.28	0.43	3.30	0.02**
Master	107	3.52		3.33		3.61		2.97		3.24		3.21		3.31	
> Master	6	3.83		3.67		4.00		3.67		3.67		3.83		3.78	
Income															
<= 10,000 B.	35	3.11		3.06		3.29		3.06		3.29		3.00		3.13	
10,001-30,000 B.	161	3.49		3.28		3.58		3.07		3.22		3.35		3.33	
30,001-50,000 B.	116	3.46	0.04**	3.27	0.09*	3.54	0.13	3.03	0.19	3.21	0.93	3.17	0.18	3.28	0.14
50,001-70,000 B.	52	3.52		3.42		3.56		2.87		3.10		3.19		3.28	
>=70,001 B.	34	3.65		3.59		3.88		3.44		3.24		3.56		3.56	
Risk of disease															
No risk	213	3.31		3.27		3.50		3.15		3.27		3.10		3.29	
Blood pressured	52	3.64	0.15	3.40	0.86	3.60	0.38	3.20	0.76	3.31	0.86	3.09	0.45	3.27	0.91
Diabetes	45	3.56		3.36		3.70		3.07		3.14		3.26		3.37	
Kidney'	81	3.4		3.2		3.5		3.0		3.2		3.3		3.3	

	N	Healthy-eating cognition													
		Q1		Q2		Q3		Q4		Q5		Q6		Total	
		Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig	Avg.	sig
s diseases		4		7		1		0		0		3		5	
Others	7	3.29		3.29		4.00		3.14		3.00		3.57		3.38	

Remark: sig refers significant value of F-test in One-Way ANOVA
* refers that value has statistical significant at level 0.10
** refers that value has statistical significant at level 0.05

The results reveal that there is not a statistically significant difference between the influences of income and diseases' risk on consumer behavior (sig>0.10). Only age has an impact on eating-concern with significant level at 0.10 and gender and education have an impact on eating-concern with significant level at 0.05.

One-Way ANOVA give the interesting outcomes that female has significantly high healthy-eating cognition than male. This means that female has been concerning in consuming pattern than the other. However, when considers the results in detail of each question, both genders have the same with high-level of healthy-eating cognition in the dimension of having 5 food groups in each meal, but others behavior female has significantly well-behave than male.

In the same way of gender, people that have high education would be significantly has high healthy-eating cognition than the lower ones, but they still have difference only in the kind of concerning to behave with healthy cognition, preferring to eat more fruit and vegetable and selecting and eating healthy food with vitamin, fiber and amino acid that good for your health. The other questions do not have difference healthy-eating cognition by education group.

Age groups have weakly difference in healthy-eating cognition. The old age have high healthy-eating cognition level then the young. However, the difference would be found only the concerning to behave with healthy cognition. This means that some old age consumers still think that they behave on healthy cognition, but they still not concern on other health dimension. Then government should be considered in these dimensions to conduct healthy campaign.

Thus, this behavior show that government still not successfully achieves the goal of good public health policies and still works hard to stimulate the true cognition about healthy concern by giving the information on either male, people which lower education and the young group. These campaigns with targeted in the proper groups would be help to improve the eating-behavior in the future.

4. Conclusion

Thailand government implements the public health policy aims to improve the population health by sending the messages seen as health-eating campaign. However, this action do not successfully recognize by the consumers. They still have uncompleted perception in eating-behavior especially in king of important consuming

such as eating healthy food with vitamin, fiber and amino acid, thinking about ingredient and nutrition and reducing consumption on alcohols and cigarettes or reducing the chance of eating infection. Furthermore, some public health policies that had high recognition rate, but still cannot made awareness to those consumers. Then, the implementers should be launch the new campaigns especially to make a basic concern to strengthening the population health for whole country consumption and should relief long time problems like diseases and unhealthy lifestyle in Thailand.

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Influence of Emotional Induction and free or forced Affiliation on in-group and out-group Trust Attitude

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Abstract
This paper intends to revisit the studies on social affiliation understood as a determinant of in-group favouritism and out-group discrimination (Tajfel, 1982) arriving at the estimate of effect represented by a *priming* emotional stimulus on implicit attitudes of trust toward in-group and to the out-group. 574 college students participated in the study. They were all administered two scales taken from the *MPP-Multidimensional Personality Profile* (Caprara, et al., 2006) to assess empathy, pro-sociality, sociability, interpersonal trust, self-esteem, social desirability, cynicism, management of self image. The participants were divided into three experimental groups and randomly submitted to one out of six experimental conditions. Results: the type of social affiliation, voluntary or forced, influences the trust towards in-group and out-group members; a negative emotional stimulus is capable of reinforcing the polarized distributions of leadership (totally internal or totally external); eliciting subjective preferences neutralizes the effects of forced affiliation; forced affiliation, when activated, influences the distribution of leadership in favour of the in-group.

Keywords:
Trust, reliability, social affiliation, emotional induction, group psychology

Introduction

In a study conducted by Tajfel et al. in 1971 it was found that the mere affiliation of subjects into groups based on an arbitrary task was enough to cause discrimination in favour of their own group and against the members of the other group (out-group). When commenting the results of the research, Tajfel claimed that the mere affiliation of subjects into groups activated a social norm of discrimination, i.e, a norm specifying that "you must act in favour of your in-group". An alternative interpretation is given in terms of the theory of similarity of beliefs (Rokeach, Smith & Evans, 1960), which states that it is the difference between presumed similarities in beliefs among the members of the in-group and the out-group rather than the social norm of favouritism towards the in-group that mediates the discriminatory behaviour observed by Tajfel. Billig and Tajfel (1973), did, however, consider the possibility that the subjects had assumed that the members of their in-group held the same beliefs. In their study the subjects were told that affiliation was either linked to their preferences in art or was random. Discrimination occurred in both cases but was greater when the subjects were affiliated according to their preferences. Tajfel's study was partially replicated by Allen and Wilder (1973), who found that the subjects attributed greater similarity in belief to members of their in-group rather than to members of the out-group. The mere affiliation into groups based on an arbitrary task had encouraged the attribution of a greater similarity of beliefs to the in-group rather than to the out-group. Going on to analyse the trust aspect, literature has underlined that the essentially social nature of trust makes it an evaluation of the influence that the interaction between trustor, target and context has on one's own results and not an evaluation of individual factors that contribute to this influence (Rotter, 1980). McAllister (1995) distinguishes two types of trust: one based on cognition (which manifests itself usually in task orientated formal situations) and one based on affection (which manifests itself in personal and informal situations). An interesting definition, that includes both the possibility of calculating the results of the effects of the situation and the emotional-propensity aspect of trusting others, has been put forward by Denise Rousseau et al. (1998), who point out that trust is a psychological state that includes the intention to accept one's own vulnerability based on positive expectations towards the intentions or the behaviour of others. Interpersonal trust derives from a belief in the reliability of the partner/s and from the importance they give to the interests of the group. In this case trust is different from other relational variables such as cohesion, attraction of the group towards certain members, friendship, pre-existing relationships between members, familiarity, specific knowledge concerning others (Goodman and Leyden 1991). Considering these distinctions, we can hypothesize that the variables operate on group performance through different mechanisms and that each one has a different predictive value. For example, believing in the reliability of a partner could influence group performance in a way that is different from the desire to remain part of the group. From a practical point of view, different interventions will be needed to stimulate or influence these variables. For example, forcing people to work together for a long time and creating familiarity in this way will not necessarily produce friendship, pleasure, trust or cohesion (Golembiewski and McConkie, 1988).

Objectives of the study

This contribution intends to revisit studies on social affiliation seen as a determinant in favouritism towards in-groups and discrimination towards out-groups (Diehl, 1988;

Tajfel, 1978; Billig and Tajfel, 1973; Allen and Wilder, 1975), evaluating mainly the aspects linked to trust and reliability ratings. It also intends to consider the effects of positive/negative emotional induction and the influence of personality traits on the processes of attribution and social affiliation.

Tools

The Multidimensional Personality Profile (MPP) (Caprara et al., 2006) was used to analyze personality traits, and more specifically the social-emotional scale (which includes the sub-dimensions of empathy, pro-sociality, sociability and interpersonal trust) and the self-presentation scale (which includes the sub-dimensions of self-esteem, social desirability, Machiavellianism / cynicism and self-image management). A translated version of the textual sceneries for sadness and happiness used in the protocol of Mayer, Allen, Beauregard (1995) was used for positive and negative emotional induction. For the evaluation of the elicited emotional state we used the Self-Assessment Manikin scale (Bradley & Lang, 1980). For Test 1 we used a chart containing the following text: "Now imagine you are about to leave for a high altitude climbing expedition. You can choose the members of your team from the two groups, namely the Sweet group and the Savoury group. Make up your line of climbers choosing three climbers from each group and putting the number of your chosen climbers in the little mans in the centre of the chart under the respective roles. The roles are ordered in degree of importance". In the centre of the chart there was a square containing the descriptions of the various roles with their relative prerogatives: (line leader: the most important person and the expert who leads the group; equipment manager: the person who is responsible for the equipment and food; the person who sets up base camp: he is the person responsible for setting up camp; the tent carrier: he is the person who transports the tents; food carrier: the person who transports the food; support worker: a marginal role of support for anyone needing it). At the sides of the central square there were two oval shapes that enclosed respectively stylized little men representing the Savoury Climbers and the Sweet Climbers, with a picture representing the food for the different categories (spaghetti for the Savoury group and cake for the Sweet group). The position of the two groups (on the right or left of the central square) varied in accordance with the balancing function. Every little man was randomly assigned a number from 1 to 26. For Test 2 we used a second chart on which was written: "Very good. Your line has reached the top first establishing a new climbing record" for the condition of success and "Unfortunately your expedition has failed and you have lost a lot of your men" for the condition of failure. For both conditions the subjects were asked: "Now we would like you to indicate which of your team members were the most reliable during the expedition. Write a number from 1 to 5 inside each little man according to the following criteria: 1 for total unreliability; 2 for minimum reliability; 3 for an average reliability; 4 for high reliability; 5 for maximum reliability". In the centre of the chart there were 2 oval shapes, one for the Sweet group and one for the Savoury group each containing the respective graphic element (spaghetti and cake), the textual reference of the corresponding group (Sweet and Savoury) and three little mans inside which the subject had to insert the value of his reliability rating. The following charts were distributed for affiliation: chart A which said: "Please indicate your food preferences choosing between Sweet and Savoury dishes. Write only your first name under your chosen preference (all the information will be statistically elaborated in complete anonymity)". In the centre of the sheet there were two oval shapes containing the

graphic element (cake and spaghetti) and a textual reference of the group (the Sweet group and the Savoury group). Chart B carried the following text: “Even though you have expressed your preference you have been arbitrarily included in the group of people with the opposite preference to your own. So you must write your name in the circle belonging to the group you have been assigned to inverting the preference you previously indicated”. In the centre of the sheet there were two oval shapes containing the graphic element (cake and spaghetti) and the textual reference to the group (Sweet and Savoury). Chart C read: “For this test you must be part of the Sweet group (C1) Savoury group (C2). So please write your name in the circle representing the group that has been assigned to you”. Chart C was divided into Chart C1 per forced affiliation to the Sweet group and Chart C2 for the forced affiliation to the Savoury group. In the centre of the sheet there was only one oval with the cake and the words ‘The Sweet’ for Chart C1 and spaghetti and the words ‘The Savoury’ for Chart C2. Chart D read: “Could you please indicate your culinary preferences, choosing between sweet and savoury dishes. Write your name under the chosen preference”. In the centre of the sheet there were two oval shapes containing the graphic element (cake and spaghetti) and the textual reference to the group (sweet and savoury).

Methodology

In the first phase of the research all the 574 students performed an evaluation, using the MPP instrument, of their personality traits related to the areas of social-emotional intelligence (empathy, pro-sociality, sociability and interpersonal trust) and of self-presentation (self-esteem, social desirability, Machiavellianism / cynicism and self-image management). Next, students were randomly assigned to one of the three experimental groups (Group 1: free affiliation; group 2: affiliation after being forced to express a preference; group 3: forced affiliation prior to the manifestation of preference) and one of the six experimental conditions (1: positive emotional induction and mission success; 2: positive emotional induction and mission failure; 3: negative emotional induction and mission success; 4: negative emotional induction and mission failure; 5: no emotional induction and mission success; 6: no emotional induction and mission failure). The experimenter gave instructions for compilation at the moment of handing out the material to each individual. The student was then invited, where required by the assigned experimental conditions, to read and empathize with the situations textually described and aimed at emotional induction, and to then express a rating of their emotional state (Self-Assessment Manikin) elicited by the stimuli presented therein. Subsequently, those assigned to Group 1 were asked to choose their food preference (sweet / savoury), writing their name inside the circle containing the graphic element relevant to the chosen food category (cake for sweet and spaghetti for savoury)(Chart A). Those assigned to group 2, however, after expressing their food preference (chart A), were forced to write their names in the opposite group (chart B). Those belonging to group 3 were arbitrarily assigned to one of the two groups (sweet / savoury; chart C1/2) and only afterwards were asked about their food preferences (chart D). All three groups then went on to do the first test, which consisted in forming a team of climbers choosing six participants (three sweet ones and three savoury ones) and subsequently, for the second test, to give a mark from 1 to 5 for the reliability of the six participants based on the results obtained (success / failure of the ascent carried out by the chosen team of climbers.

Statistic analysis and results

Taking into the consideration the subjects who freely chose their group affiliation in accordance with their food preferences (group 1) we started by verifying if the trust accorded to the members of the in-group was higher than that of the out-group. The results showed that the trust accorded to the members of the in-group was significantly higher (Sig. ,001; with an average of 11,89 for the members of the in-group and 9,00 for those of the out-group). If we then go on to evaluate the influence of the emotional stimulus on the degree of trust (Test 1) we find no significance inside the chosen group. Going on to analyse the results of Test 2, which was aimed at establishing an evaluation of reliability of the members of the climbing team in both the cases of success and failure of the mission, we can see that in both cases the degree of trust accorded was significantly higher for the members of the in-group than for the out-group (Sig.: ,02). Comparing the evaluations of reliability made in the cases of success and failure, we could observe that while the trust accorded to the members of the in-group remained stable, trust accorded to the members of the out-group dropped significantly in the case of failure (mission success, average rating 9,63; mission failure, average rating 8,49; Sig.: ,006). However, if we differentiate by gender, we can see that for females trust remained stable also for the members of the out-group. In the case of mission failure a significant difference emerged between the averages of the trust ratings towards the in-group for subjects who had undergone emotional induction. The negative emotional stimulus appeared when failure was significantly associated to a lowering of trust accorded to the in-group (Sig.: ,05). In the case of success the emotional induction was not associated with any variation of the trust rating. We then proceeded to verify the correlations between the MPP personal scales and the trust rating (Test 2) of those subjected to the negative emotional induction and mission failure. The following correlations emerged: growing empathy produced growing trust towards the out-group (,35**); Machiavellianism was negatively correlated to trust towards the in-group (-,30*). In the condition of mission success and when the emotional stimulus was positive, a negative correlation emerged between social desirability and trust accorded to the in-group (-,42** ,005) and a positive correlation between trust accorded to the out-group and pro-sociality (,32*). In the condition of success and negative emotional stimulus, a significant positive correlation emerged between interpersonal trust and trust accorded to the out-group (,44**). Finally, in the condition of failure and positive emotional induction, no significant correlations emerged. As regards the forced affiliation subsequent to the manifestation of the subject's preference (group 2), we found that in Test 1 trust accorded to the in-group (average 8,72) was lower than trust accorded to the out-group (average 12,17). While when the affiliation was forced before manifestation of the subject's preference (group 3), trust accorded to the in-group (average 12,09) was significantly (Sig. ,001) higher than trust accorded to the out-group (average 8,92), the same as the results for the free affiliation group. Going on to analyse the results of Test 2 both for conditions of success and failure, the ratings for trust attributed to the in-group registered a significant difference (Sig.: ,001) between group 2 (average 8,74 towards the in-group) and group 3 (average 10,50 towards the in-group); a further significant difference emerged in the trust ratings towards the out-group: group 3 (average 9,49), group 2 (average 10,56). The emotional stimulus had no effect. The analysis of the personal traits of group 1 and 3 showed a significant difference (Sig.: ,04) on the scale of self-confidence in the case of success among those who considered the members of the in-group to be more reliable, registering higher trust levels in the presence of lower self-confidence (more

trust towards the in-group members, average 23,35; more trust towards out-group members, average 25.21). In the case of failure, a significant difference was registered (Sig.: .05) on the scale of self-image management and on the scale of pro-sociality among those who considered the in-group members to be more reliable. More trust was associated to higher marks in the management of self-image: average 26.13 for more trust accorded to in-group members; average 24.20 for more trust accorded to out-group members. As regards pro-sociality values an average of 21.67 was registered for higher trust accorded to in-group members and an average of 20.01 for higher trust accorded to out-group members (Sig.: .05). we then went on to analyse how the subjects distributed the roles of leadership in the team. More specifically, we evaluated the attribution of the position of head of the line and the person responsible for the equipment. As regards group 1 we found that 40.0% attributed both these high responsibility roles to in-group members; 24.4% assigned the position of head of the line to the in-group and the equipment management to and out-group member; 20.0% gave the line leadership to an out-group member and equipment management to an in-group member; 15.6% gave both roles to out-group members. In total 64.4% assigned the most important roles to in-group members. Comparing the groups, a significant difference emerged on the MPP scale for empathy between those who assigned the responsible positions to in-group members (average 20.44) compared to the opposite case (those who assigned everything to out-group members, average 18.14) (T-test Sig. .021). Finally, a significant difference emerged on the Machiavellianism / cynicism scale between the group who assigned the role of line leader to an out-group member, reserving the role of equipment management for an in-group member (average 25.0) and the group who delegated both positions of leadership to out-group members (average 20.71) (T-test Sig. .05). We then went on to evaluate the influence of the positive emotional stimulus on the distribution of the positions. In situations of positive emotional stimulus we could note that the more important roles were assigned to in-group members, while in conditions of negative emotional stimulus , the tendency was to attribute the role of line leader to an in-group member and that of equipment management to an out-group member. For group 2 we observed that 18.2% attributed both roles of high responsibility to in-group members; 9.1% assigned the role of line leader to an in-group member and equipment management to an out-group member; 30.3% assigned the position of line leader to an out-group member and equipment management to an in-group member; 42.2% assigned both primary roles to out-group members. In total 27.3% assigned the more important roles to in-group members. Comparing the groups in function of the attribution of positions of responsibility, no significant differences emerged on the MPP scale. Finally, for group 3 we observed that 56.6% of the subjects gave both primary roles to in-group members; 19.7% assigned the primary role to an in-group member and the secondary role to an out-group member; 13.2% assigned both roles to out-group members; 10.5% assigned the more important role to an out-group member and the secondary role to an in-group member. In total 76.3% assigned the more important role to an in-group member. Comparing the groups a significant difference emerged on the MPP scale for pro-sociality among those who assigned both positions of responsibility to in-group members (average 20.49) as compared to the opposite case (those who assigned everything to out-group members, average 22.90) (T-test Sig. .032). A significant difference on the MPP scale for social-emotional intelligence emerged between the group who took on all the leadership roles and the group who assigned all the highest position of responsibility to an out-group member and the secondary position to an in-group member. In the first case we registered an average of 78.09

while in the second case 66.38 (T-test Sig. 042). Finally, a significant difference emerged on the pro-sociality scale between the group who assigned the role of line leader to an out-group member, reserving the role of equipment management for an in-group member (average 20.13) and the group who delegated all the positions of leadership to out-group members (average 22.9) (T-test Sig. .03). we then went on to evaluate the influence of the emotional stimulus on the distribution of the positions. In situations of negative emotional stimulus we registered a tendency towards polarization of the positions (a reinforcement of internal leadership or a reinforcement of external leadership). Both averages increased with a propensity for leadership sharing.

Discussion

The data shows that when the subjects choose their affiliation group freely (group 1), they tend to manifest more trust towards in-group members. Therefore, the data shows that the simple manifestation of a food preference can determine a propensity for trust towards people with the same characteristic. This does not happen when the subjects were arbitrarily forced into a group affiliation and only successively were they allowed to indicate their food preferences for sweet or savoury (group 3). In this case they accorded more trust to in-group members (imposed) independently of their food preferences. Here the variable which determined the propensity to trust was the forced affiliation into that group rather than another. In group 2 the subjects were asked to express their food preferences beforehand and they were then categorized in the opposite group. In this experimental condition the propensity to accord more trust to subjects with similar food preferences was highlighted, rather than the propensity to trust the members of the assigned group (in-group). This atypical tendency shown by group 2 could be caused by a cognitive dissonance between an individual preference and the forced affiliation into a group with opposite preferences. More specifically, it seems to be the preliminary request of the preference that annuls the effect of the minimum group. When the subject in full awareness recalls a personal trait (even if this trait is not a central element of identity), and the affiliation occurs after the recall, the effects of the minimum group are annulled. The reminder of certain aspects of Himself prior to the forced affiliation produces effects that go in the opposite direction to the theory of the minimum group, also in regard to the rating of trust attributed the in-group and out-group members, both in the case of success and failure of the test. When people are allowed to freely choose their group and experience failure, they tend to lower even further the trust rating accorded to the out-group, showing in this was that they significantly attribute the cause of failure to the out-group. In this condition we can presume that a subjective attribution of cause has been activated. The negative emotional stimulus together with the condition of failure determines a significant lowering of the trust rating accorded to the in-group suggesting that a negative emotion combined with failure determines a greater internal attribution of cause. Frustration due to failure alone did not register this kind of tendency. Neither did the positive emotional predisposition or success in the test determine significant variations in the ratings. The personal characteristics played different roles of mediation dependant on the different conditions. For subjects who experienced both negative conditions (failure and negative emotional stimulus), an increase in empathy caused an increase in trust accorded to the out-group, blaming the others less. This would lead us to believe that an empathetic person, more incline to identify himself with others, tends to protect others more than himself or his own

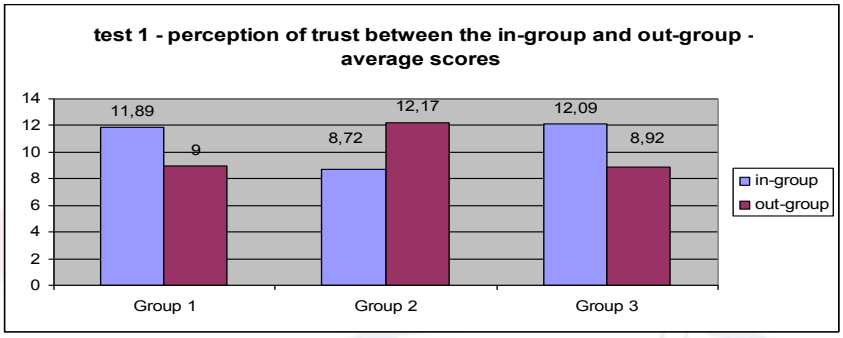
group. An increase in Machiavellianism / cynicism produces a decrease in trust ratings towards in-group members; the Machiavellian subject cynically tends to accuse his own group, holding it responsible for the failure. Rather than protect his own group, in a situation of no advantage, he will despise it, because his bond / participation is only instrumental. For subjects who experienced both the positive conditions (positive stimulus and success), an increase in social desirability produces a decrease in trust ratings towards the in-group. In the case of success, those who aspire to social desirability seem to be more willing to downplay the merits of their own group in order not the irritate the out-group and thus avoid the creation of negative images and opinions towards his person. An increase in pro-sociality produced a higher trust rating towards the out-group, almost as if to share the merits of success. In the conditions of negative emotional stimulus and success in the test, a positive correlation between interpersonal trust and trust accorded to the out-group emerged. As if in conditions of negative emotional predisposition this kind of personal characteristic is more active when subsequently associated with success which modifies (reversing it) the state of the mood. In the passage from a negative state of mood to a positive state of mood the trust rating accorded to the out-group increases. In conditions of success the subject with low self-esteem tends to reinforce his self-esteem through an increase in the trust rating towards members of his own group, distributing internally, from a compensatory viewpoint, the merits of the success. In the case of failure, those who tend to keep the trust ratings high towards their own group also present high values on the scale of self-image management, as if they wish to preserve its value in the eyes of the others in this moment of difficulty for the group and when their self-image might become involved in processes of denigration and discredit. Also in the conditions of failure, more pro-social subjects are orientated to an increase in trust ratings towards the in-group, as if they want to protect their own group in a moment when it is naturally more exposed to tensions and internal conflicts. In reference to the distribution of the positions of leadership and responsibility on the team, we could note that for group 1 and group 3 there was a prevalent tendency to assign the first and second roles to in-group members while for group 2 there was a more prevalent tendency to assign positions of leadership and responsibility to out-group members (72.7% in total as compared with 64.4% accorded to the in-group for group 1 that operated in conditions of free affiliation). As regards personal traits, in group 1 empathy appeared to tend towards an in-group orientation and the subjects characterized for this trait tended to attribute the important roles to the in-group members. The subjects with high Machiavellian / cynicism traits tended to attribute the secondary position to in-group members and the high leadership role to out-group members. Probably, this attitude would allow them to limit the risks of full responsibility while allowing them to exploit a position of power sufficiently enough to maximize its obtainable advantages. In group 3 the subjects with a higher social-emotional intelligence tended to assign the two positions of responsibility to in-group members while the lower levels of social-emotional intelligence showed a tendency to behave in a similar way as the Machiavellians (the highest position to an out-group member and the other position to an in-group member). However, the mistrust and suspicion typical of these subjects could have determined this type of choice, being orientated more to the minimization of risk than to a strategy finalized to achieving subjective advantages. Still inside group 3, the pro-social subjects tended to distribute externally both positions of responsibility. As regards the role of the emotional stimulus, we found that only the negative stimulus was capable of reinforcing the polarized distribution of leadership (totally internal and

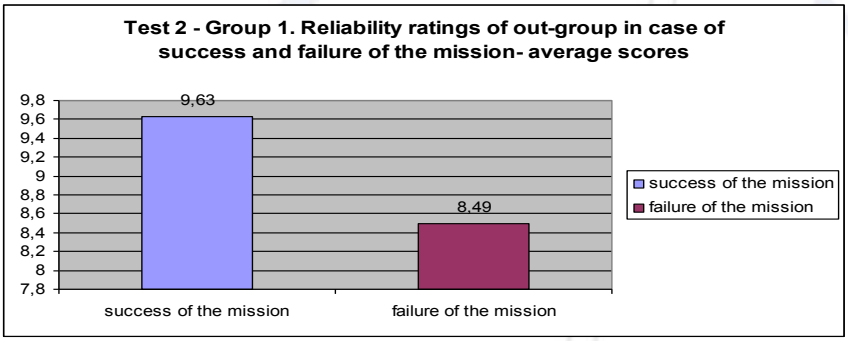
totally external), with a decrease in the intermediate positions characterized by a mixed distribution. All this meant that the group was less flexible and more willing to share the extreme positions of power. For group 2 there were no differences in this sense on the personality scale. This could be due to the particular experimental conditions of the test which required the subject to be forcibly affiliated to a group made up of subjects with food preferences opposite to his. The denial of his manifest preference and the forced integration in an opposing group could probably have generated a conflict and a greater perception of a state of coercion. This did not happen in group 3 where the preference was expressed only after the forced affiliation. The resulting cognitive dissonance and the immediate desire to react to this dissonance could have neutralized the personal traits and their relative subjective inclinations.

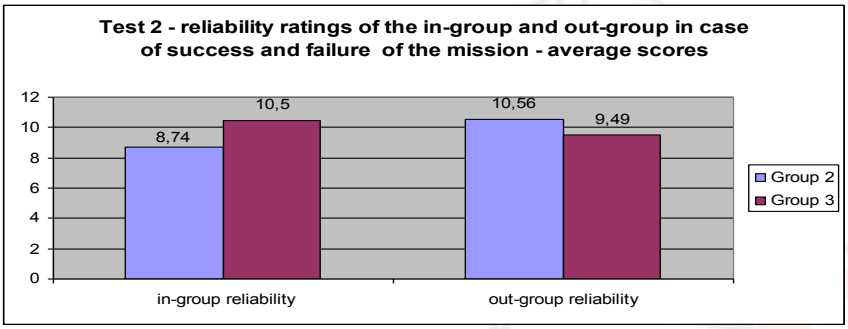
Conclusions

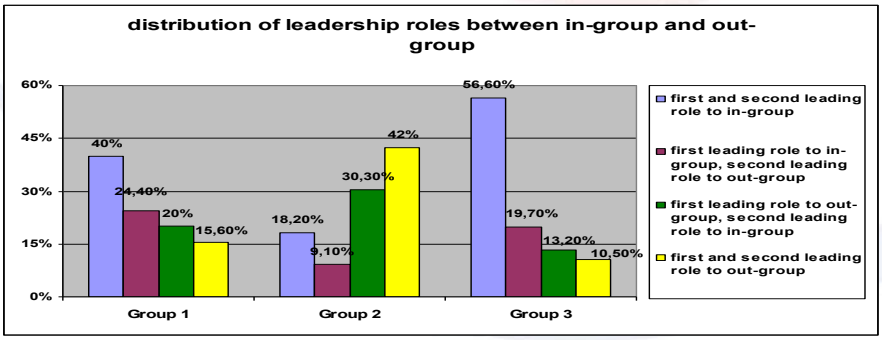
In coherence with the minimum group theory (the conditions of which have been replicated by us in the third experimental condition), our variables object of investigation, that is, the distribution of a feeling of trust and the rating of the level of inter-group and intra-group reliability, undergo the effects of social affiliation exactly in the same way as for the distribution of advantages/disadvantages. Therefore, both the trust accorded and the reliability attributed, both in the case of success and failure of the tests, is greater towards the members of one's own group rather than to the members of an out-group. We can state that the experimental results extend the laws of the theory of the minimum group and the effects of social affiliation also to the feeling of inter-group and intra-group trust and to the evaluation of reliability.
When social affiliation occurs subsequent to the elicitation of the subject's preferences the effects of the minimum group are annulled, and in fact the opposite is noted. Forced affiliation is to all effects impeded by the voluntary recall of the preferences and the person does not see himself in the group he has been arbitrarily assigned to but rather in the group that is similar to his own preferences. From a comparison between groups 2 and 3 we could find that the experimental conditions of group 2 inhibit the effects of the forced affiliation.
From the comparison between groups 1 and 3 a common tendency emerged to give more trust to in-group members (assigning them the more responsible roles). However, in group 3 this tendency was more evident (76.3% as opposed to 64.4% in group 1).
In relation to the role of the emotional stimulus, we found that only the negative stimulus was capable of reinforcing the polarized distribution of leadership (totally internal or totally external), with a decrease in the intermediate positions characterised by a mixed distribution.
When people freely choose their affiliation group and experience failure, they tend to lower their rating of reliability towards the out-group, showing in this way that they significantly blame the out-group for the failure. The negative emotional stimulus, when associated with a condition of failure, determines a significant decrease in reliability ratings of the in-group. This suggests that a negative emotional predisposition, together with a failure, determines a greater attribution to internal causes.
The personal characteristics considered have shown an irrelevant weight on the laws of the minimum group. The only dimension that has shown any influence and can be

considered capable of mediating the effects of the minimum group was the pro-social characteristic.









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Consumers Purchasing Decision and Car Safety Rating: with Respect to ASEAN NCAP

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Abstract
Emerging as one of the developing regions in the automotive industry, countries in the Southeast Asia region are experiencing growth at a variable rate and the personal passenger cars' ownership is also increasing at a fast pace. The New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP) was established with the vision of elevating the degree of motor vehicle safety standards in the region. Nevertheless, the perception of consumers on safer cars is hardly understood due to lack of studies. Thus this study aims to identify which criteria plays a significant role in choosing specific cars, as well as ascertaining whether and to what extent safety is an actual consideration. Apart from that, this study also aims to determine whether the consumers are aware of what ASEAN NCAP is, and to identify whether this information will influence their purchasing decisions. By using self-administered questionnaires, information pertaining car purchasing decisions, perception of ASEAN NCAP and demographic profiles were obtained from 660 car owners in the Klang Valley area of Malaysia. The findings obtained from this study are important for policy makers, manufacturers and other stakeholders to assist in setting priorities with regard to the promotion of car safety in the country.

Introduction

The New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP) was established from a meeting point of two separate agendas i.e. the "dream" of Malaysia to have its own independent automobile safety rating and "special mention" of such initiative in the United Nation's Decade of Action (DOA) for Road Safety 2011-2020 (WHO, 2011). Malaysia has been seriously looking into impactful intervention in road safety by setting up the Road Safety Department (JKJR) in 2004 and the Malaysian Institute of Road Safety Research (MIROS) in 2006, under the "Malaysia's Road Safety Plan 2006-2010" (Road Safety Department of Malaysia, 2006) Framework.

One of the strategic projects initiated by MIROS in the country was what is called "MyNCAP" – Malaysia New Car Assessment Program. Since 2008, major fundamental works have begun which include benchmarking process around the world, designing the crash test laboratory and introducing the Malaysian Vehicle Assessment Program (MyVAP) as a "precursor program" for NCAP (Aqbal et al., 2009). In December 2011, MIROS and the Global New Car Assessment Program (Global NCAP) signed a Memorandum of Understanding (MoU) to establish a NCAP for the Southeast Asian region, in conjunction with the DOA objective – which turned out to be a greater initiative than Malaysia's initial "dream".

"Safe Vehicles Pillar" in DOA revolves around the global deployment of vehicle safety technologies for both passive and active safety, through a combination of harmonized relevant global standards, and consumer information schemes and incentives to accelerate the uptake of new technologies (WHO, 2011). The Decade of Action has outlined several specific activities to achieve this target, in which ASEAN NCAP is the manifestation of Activity No. 2 in safer vehicles pillar i.e. implementation of new car assessment programs in all the regions in the world, to increase the availability of consumer information about the safety performance of motor vehicles. It is hoped that the ASEAN NCAP will elevate the vehicle safety level in the region, in which the ultimate goal is to ensure the users are getting the best value for their money on personal transportation. Figure 1 depicts the role of ASEAN NCAP in pursuing its goal to educate consumers, as well as to encourage manufacturers (OEMs) to produce safer cars (Zulhaidi et al., 2013a).

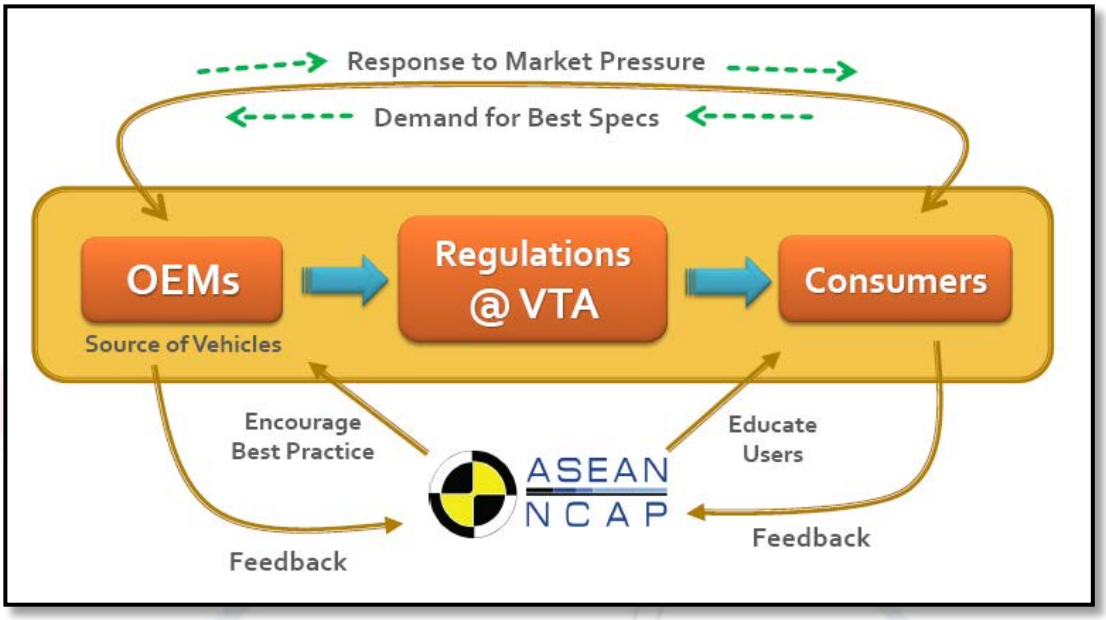

Figure 1: Role of ASEAN NCAP in "automotive ecosystem"

ASEAN is comprised of ten countries with a total population of approximately 600 million people, which is nearly 9 percent of the world's population. It is notable that the main problem in ASEAN road safety is the high number of motorcycles, which leads to the high number of casualties involving motorcyclists in most ASEAN countries (WHO, 2013). Looking at the bigger picture, ASEAN road safety can be described as a football team formation – 3-5-2 (defenders-midfielders-forwards) – whereby this concept is applicable to both overall road safety situation and automobile safety concern (Zulhaidi et al., 2013c).

The "forwards" – Brunei and Singapore – are two small countries that seem to have a better chance at reaching what is referred to as "zero fatality vision". Brunei only recorded 46 fatalities in 2010 from a population of 400,000 people, while Singapore recorded 193 deaths in the same year out of five million populations. The "defenders" – Laos, Cambodia and Myanmar –experience a low number of road deaths, but have a relatively high index of fatality based on 100,000 populations. These five countries also have no domestic car industry, thus have less exposure in terms of vehicle numbers.
The rest which are the "midfielders" – Malaysia, Thailand, Indonesia, the Philippines and Vietnam – which are also referred to as the "Big 5" have the following characteristics:
They are among the world's most populous countries (except Malaysia); combined population of more than 500 million people.
Categorized as middle income countries (MIC).
Own domestic car industries and the most sales of vehicles; Total Industry Volume (TIV) of approximately 3.5 million units in 2012 (AAF, 2012).
Recorded high number of fatalities; combined road deaths were 70,000 in 2010 (WHO, 2013).

Therefore, it is hoped that the ASEAN NCAP will act as a countermeasure in the road safety situation in ASEAN, particularly for more complicated road traffic systems in the "Big 5" countries. Currently, the ASEAN NCAP performs one crash test per

selected model and produces two separate ratings i.e. adult (AOP) and child occupant protection (COP) (ASEAN NCAP, 2012). AOP measures how effective a car is in protecting adult occupants in the event of a frontal collision, and COP shows how a car may protect child occupants if the Child Restraint System (CRS) is used. The ASEAN NCAP has now reached the final stage of its pilot status – conducted in three phases – in which crash test results for the first and second phases have been published through various mediums e.g. press conferences and releases, interviews, the social media platforms, proceedings, journals and many others.

Nevertheless, whether the consumers are aware of the existence of the ASEAN NCAP and utilize the vehicle safety ratings in their purchasing decisions is poorly understood. Apart from that, it is also essential to understand how the consumers consider safety when purchasing a vehicle and its contributing factors e.g. driver characteristics. According to recent studies, factors such as age and gender have been shown to influence consumers who rate safety as one of their main priorities during the purchasing process (Clark et al., 2012; Vrkljan and Anaby, 2011; Koppel et al., 2008). This information is very important for the ASEAN NCAP in their future branding and promotion, influencing policy makers, manufacturers and other stakeholders to assist in setting priorities with regard to the promotion of car safety in the region. Thus, this study intends to achieve the following objectives:
To determine how consumers conceptualize vehicle safety and to what extent this factor affects the purchasing decisions of their cars.
To examine the influence of gender and age towards consumers' purchasing decisions with regard to safety.
To determine the consumers' awareness level of the ASEAN NCAP and identify whether the safety ratings information would influence their purchasing decisions.

Methodology

2.1 Development of Questionnaire

The questionnaire was developed and adapted from previous studies which investigated factors that influence vehicle purchasing decisions among consumers (Clark et. al., 2012; Vrkljan & Anaby, 2011; McCartt and Wells, 2010; Koppel et al., 2008). In addition, the questionnaire was constructed in both English and Malay in order to ensure that respondents with different first languages could understand all the items. It comprised three main parts:
Section A: Information about present cars including the decision makers. All respondents were also asked to rank the importance of 13 vehicle features they considered when purchasing their present cars using a 5-point scale, where 1 indicated "very unimportant" and 5 indicated "very important". There is also an open-ended question on how the consumers conceptualize or interpret "vehicle safety".
Section B: Consumers' awareness and source of information regarding the ASEAN NCAP, and whether ASEAN NCAP safety ratings influence their purchasing decisions.
Section C: Demographic profiles including age, gender, marriage, income, driving experience and previous accidents.

The questionnaire was then checked for face and content validity. Face validity was conducted by selected five research officers, whereas content validity was reviewed by two experts in the field of vehicle safety. A pilot study of 40 respondents was also conducted in order to determine the reliability of the instrument. The Cronbach's

alpha coefficient for 13 items in Section A was measured at 0.882, and this is considered acceptable.

2.2 Participants and Settings

Klang Valley, a highly populated area in Malaysia, was selected for this study. Five districts from the area were randomly selected e.g. Petaling, Hulu Langat, Gombak, Kuala Langat and Hulu Selangor. Realizing the possibility of obtaining high responses from the public, shopping malls were chosen as the study locations and randomly selected for each district. Furthermore, a systematic sampling method was adopted in the study to select the sample respondents. Every 10th person entering the shopping malls was approached. If the approached person refused to participate, the next person entering the premise would be approached and so on.

The respondents were also informed about the objectives of the study and were assured that the information obtained would remain confidential. To ensure the reliability of the information obtained from the respondents, the enumerators were recruited through an interview process and trained for data collection. The data collection was completed within a three-month period (from November 2013 to January 2014).

2.3 Statistical Analysis

Out of the 700 respondents surveyed, only 660 respondents who met the inclusion criteria (own a car and were the main or joint decision maker when purchasing their present car) were included and used for analyses in order to avoid any hypothetical bias, as indicated by Koppel et al. (2008). A number of descriptive analyses (mean and percentage) were performed to determine the respondents' demographic characteristics, importance level of vehicle features and consumers' understanding about vehicle safety. A One-Way Analysis of Variance (ANOVA) with post-hoc analysis using the Tukey method was performed to determine whether there was a difference in the level of importance attributed to the vehicle features.

For the top three features identified as the most important (including safety aspects), a Two-Way ANOVA was conducted using the following design: 2 (gender) x 4 (age groups). As suggested by Vrkljan and Anaby (2011), the Effect Size (ES) was calculated and interpreted based on Cohen's classification (Cohen, 1977) where ES=.01 is considered a small effect, ES=.06 as medium, and ES=.14 as a large effect size. All of the analyses were performed using the Statistical Package for Social Sciences (SPSS) version 16.0.

Results

3.1 Demographic Profiles

The demographics of the survey respondents are shown in Table 1. Of the 660 respondents, 338 (51.2%) were male and 322 (48.8%) were female. The respondents' age were recorded at an average of 32 years, with higher percentage reported within the range of 26 to 35 years old. A majority of the respondents had received tertiary education (60.9%), followed by secondary education (38.3%), and the least were primary education (0.8%). The majority of respondents reported having a monthly income of less than RM5000. More than half of the respondents were married; with 48.2% of them having at least one child. Out of the 261 respondents who had been

ticketed previously, speeding was reported as the top traffic offence. About 34% of the respondents had been involved in road crashes.

3.2 Factors Contributing to Car Purchasing Decisions

Respondents were asked to rate the level of important factors they would look for when purchasing their present cars. According to Table 2, certain features are rated as more important than others when deciding to purchase their present vehicles. Further analysis using ANOVA technique indicated that there was significant difference amongst all features reported by the respondents [$F(12, 8567) = 33.934$, $p < .0001$]. Post-hoc analyses revealed that price had the highest importance rating as compared to other features, followed by safety ($p < .0001$), comfort ($p < .0001$) and fuel economy ($p < .0001$). The least importance features were design or style of the car ($p < .0001$) and resale value ($p < .0001$).

Table 1: Demographic information of the respondents

	N (%)	Mean (SD)
Gender		
Male	338 (51.2)	
Female	322 (48.8)	
Age group		32.0 (10.2)
16-25 years old	206 (31.2)	
26-35 years old	269 (40.8)	
36-45 years old	103 (15.6)	
More than 45 years old	82 (12.4)	
Level of education		
Primary	5 (0.8)	
Secondary	253 (38.3)	
Tertiary	402 (60.9)	
Income		3,809.56 (3455.33)
Below RM 5000	484 (73.3)	
Above RM 5000	176 (26.7)	
Marital status		
Single	281 (42.6)	
Married	379 (57.4)	
Driving experience		
Less than 10 years	456 (69.1)	
More than 10 years	204 (30.1)	
Experienced of being summoned		
Yes	261 (39.5)	
No	399 (60.5)	
Involved in road accident?		

Yes	227 (34.3)
No	433 (65.6)

Further analysis regarding the top three factors using a two-way ANOVA indicated that there was a significant interaction effect between gender and age groups on the rating of safety and comfort. Post-hoc analyses revealed that, female drivers in the youngest age group (16-25 years old) and male drivers aged older than 45 years rated safety and comfort as more important than the other age groups. For the feature of price, a main effect was found only between genders with no interaction effect with age groups. In other words, gender is independent of age groups in terms of price. Across all age groups, female drivers tended to rate the importance of price higher than male drivers. The ES for both the interaction effects (safety and comfort) and main effect (price) is considered low or small effect, as shown in Table 3.

Table 2: Factors considered by the respondents when purchasing their present cars

Factor	**N (%)**					**Mean**	**SD**
	1	2	3	4	5		
Price	1.2	3.9	1.7	50.3	42.9	4.30	.790
Safety aspects	2.0	2.1	16.7	29.2	50.0	4.23	.936
Comfort	1.4	3.3	12.9	39.7	42.7	4.19	.881
Fuel economy	1.5	3.0	16.5	41.7	37.3	4.10	.887
Cost of maintenance/service	1.5	3.0	13.3	51.5	30.6	4.07	.833
Reliability	1.5	2.9	18.8	46.7	30.2	4.01	.861
Interior/luggage space	1.4	6.2	16.2	45.2	31.1	3.98	.919
Performance (including power & handling)	1.4	5.6	19.4	45.5	28.2	3.93	.905
Warranty coverage	3.2	4.7	22.3	39.2	30.6	3.89	.997
Vehicle size (sedan, hatchback, SUV, etc.)	2.4	8.0	23.6	42.4	23.5	3.77	.978
Style / design / colour	3.5	9.1	20.5	46.2	20.8	3.72	1.005
Resale value	2.9	10.0	23.6	43.3	20.2	3.68	.998
Brand	3.2	12.7	16.7	48.0	19.4	3.68	1.026

Note: 1=Very Unimportant, 2=Unimportant, 3= Neither, 4=Important, 5=Very Important

Table 3: Two-Way ANOVA of features identified by the consumers as the top three most important factors considered when purchasing their present cars

	Gender		**Age group**		**Gender * Age Group**	
	F	***ES***	***F***	***ES***	***F***	***ES***
Price	4.007*	0.0061	1.327	0.0061	0.171	0.0008
Safety	0.817	0.0013	0.675	0.0030	3.512*	0.0160

Comfort	0.604	0.0009	0.442	0.0020	3.648*	0.0163

*p<.05

3.3 How do the Consumers Conceptualize Vehicle Safety?

In the current study, respondents were asked to list up to three factors that they believed would make vehicles safe. A lot of responses were obtained from the respondents which were grouped into different relevant categories, as illustrated in Figure 2. Most of them listed braking system e.g. Antilock Braking System (ABS) and Electronic Stability Control (ESC) as the most important safety features in comparison with passive safety technologies e.g. airbag and seatbelt. It is interesting to note that none of the respondent associated vehicle safety with "crashworthiness ratings or safety results".

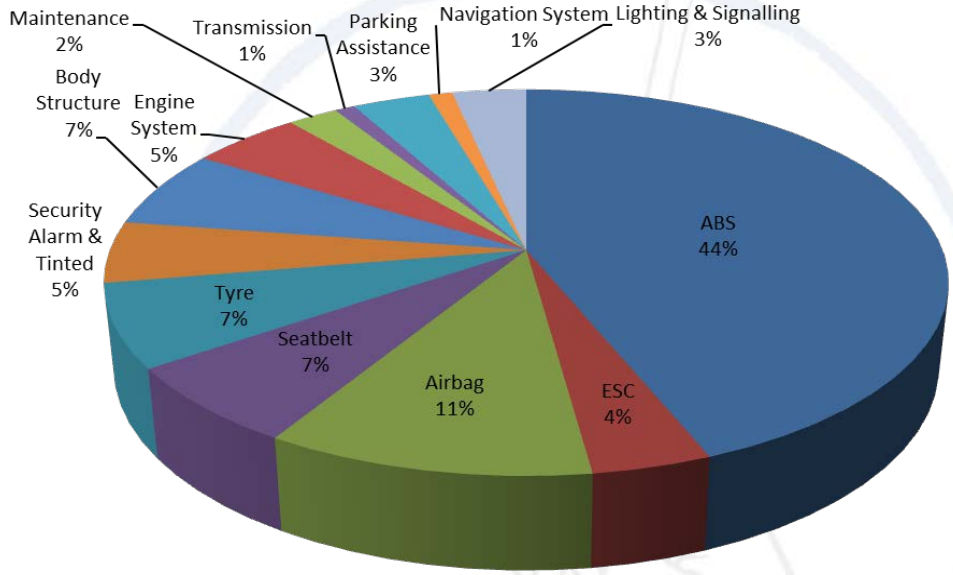

Figure 2: The most important factors that consumers believed would make cars safer

3.4 ASEAN NCAP

Out of the 660 respondents surveyed, only 15.5% (102) of them knew about the ASEAN NCAP, primarily from their friends and family members, as shown in Figure 3. The ASEAN NCAP website which contains most of the information on the tested vehicles was not regarded as the main source of information to refer to. In fact, only about 10% of the respondents learnt about the ASEAN NCAP via its website.

Furthermore, 43 respondents could name the safety rating of their present cars whereas the remaining 59 respondents were either uncertain or did not know that their vehicles have been rated by the ASEAN NCAP. Of the 43 respondents who knew that their cars have been tested by ASEAN NCAP, 51.2% percent of them said such information has greatly influenced their purchasing decisions. Those who responded "No influence at all" (N=4) purchased their cars before the ratings were announced.

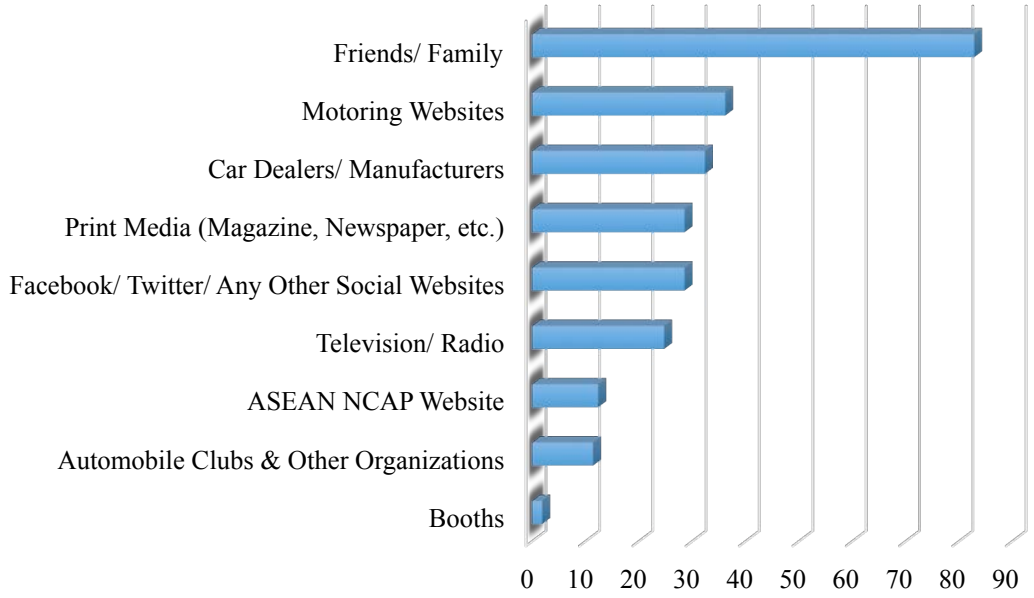

Figure 3: Source of information used by respondents who have heard about ASEAN NCAP

Discussions

The first aim of this study was to determine whether safety plays an important role in the vehicle purchasing process, relative to other factors. The findings of the current study are consistent with previous studies conducted in different western countries, namely France, Germany, Great Britain, Italy, Portugal, Czech Republic, and Poland (MORI, 2005), Sweden and Spain (Koppel et al., 2008), United States (McCartt and Wells, 2010), and Canada (Robertson et al., 2013). In these studies, safety is rated as one of the most important factors to consider when purchasing a particular vehicle model. This is in contrast to several studies which suggest that safety is not always the main priority for consumers when deciding which vehicle to purchase i.e. safety has been shown to be consistently outranked by price, appearance and reliability (DesRosiers Automotive Reports, 2002; Vrkljan & Anaby, 2011; Clark et al., 2012).

Another essential finding from the current study is that consumers typically associate "safer vehicle" with safety items, particularly active safety (e.g. braking system) rather than the overall safety performance (i.e. crashworthiness ratings); with the same situation reported in other studies (MORI, 2005; Koppel et al., 2008). Although active safety is considered highly important in the event of a crash which acts as "preventive" measures, the condition of the occupants if their vehicle is involved in a crash ("mitigation" measures) is also essential. To address this issue, most of the NCAPs incorporate both aspects. For example, to qualify for a 5-star rating in the ASEAN NCAP, the tested vehicle must be equipped with ESC as pre-requisite in addition to the minimum AOP of 14 points (ASEAN NCAP, 2012).

When examining the interaction effects between age and gender, those who rated safety gradually increased by age for male drivers. This could be due to the lifestyle changes where more safety features such as child restraints to transport children would be used (Vrkljan & Anaby, 2011). Nevertheless there are inadequate evidences to support this claim. This finding also suggested that young male drivers viewed

safety as less important than other age groups. This requires further attention as this particular male age group has been shown to be over-represented in road crash statistics i.e. higher risk of collision (WHO, 2013).

The result also indicated that a relatively low number of respondents were aware of or have heard about ASEAN NCAP and its website. Language barrier might be one of the main reasons leading to the low ASEAN NCAP awareness level, where the medium of language used to disseminate most of the information on ASEAN NCAP is currently English. This may also affect other ASEAN countries where English is not a first language (Zulhaidi et al., 2013). The Euro NCAP also faced the same situation although the consumer safety program has existed for decades. As reported by Koppel et al. (2008), safety information is not the first choice for consumers to refer to as compared to other sources (e.g. friends, families, vehicle dealers, etc.) although safety tops their list of selections when deciding on which vehicle to purchase.

This study has potential implications for ASEAN NCAP's road maps and future strategies. It is recommended that a specific working group under the ASEAN NCAP is formed to objectively look into marketing and branding strategies. The working group is responsible – among others – in finding better ways for communication and dissemination of information on the ASEAN NCAP, in focusing on understanding consumers' needs, as well as enhancing existing safety information and improving awareness and use of ASEAN NCAP ratings.
Together with media campaigns to reach a wider spectrum of consumers, the working group is also responsible in engaging government agencies and private corporations by proposing the inclusion of ASEAN NCAP ratings into their fleets' vehicle purchasing policy. This will create a "vehicle safety" culture in the fleet industry which is hoped to reach the consumers at large. This has been introduced by the Australia NCAP for the Department of Transport, Energy and Infrastructure (DTEI) since 2008, where this policy has reduced the number and severity of crashes involving DTEI fleet vehicles after two years (Leyson, 2010).

In addition, engagement with established organizations and related stakeholders by way of utilizing their Corporate Social Responsibility (CSR) initiative is vital in elevating the visibility of the ASEAN NCAP program and its rating. This can be further explored through media campaigns as well as technical and academic seminars, which could pave the way forward and spark a bright future for the ASEAN NCAP promotion.

After the ASEAN NCAP was established in 2012, several manufacturers have responded well by incorporating safety features into the development of new models. However, the outcome of the commendable efforts by manufacturers will be more effective if the consumers are well aware of the incorporated safety items. For that, it is the responsibility of ASEAN NCAP to encourage the manufacturers to include the ASEAN NCAP safety information into their advertisements as part of their selling points.

Injury severity of car occupants in a crash is part of the liability coverage for auto insurance compensation, other than vehicle damage repair. With the improvement of overall vehicle safety standards, the insurance industry will directly benefit from this

by means of lower national pay-out to crash victims. It is therefore imperative for the insurance industry to incorporate ASEAN NCAP results into their insurance premium package, by allocating special discounts on insurance premium for vehicles with higher safety ratings.

Limitations

There are several limitations identified in this study. Firstly, the respondents surveyed were from the city areas only. The study location, Klang Valley, which is also called the Greater Kuala Lumpur, comprises mainly the capital city of Malaysia (Kuala Lumpur) and its suburbs, and adjoining cities and towns in the state of Selangor. Therefore, it is not possible to generalize these findings to the whole of Malaysia or ASEAN population. However, it is expected that the population in rural or suburban areas may have a lower exposure to the ASEAN NCAP.

Future studies shall include respondents from the rural areas in Malaysia and other ASEAN countries. Secondly, the number of respondents who knew that their cars have been rated by the ASEAN NCAP was very small. This could be partly due to the small number of cars that have tested so far (19 models). Further analysis will be conducted in the future after more samples are added.

Conclusions

The results of the present study suggest that safety is one of the main factors considered by the consumers when purchasing their present cars, with most of them listing the braking system as the most important feature. Both gender and age have been shown to be associated with safety. Although the number of respondents who were aware of the ASEAN NCAP and would use the safety information to purchase cars is still low, it is still a positive and impressive finding considering that the ASEAN NCAP was just established recently. It is hoped that the recommendations highlighted in this study will be useful to the stakeholders, policy makers and related agencies in promoting safer vehicles to the consumers in the region.

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Cognitive Dissonance among Chinese Gamblers: Cultural Beliefs versus Gambling Behavior

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Abstract

The main objective of this research was to ascertain whether there is cognitive dissonance among Chinese gamblers as a consequence of gambling while holding negative attitudes toward gambling, which are inherent in their cultural values. Using the behavioral variable of actual gambling and an attitudinal variable of negative beliefs about gambling, a third, practical measure of cognitive dissonance was obtained. By means of questionnaires completed by 200 adult Chinese respondents, these measures were examined in relation to three independent variables used in the gambling literature. Cognitive dissonance was expected to have significant negative correlations with traditional Chinese values and family emotional support, and a significant positive correlation with neuroticism. Cognitive dissonance was also examined for its relation to two personal outcome measures, namely, self-actualization and life satisfaction. The results revealed that the family support, traditional values, and neuroticism variables were correlated with gambling as expected, confirming the validity of the new measures; and that cognitive dissonance does indeed exist among Chinese gamblers, with increased gambling strongly associated with more cognitive dissonance. The research revealed that Chinese gamblers, even though they do gamble, also hold negative attitudes toward gambling. This provides a new perspective on studying Chinese gambling, and offers a possible strategy to help Chinese pathological gamblers, that is, by advising them that their negative beliefs about gambling reflect the positive moral values of their traditional society, an approach that may reduce their desire to gamble.

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Although there has been a great deal of research on gambling among Chinese people, including that they gamble to a greater extent than other populations (Oei, Lin, & Raylu, 2008), and that they have higher rates of gambling addiction (Chen et al., 1993), there has been almost no mention of the fact that the traditional mores of Chinese society condemn gambling as immoral (Cheng, 2009). Additional evidence for the idea that gambling is deemed immoral in Chinese society is research showing Chinese gamblers under-reporting their gambling (Blaszczynski, et al., 1998) because they see it as an admission of "personal failure," and do not report it in order to "save face" (Loo, et al., 2008, p. 1154). Yet, many authors see gambling as an acceptable behavior for the Chinese (e.g., Fong & Wong, 2009). But if gambling is accepted by Chinese society, why would the Chinese see their gambling as an admission of personal failure? And why would they have to avoid admitting that they gamble in order to save face? Clearly, based on the historical condemnation of gambling and on the fact that Chinese people see their gambling as a personal failure, it can only be concluded that gambling is indeed regarded as immoral by traditional Chinese culture.

In other words, there is a contradiction between the traditional Chinese view of gambling and the act of gambling, which means that Chinese people who live according to traditional Chinese beliefs would be less likely to gamble. Taormina (2009) empirically tested this idea and found a strong *negative* correlation (at $p < .001$) between these variables.

That poses no problem for people who do not gamble; but the fact that many Chinese people do gamble and that the condemnation of gambling is part of traditional Chinese culture should create a feeling of cognitive dissonance for those people. Cognitive dissonance is an uncomfortable mental state that occurs when two inconsistent (or contradictory) perceptions exist together for a person (Festinger, 1957). Thus, cognitive theory would predict that Chinese people who gamble and who are also mindful of their traditional beliefs would experience cognitive dissonance. This study was designed to test this idea.

Research Design

The main variable of Cognitive Dissonance is examined as a function of its two component variables, i.e., Gambling Behavior and the Negative Beliefs about Gambling in traditional Chinese culture. These three variables are the dependent variables because they are the focus of this study, and they are examined in relation to three antecedent and two outcome variables.

Gambling Behavior. For clarity, gambling is defined as "the betting or wagering of valuables on events of uncertain outcome" (Devereux, 1979, as cited in Scull & Woolcock, 2005, p. 30). As the literature on the detrimental effects of gambling on people's lives is so extensive, and because of the limited space allowed for this article, only one study is cited here, i.e., Bergh and Kühlhorn (1994) studied more than 100 pathological gamblers and found that over 50% had serious financial problems, difficulties in relationships with family and friends, as well as psychological problems. This provides the rationale for studying how gambler's think.

Negative Beliefs about Gambling. As noted above, Chinese society has long considered gambling to be improper and/or immoral because it can have detrimental effects on families, friends, the community, and the society (for further discussion of this, see Taormina, 2009). Chinese people therefore have a long history of negative beliefs about gambling, so these beliefs will be another component of the present research.

Cognitive Dissonance. This variable has never been used before in gambling research. Leon Festinger (1957) described cognitive dissonance by saying "if a person holds two cognitions

that are psychologically inconsistent, he or she would experience dissonance" (as quoted in Aronson, 1992, p. 304). A "cognition" is a thought, idea, or perception; and the inconsistency refers to a situation where two perceptions do not fit together in a logical way. An example is when we learn that someone we thought was a friend has been insulting us when speaking to other people. According to dissonance theory, when such inconsistencies happen, they create a feeling of discomfort because the incongruous perceptions are disconcerting.

With regard to Chinese gambling, the two perceptions are: (a) one gambles; and (b) traditional Chinese mores, which are deeply ingrained in society, view gambling as immoral. Evidence of the traditional beliefs can be found in various places. Historically, Cheng (2009) reported that views against gambling date back to Confucius, that there are anti-gambling stone monoliths in China that are over a thousand years old, and that the Qin Dynasty (221-206 BC) outlawed gambling. Cheng also reported severe punishments against gambling, which included torture and even death. Furthermore, in Mainland China, where gambling is still illegal, Papineau (2005) reported that there have been campaigns that denounce and attempt to eradicate gambling. Yet, there are Chinese people who gamble. Consequently, even though the idea of cognitive dissonance has not been previously researched in the gambling literature, cognitive dissonance must exist among Chinese gamblers!
H(1a) The more people Gamble, the more Cognitive Dissonance they will experience.
H(1b) The more Negative Beliefs about Gambling people have, the more Cognitive Dissonance they will experience.

Antecedent Variables
In addition to the three main variables identified above, which were used as the dependent variables in this research, two other variables that are often found in the gambling literature are used as potential antecedents, namely, Neuroticism and Family Emotional Support. One additional antecedent variable employed was traditional Chinese Values. The rationale for each of these variables is explained in their descriptive paragraphs, below.

Neuroticism. This variable was included for two reasons. One was to test the convergent validity of the gambling measure, that is, previous literature has found Neuroticism to be positively related to gambling. For example, Dube, Freeston, and Ladouceur (1996) assessed several variables to distinguish between potential and probable pathological gamblers, and reported that "worry" (a critical component of Neuroticism) was positively and significantly associated with pathological gambling. Steel and Blaszczynski (1996) used three personality measures, namely, Psychoticism, Extraversion, and Neuroticism, and found that Neuroticism was one of the predictors of gambling behavior. Therefore, Neuroticism was used to confirm the validity of the gambling behavior scale used in this study. The other reason for using this variable was to assess its relationship with the new variable of Cognitive Dissonance.
H(2) The more Neuroticism people have, the more they will (a) Gamble, and (b) feel Cognitive Dissonance.

Family Emotional Support. Attachment theory forms a basis for understanding how family support could relate to gambling. Ainsworth (1989) argued that supportive emotional attachment leads to more social competence and emotional adjustment. Slutske, Caspi, Moffitt, and Poulton (2005) claimed that gamblers tend to have negative emotionality, which could develop as a result of low family support and attachment; and Pietrzak and Petry (2005) found that gambling was associated with poor social adjustment. Also, Hardoon, Gupta, and Derevensky (2004) found gambling to be related to poor family support. Furthermore, Taormina (2009) tested these ideas and found a significant negative relationship between

family emotional support and gambling behavior. The same relationship is expected here.
H(3) The more Family Emotional Support people have, the less they will (a) Gamble, and (b) experience Cognitive Dissonance.

Chinese Values. A study conducted in China (Chinese Culture Connection, 1987) identified four factors of traditional Chinese values, one of which was "Confucian dynamism," with the other three also related to Confucian philosophy, i.e., moral discipline, human heartedness, and integration (of social mores). Many of the elements of these factors can be understood to be oriented toward social harmony, such as non-competitiveness, reciprocation, saving face, patience, and kindness towards others. These foster peaceful coexistence, but gambling puts people in a contentious position; so it is not surprising that Confucius has been quoted as saying that gambling is immoral (Lau, 1983). Furthermore, in a modern study of attitudes toward gambling, Vong (2004) found that Chinese people are morally opposed to gambling, with 57% of respondents agreeing with the statement "I am morally against gambling." Thus, both tradition and research suggest that Chinese values are negatively related to gambling.
H(4) The more that people live according to traditional Chinese Values, the less they will (a) Gamble, and (b) experience Cognitive Dissonance.

Outcome Variables
The final two variables used in this study are related to one's feelings of personal achievement and are used as outcome variables, namely, Life Satisfaction and Self-Actualization.

Life Satisfaction. Diener's (1984) theory of life satisfaction states that happiness with standard of living, job, and family, can lead to feelings of life satisfaction. Thus, gamblers should have low life satisfaction because gambling leads to loss (not gain). This would decrease the standard of living, jeopardize one's job, and disrupt family relationships (Wong & So, 2003). Grant and Kim (2005) found pathological gamblers had lower life satisfaction.
H(5): The more people Gamble, the less Life Satisfaction they will have.
Regarding cognitive dissonance and life satisfaction, Festinger's (1957) theory states that whenever two inconsistent perceptions co-occur, psychological distress results. Shaffer and Hendrick (1974) tested this idea using opposite constructs (dogmatism and tolerance of ambiguity) to create cognitive inconsistency and found that participants experienced mental discomfort in the cognitive dissonance condition. As traditional values are lifetime beliefs, and if gambling is done over some time period, the dissonance that is engendered could result in long-term psychological discomfort, and, thus, life dissatisfaction.
H(6): The more Cognitive Dissonance gamblers have, the less Life Satisfaction they will have.

Self-Actualization.
In his theory of motivational needs, Maslow (1943) explained that Self-Actualization is the highest level of satisfaction a person can achieve in life, which is characterized as the ability to fully use one's personal potential and to experience life fully. To reach this level, according to the theory, a person must first satisfy the other four needs, i.e., physiological, safety, belongingness, and esteem (in that order). For gamblers, however, there is a factor that makes it difficult to satisfy even the lower level needs. That is, that the odds are invariably against the gambler, meaning that they will have financial losses (Walker, 1992), which often place gamblers in debt. As noted by Taormina (2009), the historic censure against gambling was based on the fact that debt disrupts people's lives because cannot satisfy their basic needs if they do not have money, and they will have family arguments, lose friends, and lose esteem from others. Thus, if they cannot satisfy the lower level needs, which is necessary to satisfy the highest level need, gamblers will have difficulty self-actualizing. The logic is the same for

Cognitive Dissonance, which makes it difficult to fully use one's potential.
H(7): The more people Gamble, the less Self-Actualization they will have.
H(8): The more Cognitive Dissonance people have, the less Self-Actualization they will have.

Method

Respondents

The respondents were 200 adult Macau residents (91 female, 107 male) aged 18 to 67 years (M=32.74, SD=10.77). On marital status, 124 were single, 74 married, and 2 were "other." For education, 32 completed primary, 100 secondary school, 6 a 2-year college diploma, 56 a bachelor degree, and 6 a master degree or above. For monthly income (in the local currency), 53 earned below 5,000; 46 earned 5,000-9,999; 63 earned 10,000-14,999; 28 earned 15,000-19,999; 7 earned 20,000-24,999; and 3 earned 25,000 or more. On gambling behavior, the mean score was 1.69 (SD = 0.65) on a 5-point frequency measure.

Measures

Measuring Cognitive Dissonance

To measure cognitive dissonance among Chinese gamblers, two variables were needed to compute these values. One is gambling behavior, and the other is a measure that assesses traditional Chinese beliefs that reflect gambling as an improper behavior. The two component variables are explained first, followed by a discussion of the Cognitive Dissonance variable, which includes a description of how it was computed.

Gambling Behavior. Actual gambling behavior was the essential element of this research, and was measured by the Gambling Behavior Scale (Taormina, 2009). The scale has 10 items, and asks how often the person had bet money on different types of gambling. The items (games) were "Social gambling with family," "Social gambling with friends," "Mark six lottery betting," "Football betting," "Basketball betting," "Macau casino table games," "Casino slot machines," "Other slot machine venues," "Horse racing," and "Dog racing." The question was "In the past 12 months, how often have you bet money on the following games?" Answers were on a 5-point scale ranging from 1 (never) to 5 (very often), and the responses were averaged.

Negative Beliefs about Gambling. Several sources of Chinese writings (e.g., Confucius, 2007; Qiu, 1984; So, 2002) were consulted to locate long-standing sayings and proverbs that reflect negative beliefs about gambling. A total of five statements were selected for use as items for this scale. These were: "Greediness will result in poverty," "Gambling ten times will result in nine losses," "You will win a candy but lose a factory," "Not gambling is winning," and "Losing is all because of an early win." The responses were on a 5-point Likert scale that ranged from 1 (strongly disagree) to 5 (strongly agree), and the responses were averaged.

Cognitive Dissonance. Measuring cognitive dissonance can be difficult because it is a mental state that cannot be directly assessed. That is, two conditions must occur simultaneously, which means cognitive dissonance must be measured with two variables; and the variables must be examined in such a way that it would reveal the disparity. These two variables were: (a) the degree to which the person agreed with traditional cultural views against gambling, and (b) how much that person actually engaged in gambling. If dissonance exists, it would be among individuals who have high scores on both their gambling behavior as well as how much they see gambling as an undesirable behavior.

Thus, cognitive dissonance was operationalized for each person by *multiplying* the person's gambling behavior score times that person's score on a measure indicating agreement with statements reflecting *negative* beliefs about gambling. A low score indicates little difference, while a high score would indicate that they gamble a lot while also having strong negative beliefs about gambling; thus, the higher the value, the greater the dissonance. Whereas the Gambling Behavior scale ranged from 1 to 5 and the Negative Beliefs about Gambling scale also ranged from 1 to 5, the Cognitive Dissonance scale could range from 1 (no dissonance) to 25 (extremely high dissonance).

Chinese Values. This was measured by Taormina's (2009) 12-item Chinese Values scale. Sample items were "Having a sense of shame," "Personal steadiness," and "Moderation." Respondents were asked to what extent they live their lives by these values, and responses were on a scale from 1 (never) to 5 (always). The Cronbach alpha scale reliability was .87.

Family Emotional Support. This was from Family Emotional Support Scale (Procidano & Heller, 1983); only 10 items relating to receiving rather than giving support were used. A sample item was "My family gives me the moral support I need," and respondents were asked how much they agreed or disagreed with the statements using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability of this scale was .89.

Neuroticism. This was a 5-item scale using items that focused on the "worry" aspect of neuroticism. Two items were from Costa and McCrae's (1992) NEO Neuroticism Domain, e.g., "I am filled with doubts about things," and three items from Peterson and Seligman's (2004) Neuroticism measure, e.g., "I am not confident that things will work out for the best." Respondents were asked how much they agreed or disagreed that these statements described them, using the 5-point disagree-agree Likert scale. The scale reliability was .74.

Life Satisfaction. This was measured by Sirgy et al.'s (1998) the 10-item Life Satisfaction Scale. This scale asks respondents to compare their life achievements with various situations by asking how satisfied they are with their life compared to the statements in the items. Sample items were "The life goals you set for yourself" and "The accomplishments of your friends." Responses were on a 5-point Likert scale ranging from 1 (extremely unsatisfied) to 5 (extremely satisfied). The scale reliability was .88.

Self-Actualization. This was a 10-item scale that used three items from Jones and Crandall (1986) and seven newly developed items for this study. The new items were added to better represent the self-actualization concept. Sample items were "I am very happy being the person I am now"and "I am being the person I always wanted to be." Respondents were asked how much they agreed or disagreed that these statements described them, using the 5-point disagree-agree Likert scale. The scale reliability was .77.

Procedure and Ethics

Data were gathered in Macau from 100 people from the general population and 100 gamblers. For the general population, people passing at busy street corners in densely populated areas were randomly selected. For gamblers, data were gathered from people exiting sports betting shops. All potential respondents were told the nature of the research and asked if they would answer the questionnaire. Those who agreed were handed a questionnaire, which was collected on site when finished. APA ethical guidelines were followed with all respondents.

Results

Demographic Differences

Though no hypotheses were made for demographics, they were tested (t-tests and ANOVAs) for differences on Gambling Behavior, Negative Beliefs about Gambling, and Cognitive Dissonance. For gender, females gambled less than males ($p<.001$), had more negative beliefs about gambling than males ($p<.05$), and had less cognitive dissonance than males ($p<.001$). No significant differences were found for any of the other demographics.

Correlations

Correlations were run to test all the hypotheses. For Cognitive Dissonance, both Gambling Behavior and Negative Gambling Beliefs were positively and significantly correlated with Cognitive Dissonance (both $ps<.001$), which supported H(1a) and H(1b), respectively. Neuroticism was positively correlated with Gambling ($p<.01$) and with Cognitive Dissonance ($p<.05$), supporting H(2a) and H(2b), respectively.

Family Emotional Support was negatively correlated with Gambling ($p<.001$) and also with Cognitive Dissonance ($p<.005$), supporting H(3a) and H(3b), respectively. Likewise, Chinese Values was negatively correlated with Gambling ($p<.001$) and with Cognitive Dissonance ($p<.10$), supporting H(4a) and H(4b), respectively.

For the Outcome Variables, Gambling was negatively related with Life Satisfaction ($p<.005$), supporting H(5). And Cognitive Dissonance was negatively correlated with Life Satisfaction ($p<.05$), supporting H(6). Likewise, Gambling was negatively correlated with Self-Actualization ($p<.005$), supporting H(7). And Cognitive Dissonance was negatively correlated with Life Satisfaction ($p<.05$), supporting H(8). All correlations are shown in Table 1.

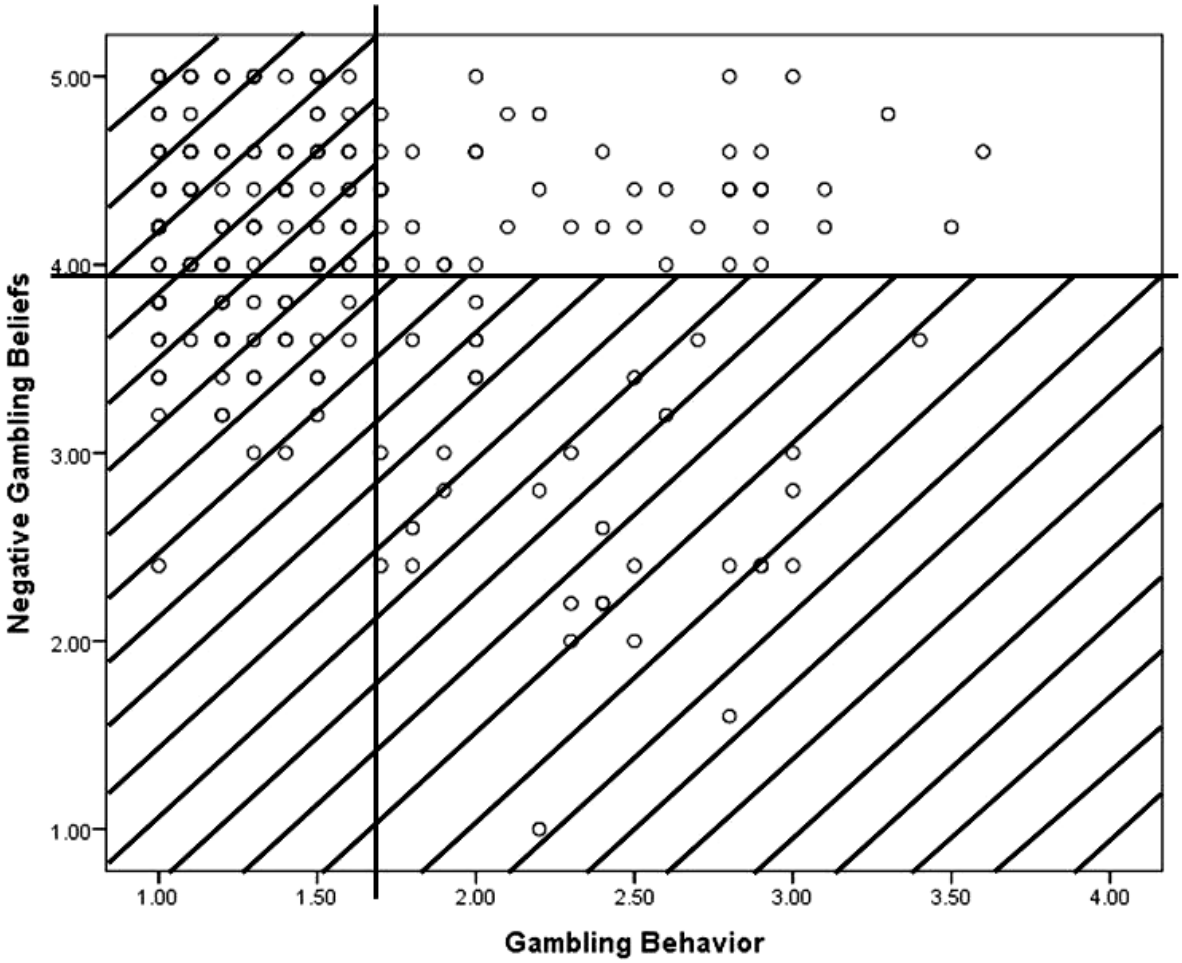
Table 1.
Means, SDs, and correlations between Cognitive Dissonance, Gambling, Negative Gambling Beliefs, and the theoretical test variables (N=200).

Variables	Mean	SD	Cognitive Dissonance	Gambling Behavior	Negative Gambling Beliefs
Cognitive Dissonance	6.62	2.73	---		
Gambling Behavior	1.69	0.65	.82****	---	
Negative Gambling Beliefs	3.99	0.76	.32****	-.25****	---
Chinese Values	3.66	0.49	-.09†	-.24****	.33****
Family Emotional Support	3.35	0.58	-.19***	-.26****	.14*
Neuroticism	3.07	0.63	.15*	.17**	-.05
Self-Actualization	3.26	0.49	-.12*	-.14*	.07
Life Satisfaction	3.32	0.56	-.16*	-.20***	.06

†p< .10; *p< .05; **p< .01; ***p< .005; ****p< .001.

To further assess Cognitive Dissonance, the scores for Negative Beliefs about Gambling were plotted as a function of Gambling Behavior to find respondents who were high on both variables, which would indicate high Cognitive Dissonance. For the cutoff values, the high Gambling scores were set at ≥ 1.70, and the high Negative Beliefs scores were set at ≥ 4.00. The high dissonance group (N=45) is shown in the upper-right quadrant of Figure 1.

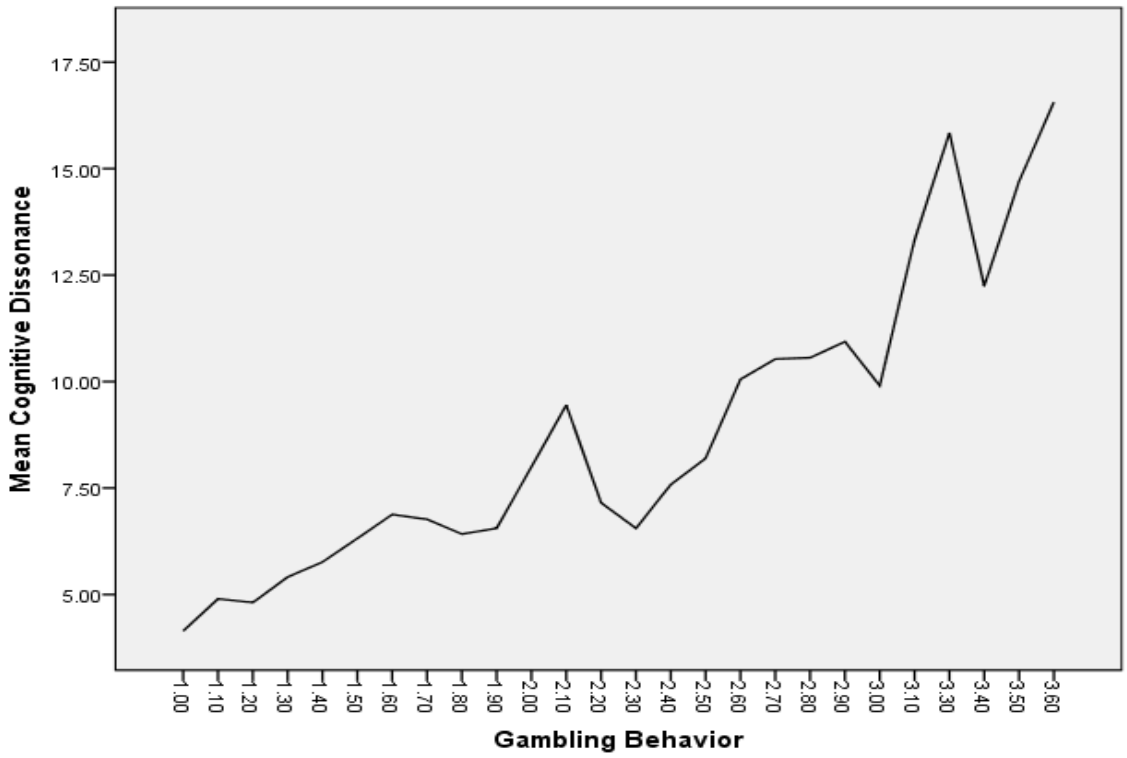
Figure 1.
Scatterplot of all respondents (N=200) on Gambling and Negative Beliefs about Gambling. Cutoffs show high gambling (score ≥ 1.70) and high negative gambling beliefs (score ≥ 4.00). Those scoring high on both variables are in the upper-right quadrant.



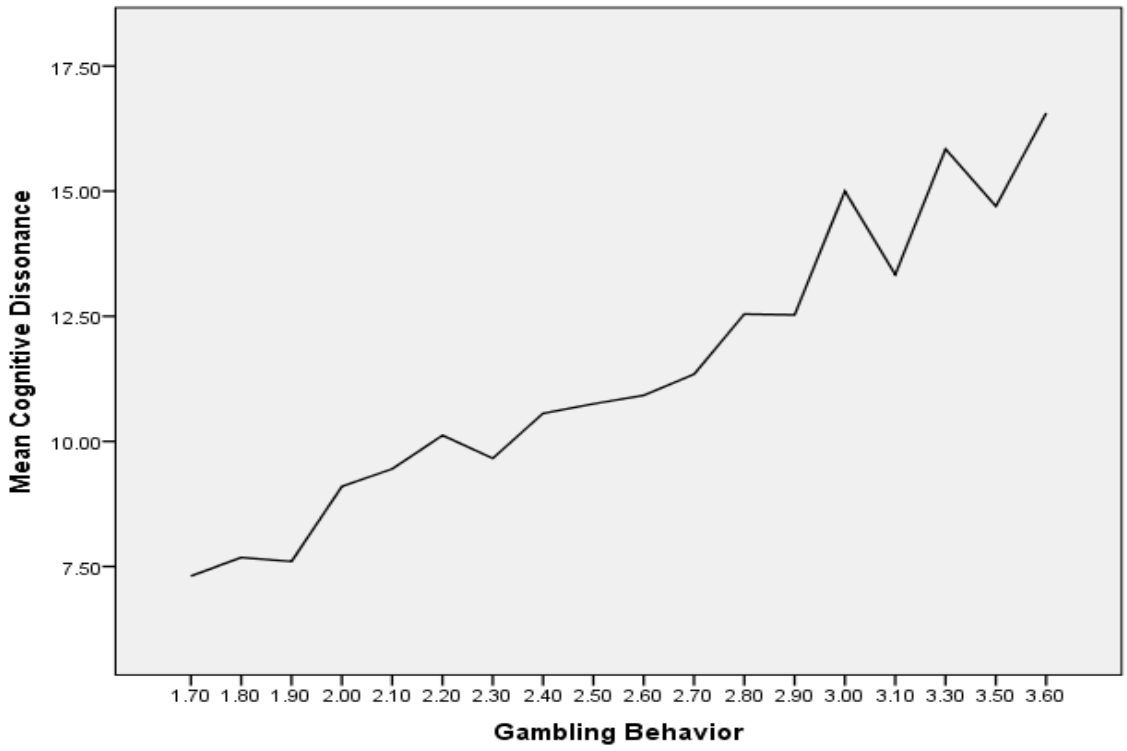
To assess the overall relationship between Gambling and Cognitive Dissonance, a line chart was graphed to depict the relationship between these two variables. First, the line was drawn for all 200 respondents (N=200), shown in Figure 2(a).

For comparison, another line was graphed for only the people in the high gambling and high negative beliefs group (N=45), which is shown in Figure 2(b). Both charts show strong increasing functions, with the overall (N=200) correlation, $r = .82$, $p<.001$, and the gamblers showing an even stronger correlation, of $r = .96$, $p<.001$ (with less variation).

Figure 2.
(a) Cognitive Dissonance as a function of Gambling Behavior for all respondents (N=200).



(b) Cognitive Dissonance as a function of Gambling Behavior, for respondents high on both Gambling and Negative Gambling Beliefs; see upper-right quadrant in Figure 1 (N=45).



Discussion

The results offered strong evidence that cognitive dissonance exists among Chinese gamblers. That is, Chinese gamblers had cognitive dissonance because they gambled while holding negative beliefs about gambling at the same time. This was the critical concern in this study because the idea of cognitive dissonance among Chinese gamblers had been absent from the literature, although anticipated (Taormina, 2009), and until now there was no research on it.

The results are also strengthened by Cheng's (2009) claim that, according to Confucian thought, which is the traditional view of Chinese culture, gambling is an immoral behavior. These results also reflect the views of Mencius (372-289 BC), another Chinese philosopher, who considered gambling to be one of the "five unfilial acts," i.e., behaviors *not* acceptable in the society. The results for Family Emotional Support strengthened this idea as it was strongly and negatively correlated with gambling behavior and cognitive dissonance. As gambling is viewed negatively in society, families may be giving the gamblers less emotional support as a signal that gambling is unacceptable, thus increasing the gamblers' cognitive dissonance.

Apparently, the picture of gambling in the mind of Chinese gamblers seems quite ambiguous. On one hand, they desire to gamble for the obvious reason of hoping to gain a big win at one of the games (e.g., roulette, where the payout to the gambler could be as much as 35:1, i.e., the gambler could gain $35 dollars for each $1 bet). On the other hand, however, the "odds" of winning always favor the casino and are always against the gambler (e.g., in roulette, the odds are 35:1 *against* the gambler), and gamblers know this. This fact is the logical basis for not gambling; but the emotional problem is that the loss of money is detrimental not only to the gamblers but also to their families, because the losses result in debt and an accompanying weakening of the integrity of their families. This is the reason gambling was regarded so negatively by traditional society, i.e., gambling has the potential to undermine the very fabric of society because the family is the most important and fundamental unit in Chinese society.

Thus, the gambler must feel the discomfort of the two competing perceptions, i.e., the desire to gamble in hope of making a big win versus the knowledge that gambling is considered to be immoral by one's family (reflected in this study by the lower Family Emotional Support) and by society (assessed by the Chinese Values measure). This disparity between gambling behavior and the negative attitudes about gambling thus resulted in cognitive dissonance.

Neuroticism was another variable assessed for its relationship to both gambling and cognitive dissonance, and was used to test the validity of the new measures. First, Neuroticism had a significant positive relationship with Gambling, which coincides with findings by Blanco et al. (2001), who suggested neurotic people might have less self-control and thus gamble more. Neuroticism also had a significant positive correlation with Cognitive Dissonance, which implies that people who are more neurotic have more difficulty dealing with the dissonant cognitions. Thus, neuroticism also supported the (construct) validity of the new measures.

Additionally, the two outcome variables of Self-Actualization and Life Satisfaction were included to assess whether gambling and cognitive dissonance might influence these feelings. Gambling had a highly significant negative relationship with Life Satisfaction, suggesting that gambling interferes with one's ability to achieve certain accomplishments in life. Likewise, gambling had a significant negative relationship with Self-Actualization, which indicates that gambling limits one's ability to live a full life, e.g., as gambling leads to debt, which limits what one can have in life, one cannot live one's life to the fullest.

Regarding Cognitive Dissonance, similar results were obtained. That is, it had a significant negative relationship with Life Satisfaction, suggesting that the incongruent cognitions about one's gambling and social values is distracting enough to reduce one's ability to reach high levels of accomplishment in life. Likewise, Cognitive Dissonance also had a significant negative relationship with Self-Actualization, which indicates that the dissonant perceptions are also sufficiently disturbing to reduce one's feelings that one is living a full life.

The finding, that Chinese gamblers hold negative attitudes about gambling even though they do gamble adds a new perspective on studying Chinese gamblers, i.e., by examining their cognitive dissonance. A practical implication of this research offers a possible strategy for helping Chinese pathological gamblers, namely, advising them that their negative beliefs about gambling reflect the positive moral values of their traditional society, an approach that may help them to reduce, and possibly even stop, their gambling.

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Relationship between self–efficacy, self-esteem, and attachment style among juvenile delinquency in Urmia – Iran

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Abstract:

Psychological factors, such as self-esteem and self-efficacy, have been shown to be equally as important in contributing to the cause of deviant behavior. The aim of the present study is to investigate the relationship between the self-efficiency, self-esteem, and attachment style in juvenile delinquency in Urmia City-West Azerbaijan, Iran. By simple random sampling, 60 adolescents in delinquent juvenile institution was selected. Three questionnaires: Parent and Peer Attachment (Armesden and Greenberg, 1987), Self-Esteem Scale of Rochester, and adolescent social self-efficacy were used. The findings indicate there is a positive significant correlation between self-esteem and attachment to friends ($p<0/05$). But correlation between the self-efficiency and attachment to mothers, self-efficacy and attachment to fathers and friends was not meaningful. By doing multiple regression analysis, attachment to the friends and self-efficiency have the most important role in predicting the self-esteem variable.

Keywords: *Attachment styles, self-esteem, self-efficacy, juvenile delinquency, Urmia, Iran*

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Introduction

Adolescence is the stage of life when people experience continuous change mentally, physically, and psychologically (Santrock, 2004). Psychologically, adolescents are developing and attempting to demonstrate signs of maturity by building their self- image and learning appropriate social behavior.

Psychologists regard having a strong sense of self-esteem as a sign of self-understanding and self-acceptance, which allows individuals to view themselves and others equally, achieving one's self-integration and developing one's potential effectively, as well as having a higher expectation for self-efficacy (Tabassam & Grainger, 2002).

Sociologists and psychologists have long considered self-esteem to be an important cause and consequence of social behavior (Mason, 2001). If a sense of self-esteem and positive self-evaluation cannot be gained through socially acceptable methods, motivation for behaving in such a (positive) way will gradually decline. Instead, one may try to gain self-esteem and attention through other means that may include deviant behavior. Thus, having a low sense of self- esteem has often been regarded as a motivation for deviant behavior (T. Wing Lo *et al*., 2011). It is not the deviant behavior itself, but rather the acceptance and recognition gained from deviant peers after committing an act of deviance that enhances adolescent's self-esteem (Goodnight *et al*., 2006; Becker & Luthar, 2007). Delinquents' sense of self-enhancement and protection can ultimately be gained by strengthening the psychological bonding with other delinquents when they engage in similar behavior. Therefore, there is not necessarily a direct relationship between unruly behavior and self-esteem, which can be enhanced through "delinquent association" (Sung & Thornberry, 1998).

When there is a high expectation for a close and affectionate relationship from the parents to the adolescent it leads to a better adjusted adolescent in several different areas inclusive of self-esteem/image (Baumrind, 1991).

Parents who demonstrate trust, acceptance, encouragement with their teen, develop their self-esteem and r social skills. when parents give forth effort to increase their knowledge of adolescents' behaviors, interests, and activities, it emphasizes parental caring and supports the adolescent-parent relationship (Stattin & Kerr, 2000). Adolescents' level of confidence in relationships and level of security are greatly affected by any instability present in parent-child relationships. This insecurity can be due to parent emotional unavailability or other behaviors expressed through parenting styles or negative life events.

Adolescents who perceive a strong attachment to their parents are more inclined than their peers who perceive a weak attachment, to adhere to their parents' limits, rules, and expectations, as well as considering their parents' reactions when tempted to engage in delinquent behavior (Marcus & Betzer, 1996).

Parental attachment positively or negatively affects adolescents' sense of psychological well-being, especially self-esteem, self-evaluation, and peer relationships. There is some research and studies that suggest attachment and connection as critical components of the family process in relation to delinquency. That is to say, adolescents who feel more connected to their parent(s) feel more supported and attended to thereby engaging in less delinquent and problem behavior. (Johnson , J. H. 2005). The formation of strong peer attachments and graduated independence from the family is a normal part of adolescent development. Unfortunately, youth whose peers engage in high-risk behavior are at high risk for the development of similar behaviors (Rai AA, Stanton B, Wu Y, et al, 2003).

In our society, adolescent delinquency has been reported as a dilemma, and increasingly is a topic of concern and much needed attention. Daily, the media reports problematic and socially unacceptable behaviors demonstrated by adolescents. These behaviors include such things as substance abuse, drug distribution, car thefts, rape, illegal border escape, scuffling.

The purpose of this study was to examine the relationships between self-esteem, self-efficacy, and parent-adolescent attachment, parent-friends attachment, among delinquency adolescent males.

Methodology

Participants

The sample included 60 adolescents from delinquent juvenile institution center of Urmia, North West in Iran. Because of time limitation, available samples were studied. The majority of adolescent were 17 years old (36/7%), 18 years old (21/7%), and 16 years old (26/7%), and 15 years old (8/3%). Regarding educational levels of deviant adolescents: illiterate 10%, primary school 21/7%, guidance school 46/7%, high school 15%, and graduate high school 3/3%.

Measures

Rochester self-esteem scale: This test which evaluates the perception of adolescents proportional to self-esteem has been prepared to be used in Rochester longitudinal study on adolescent development according to Rosenberg (1965) self-esteem scale (1986). This scale consist 9 phrases and the applicant had to define his/her agreement or disagreement with each phrase in a 4-degree Likert scale. The scope of scores of this test range from 1 to 4 and higher scores indicate higher self-esteem of the individual. The coefficient of a Cronbach’s Alpha for this research is 52%. Preparation and composition of this scale in Iran has been in the year 2010.

Inventory of Parent and Peer Attachment Armsden & Greenberg (1987) was generated based on Bowlby attachment theory in order to evaluate the imagination of adolescents about negative and positive dimensions of emotional/cognition relation with family and their close friends. The part related to parental attachment consisted 28 phrases and the part related to friends' attachment had 25 phrases and the applicant had to define his/her agreement or disagreement with each phrase in a 5-degree Likert scale. In this study the coefficient of a Cronbach's Alpha for attachment to mother was 87%, for father 87% and for friends 88%.

Adolescent Social Self-Efficacy Scale: Adolescents social self-efficiency was presented by Connolly (1989) to evaluate the rate the Adolescent self-efficiency. This scale is a self-reporting 25-phrased tool in which the applicant has to define how much each phrase of the test clarifies his personality in a 7-degree Likert scale (impossible=1 to too easy=7). Overall score of the test is between 25 to175 and higher scores indicate higher level of applicant's social self-efficiency. This scale is a self-reporting tool which has 25 phrases and has been composed in Iran on year 2012.

Results:

Pearson correlation coefficients between self-esteem, self-efficacy and attachment components are shown in table 1. According to this table, there was a significant relationship between self-esteem and attachment to friends (P< 0.05). There were not a significant relationship between adolescent's self-esteem and attachment to mother (0.12), and to father is (-0.04). Also, the results of Table(1) indicated that correlation coefficient among variables of self-efficiency and attachment to mother, attachment to father, and attachment to friends were not significant.

Table 1: Pearson correlation coefficient between self-esteem, self-efficacy and attachment components.

Variable	Attachment to mother	Attachment to father	Attachment to friends	
Self-esteem	0.12	-0.04	*0.33	r
	0.37	0.75	0.01	Sig.
Self-efficiency	0.24	0.14	0.23	r
	0.07	0.32	0.07	Sig.
	60	60	60	n

Furthermore, as shown in Table 2, there was a significance correlation between adolescents' self-esteem and self-efficacy. Results indicated that deviant adolescents' self-esteem positively correlated to their self-efficacy.

Table 2: Pearson correlation among deviant adolescent's self-efficacy and self-esteem

ariable	Self-efficacy	
Self-esteem	**0.39	r
	0.002	Sig.
	60	n

Self-esteem and self-efficacy were moderately related (r=0/39) $p < .01$), so we conducted multiple regression analyses to test whether they had independent effects on attachments to friends. For answering to this question: Will self-efficiency and dimensions of attachment to friends predict self-esteem in deviant adolescents, regression analysis was used.

Table 3: Regression analysis to predict deviant adolescent's self-esteem by their attachments to friends and self-efficacy.

model	Predicting Variables	change source	Sum of Square	df	mean Square	F ratio	Sig.
1	Attachment to friends	regression	65.76	1	65.76	6.73	0.01
		Residue	420.14	43	9.77		
		Total	485.91	44			
2	Self-efficiency	regression	128.52	2	64.26	7.55	0.002
		Residue	357.38	42	8.51		
		Total	485.91	44			

Our results (Table 3) by using regression analysis and backward method showed self-efficacy and attachments to friends as predictive variable has a significant role in deviant adolescent's self-esteem as criterion variable.

Findings illustrated that the F value achieved from regression analysis was significant at the level of 0.01 and can be concluded that there was a liner relation between predicting variables (attachment to friends and self-efficiency) and criterion Variable (self-esteem). Therefore, attachment to friends and self-efficacy were a positive and significant predictor of deviant adolescent's self-esteem so the main question of study accepted with %99 confidence.

Conclusion

Youth delinquency is a problem with multiple causes and effects, and the present study found that self esteem is a crucial factor. It seems that most participants in the present study not having a supportive family environment. It is likely that lack of warm and accepting parents impact on their self.

Deviant behavior can be viewed as another expression of pro-social behavior within the delinquent network where more peer acceptance is gained through committing more severe acts of deviance.

If adolescents fail to gain social acceptance through normal living experiences, an impaired self-image may develop. If this is combined with relatively low self-esteem and self-efficacy and high susceptibility to peer influence, adolescents may naturally try to gain acceptance in other social groups through engaging in deviant behavior (Wentzel, 1994; Allen *et al*., 2005)

Deviant adolescents desire to gain acceptance from peers. Therefore, the deeper attachment to friends, the more self-esteem of young people engaged in deviant behavior. It is easier for delinquents to be noticed by their peers, delinquents' self-esteem and self-efficacy will gradually be enhanced. Once they are frequently engaged in unruly behavior in an open manner, their self-esteem and self-efficacy will become higher.

The selection of the sample from a juvenile center limits the generalization of the study. However, the present study suggests these adolescents have good attachment to friends, and this variable related to their self-esteem.

What can we do? The first step for pediatric clinicians should be encouraged to discuss evidence-based parenting practices with parents. Second, Adolescents who staying in this center, should be provided with the opportunity to participate in several activities, so channel their rebellious behavior in constructive ways. Active participation in activities could help to develop their potential and enhance self-confidence and self-esteem, thus serving as a protective factor of delinquency. Since adolescents often turn to their peers, including deviant ones, for support during times of them, they should be coached on how to resist undesirable peer pressure through proper social skills; helping them to rebuild their social circles is a necessary strategy. And finally, For changing the deviant identity of delinquents is central to social work for young people. Without a new identity, they would feel easy to mingle with their former deviant peers. Social work in this center (where these adolescents staying for months or years) should prepare

the delinquents for the new roles they are to play after any intervention programs. However, preoccupation with their previous deviant identity is a hurdle for positive change; they may seek to resolve the crises and frustrations they encountered by deviant means. To rebuild their self and identity, they need to look for someone or something that they have faith in. They have to experience success or achieve social status through conventional means, such as sports, talent programs, volunteer services, mentoring, and role modeling. The identity-rebuilding process would gradually strengthen their self-esteem and self-efficacy, remove their deviant self-concept, and prevent them from going astray.

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An Application of the UTAUT Model for Exploring Cosmetics Product Purchase Intention of Virtual Community Members

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Abstract

Technology development have been rapidly grown and adapted by people. Internet users in Taiwan have been a great number and powerful growth. There are 36.4% people who use internet to search for cosmetics information. These challenges highly involved the technological innovations in cosmetics market. Due to plenty of internet users, virtual community (VC) has been established. Since VC is full of business benefit, there have been more and more researches paying attention on it. During past studies, researchers pointed out that VC can significant aggregate common needs both of society and commercialization. Furthermore, VC can be applied on purchase intention and behavior. These findings drive us to dig deeper on how virtual community affects on cosmetic product purchase intention. We apply on a general approach, Unified theory of acceptance and use of technology (UTAUT), that could help to bridge people acceptance and use of technology, and generate new factors to understand how virtual community provide influences to cosmetic product purchase intention. This research were concentrated on the UTAUT analysis by performance expectancy, effort expectancy, social influence, facilitating conditions and trust. Finally, we are looking forward cosmetic product purchase intention factor in VC can be facilitated on similar industry and observing for significant opportunity of VC.

Key words: Virtual Community, Cosmetic Product, Purchase Intention, UTAUT

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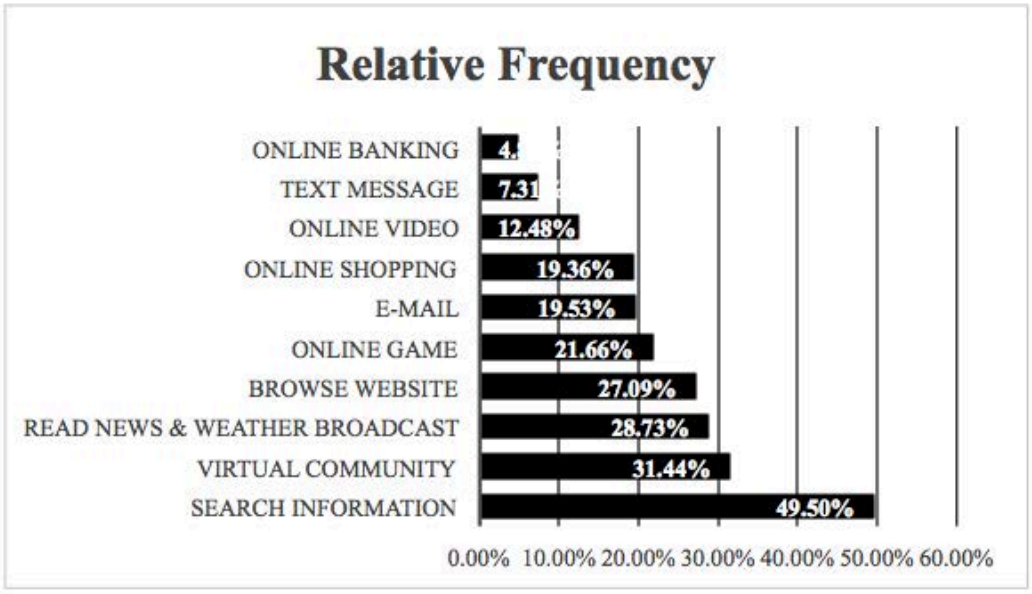
1. Introduction

Internet users in Taiwan have been a great number and powerful growth. Taiwan Network Information Center, TWNIC (2013) points out that internet user rate in Taiwan comes to the third place, high up to 77.09%. From 2002, Taiwan government has been promoted National Information Infrastructure project and it does a big progress. According to TWNIC (2013), regular internet user population from 9.35 million up to 17.53 million and growth rate also up to 87%. In TWNIC's survey, the first ten popular behavior of internet users are as following. (Fig. 1)



Source : Shi, 2013

Fig. 1 Most popular behavior of internet users

Chien and Fang (2005) observed that internet space can change people life, including works, entertainment, consumption, education and so on. These changes make internet becomes a potential business opportunities. (Chien & Fang, 2005). Cosmetic industry provides people enjoy in fashion and diversity industry. The internet could be built as a platform for customers to have social interactions with others who have their shared interests. In this research the main focus is to test application of UTAUT model on VC members purchase intention of cosmetic product. We are trying to find what factors will influence on VC members' purchase intention. We begin from defining virtual community and cosmetic industry, purchase intention will be reviewed as well. Presenting the research model and hypotheses, and we will reveal the data collection

and the data analysis. Conclusion and managerial implication will be given in the end.

2. Literature Review

2.1 Virtual Community and Cosmetic Industry

The most widely known definitions and attributions of VC are given by Howard Rheingold (Rheingold, 1993). As internet was booming growing up, more and more scholars gave verified definitions of VC. Definition of VC is also changed and revised by different periods (Table 1). Thus, we can imply VC keeps growing and developing.

Table 1 Definitions of VC proposed by various authors

Year	Author	Definition
1993	Rheingold (1993)	VC is a group of people who may or may not meet one another face to face, and who exchange words and ideas through the mediation of computer bulletin boards and networks
1997	Hagel and Armstrong (1997)	VC are computer-mediated spaces where there is a potential for an integration of content and communication with an emphasis on member-generated content.
2000	Craig and Zimring (2000)	A sense of community, that is, it is not guaranteed by opportunities for interaction but, rather, must grow out of interaction itself.
2000	Ho, Schraefel, and Chignell (2000)	Technologically mediated, persistent, environment which supports: multiple interaction styles, capability for real-time interaction, and multi-user engagement.
2004	Koh and Kim (2004)	A group of people with common interests or goals, interacting for knowledge (or information) sharing predominantly in cyberspace.
2006	Chiu, Hsu, and Wang (2006)	VC are online social networks in which people with common interests, goals, or practices interact to share information and knowledge, and engage in social interactions. It is the nature of social interactions and the set of resources embedded within the network that sustains VC
2010	H-K. Ellonen, A. Tarkiainen and O. Kuivalainen (2010)	From the relationship marketing perspective, the key would seem to be that customers

Definition of VC is constantly redefined as time goes by, it would change its profile and be created new feature. Despite definition of VC being revised, it still has its

common features. In summary, we can define that there are four main characteristics of VC:

1. They must exist in the cyberspace;
2. They have to use internet technologies;
3. They allow the formation of social relationships;
4. They are used for members' communication and interaction around common interests which are user generated.

For application of VC, we found that researchers have concluded VC had its business implication. Hagel (1999) gave the definition of VC in a new way. "VC actually started as spontaneous social events on electronic networks, people gathered around common areas of interest, engaging in shared discussions that persisted and accumulated over time that led to a complex network of personal relationships and an increasing identification with the group as a community. These spontaneous social events provide the foundation for a very attractive business model" (Hagel, 1999). VC can provide opportunities for businesses seeking to benefit (Kim, Kim, & Huang, 2014). The individual's interaction with these tools allow companies to gather information about tastes, preferences, trends, concerns and other personal and collective data to help them redefine and improve the product or service (Hernández & Boluda, 2012). From understanding of researchers' finding, VC can generate business benefit and it established new opportunity for business.

According to Datamonitor (2013), cosmetic industry could be inferred that market consumption volumes increased with a compound annual growth rate of 4% from 2008 to 2012, to reach a total of 0.46 billion units in 2012. What's more, Euromonitor International (2013), current value sales of cosmetic industry in Taiwan is up by 7% to reach US$ 117 million in 2010. Reviewing by Industry & Technology Intelligence Service (ITIS) in 2013, total revenues of US$ 570 million is generated in Taiwan. Even if economic regression, cosmetic indusrty still stand in a relative advantage situation. Especially, young generation should be taken into consideration because of 24.9% share in whole cosmetic consumption (Wu & Chen, 2012). The statistics shows VC and cosmetic industry are being promising growth.

2.2 Trust on Purchase Intention

Trust is "the willingness of a party to be vulnerable to the actions of another party

based on the expectation that the other will perform a particular action important to the trustee, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995). Trust is one type of social constructions that originates from interpersonal relationships (Sztompka, 1999). Therefore, it can be a key factor when people surf on VC. Trust has been definitely recognized as a critical success factor when it comes to online shopping. Customer trust can affect customers' purchase intention (Sun & Yang, 2009). VC members would think they are trustworthy when individual perceives to be similar to others. When members trust the community in general, they will identify with the community and trust the information provider of the community.

In summary, cosmetic product purchase intention can be stimulate through VC. We could expect that the emergence of factors from UTAUT will drive VC members' purchase intention.

3. Conceptual Model and Research Hypotheses

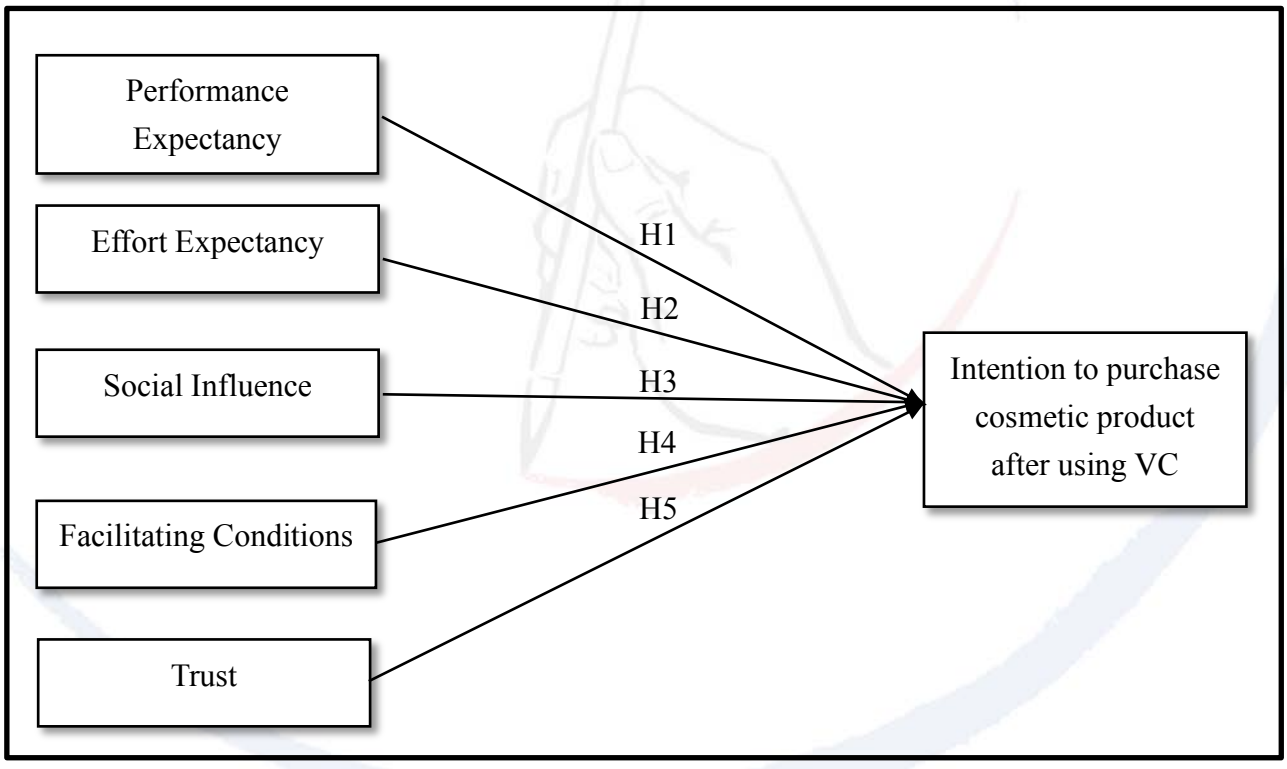
We use the UTAUT model and add Trust as one key factor in the research model. This approach has previously been used in a number of studies on many people's technology adoption or purchase intention, such as mobile learning, M-banking and so on (Carlsson, Carlsson, Hyvonen, Puhakainen, & Walden, 2006; Cheah, Teo, Ooi, & Wong, 2013; Cody-Allen & Kishore, 2006; El-Gayar & Moran, 2006; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Thomas, Singh, & Gaffar, 2013). The UTAUT models have typically not only been tested in the studies but have been used as conceptual tools to different issues. We revised UTAUT and tested it as main tool on VC members.

UTAUT formed a new model that were evidenced based on the past studies which have all been verified in each field and category separately. UTAUT was also proposed as a theoretical advancement over existing theories used to examine technology adoption and diffusion related research. It facilitates in examining customers' intentions to use and adapt to information system and consequent usage behavior. The main model of the framework to this research is based on Unified Theory of Acceptance and Use of Technology Model (Venkatesh, Morris, Davis, & Davis, 2003).

UTAUT postulates that four constructs act as determinants of behavioral intention and

we add trust as a factor in the revised UTAUT (Venkatesh *et al.*, 2003):

1. **Performance expectancy:** The degree to which an individual believes that using a particular system would improve him or her to attain gains in job performance.
2. **Effort expectancy**: The degree of ease associated with the use of a particular system.
3. **Social influence**: The degree to which an individual perceives that other important people believe he or she should use the new system. Social influence is system- or application-specific, whereas the subjective norm relates to non-system-specific behavior.
4. **Facilitating conditions:** The degree to which an individual believes that an organizational and technical infrastructure exists to support the use of a particular system.
5. **Trust:** The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustee.



Source: Venkatesh *et al.*, 2003

Fig 3.1 Research model (Revised UTAUT)

The effects of performance expectancy (PE), effort expectancy (EE), social influence

(SI), facilitating conditions (FC), trust (TT), and cosmetic product purchase intention (PI) are examined. The impacts of moderators in the UTAUT by Venkatesh *et al.* (2003) will not be included in this test. Therefore, the hypotheses of relationships for direct effects are:

H1. The performance expectancy in the use of the VC positively affects the online purchase cosmetic product intention.

H2. The effort expectancy in the use of the VC positively affects the online purchase cosmetic product intention.

H3. The social influence regarding the use of the VC positively affects on the online purchase cosmetic product intention.

H4. The facilitating conditions perceived in the use of the VC positively affect the online purchase cosmetic product intention.

H5. The trust in the use of the VC positively affects the online purchase cosmetic product intention.

We will try out the UTAUT on five factors in order to find out what factors can be able to affect on VC members' cosmetic product purchase intention.

4. Data Analysis

4.1. Data collection

The surveys were carried out online questionnaire within a limited period from January to March in 2014. The samples have been randomly selected, and all of them are anonymous. The objective of the pretest was to test whether the sentence of the questionnaire would make people misunderstand, and it also tested whether people could understand the meaning of each items in the questionnaire. The reliability of this questionnaire could be examined through the pretest. After pretesting, questionnaires were distributed online and received 285 participants. After filtering invalid response, 278 participants are valid.

4.2 Data analysis

This research used SPSS analyze data to examine the data. The description statistics, reliability analysis and validity analysis and correlation analysis of the research instrument were analyzed with SPSS. The data construction is balanced with gender. All of female and male were high education and experienced VC users. The result shows that the overall reliability of this research is 0.857 which means high reliability. The KMO of this research is 0.854. It represent that this research is appropriate to do analysis. This analysis adopts Pearson's correlation coefficiency to test the

relationships between the constructs. The result of the correlation analysis is shown in Table 2.

Table 2 Correlation analysis

Correlations						
	PE	EE	SI	FC	TT	PI
PE						
EE	0.284**					
SI	0.015	0.12				
FC	0.193**	0.253**	0.174**			
TT	0.210**	0.12	0.072	0.184**		
PI	0.489**	0.202**	-0.121	0.1	0.227**	

Note: **. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

5. Conclusion

5.1 Contribution and practical implication

In this paper we have studied the factors affecting VC members' cosmetic product purchase intention by testing the UTAUT. Performance expectancy and trust could be found as explanations for purchase intention, but that social influence could not be used as such for explanations. From the results, it reveals that people emphasize performance expectancy most of all. It means VC should provide cosmetic product abundantly and help people accomplish task quickly during browsing cosmetic product information (Guo & Barnes, 2007; San Martín & Herrero, 2012). Second, people also pay attention on their personal information security. If VC provide skills and expertise to VC members, people would be inspired to purchase after using VC (Lu, Zhao, & Wang, 2010; Wu, Chen, & Chung, 2010). However, social influence used to consider as a key factor to stimulate purchase intention but not significant in this research. Some researchers pointed out that social network and social influence had become more complex and inconsistent so social influence should not be simplified into the model (Hamre, 2008; Lee, Lee, & Lee, 2006).Thus the results we obtained do not support in all cases the original UTAUT hypotheses.

5.2 Further study

For the further study, we suggest using the qualitative study method to interview the

VC members face-to-face, thus evolving the conceptual factor to do further study. The method used in the study is quantitative, using documents to discover the factors and develop the questionnaire. It would be interesting to include holistic perspective on purchase intention of cosmetic product on VC members.

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Statistics Anxiety, Basic Mathematics Skills and Academic Performance among Undergraduate Psychology Students

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Abstract

Statistics anxiety is a perennial problem among social science students who are faced with statistics as a programme requirement. At one Department of Psychology in Malaysia, the failure rates for a statistics course, across six semesters spanning 2010 to 2013, were the highest compared to other undergraduate courses. Thus, this study attempts to investigate the relationship between statistics anxiety, basic mathematics skills and academic performance among undergraduate psychology students. A survey that included an adapted Statistics Anxiety Scale (SAS) and basic mathematic skills were distributed to the students at the beginning of the semester. Academic performance was measured through mid-semester examination and three quizzes. Scores from 80 students was analysed by linear regression analysis. The adapted SAS had adequate reliability, Cronbach alpha = .946. It was found that both mathematics skills scores and statistics anxiety scores are significant predictors of the overall academic performance. The resulting regression equation was significant, $F(2,77)=14.255$, $p<.001$, $R^2=.270$. The results of the study confirmed that academic performance was negatively correlated with statistics anxiety and positively correlated with basic mathematics scores. The SAS can be used for assessing students' anxiety as part of class intervention, but its factor structure needs further investigation.

Keywords: statistics anxiety, basic mathematics skills, psychology students

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Introductory statistics courses are required courses in many undergraduate psychology degree programs. However, not all students who registered for the course did it with high optimism and positive attitude. It is not uncommon for students to show evidence of anxiety when faced with statistics course. According to Cruise, Cash, and Bolton (1985), statistics anxiety can be defined as a specific anxiety when taking statistics courses which involve gathering, processing and interpreting the data. This paper presents a study that examines the relationship between basic mathematics skills, statistics anxiety and academic performance among undergraduate psychology students at a public university in Malaysia.

Statistics anxiety

Statistics anxiety may be manifested in the form of thoughts as well as physical arousals. Students found that statistics course is one of the most anxiety-inducing course, a barrier to completion of degree, and a course to be avoided early in the study (Macher, Paechter, Papousek, & Ruggeri, 2011). It can have deleterious effect on students' academic performance. Previous researches showed a significant relationship between statistics anxiety and academic performance. For example, Ali and Iqbal (2012) studied statistics anxiety among psychology post-graduate students by measuring their anxiety and their marks in statistics examination. They found that there is a moderate negative relationship between statistics anxiety and statistics examination's marks. It showed that students who have high statistics anxiety are predicted to have low score in their examination. The relationship could be explained by the effect of anxiety on procrastination and the amount of time and efforts spent on learning (Macher et al., 2011). Rodarte-Luna & Sherry (2008) found that both male and female students showed positive relationship between procrastination and statistics anxiety. However, female students were more able to use multiple learning strategies to deal with statistics anxiety.

Apart from that, Williams (2010) studied statistics anxiety and instructor immediacy among graduate students. The method used by Williams (2010) is slightly different from Ali and Iqbal (2012) in which, pre-test and post-test design was used to investigate the relationship between instructor immediacy and statistics anxiety among 76 graduate students. The measure of statistics anxiety used was Statistics

Anxiety Rating Scale (STARS) which has six factors. It was found that the instructor immediacy is significantly correlated to all factors of the STARS namely worth of statistics, computational self-concept, and fear of exam, teacher of statistics, asking help, and interpretation.

Furthermore, Onwuegbuzie (2004) also studied on academic procrastination and statistics anxiety and found that 80% of graduate students experienced high level of statistics anxiety. Onwuegbuzie (2004) used the same measurements like Rodarte-Luna & Sherry (2008). The result showed that academic procrastinations from fear of failure and fear of task were significantly related to the six dimensions of STARS.

Basic Mathematics Skills

Basic mathematics skills are very important in a statistics course. Previous researchers showed a positive relationship between basic mathematics skills and academic performance (Johnson & Kuennen, 2006; Lunsford & Poplin, 2011). Johnson and Kuennen (2006) identified the types of mathematics skills most associated with students' success in Introductory Business Statistics course by developing 15 questions of basic mathematics skills. They found that the scores of mathematics skills are positively correlated with academic performance in Introductory Business Statistics course. It means the higher the scores of basic mathematics skills the higher are the scores in Introductory Business Statistics course.

In addition, Lunsford and Poplin (2011) studied basic mathematics skills and success in Introductory Statistics. The students were given a basic mathematics skill test developed by Johnson and Kuennen (2006) and they also had an examination for Introductory Statistics. The result shows that the marks in Introductory Statistics were positively correlated to basic mathematics skills. It means that the students who got higher marks in basic mathematics skills test tend to get higher marks in their Introductory Statistics examination. Thus, Lunsford and Poplin (2011) stated that basic mathematics skills test was a significant predictor of performance in a statistics course. Self-reported mathematics achievements (prior to taking statistics course) were also found to be positively correlated with final grades of statistics course (Emmioğlu, 2011; Dupuis *et al.*, 2012; Feinberg, & Halperin, 1978).

Objectives of Study and Hypotheses

The purpose of this present study is to examine the relationship between statistics anxiety, basic mathematics skills and academic performance among undergraduate psychology students. There are concerns about the students' performance in a statistics course (Abd Hamid & Sulaiman, 2014). Their study, using STAR as the measure of anxiety, did not find evidence for the relationship between statistics anxiety and performance. The reliability of the scales in STAR was not fully satisfactory. Thus, this study attempted to measure anxiety using a different scale namely Statistics Anxiety Scale (SAS).

The findings from the study are expected to help the course instructor to re-design teaching strategies by identifying the important factors that are related to performance in the course. Based on the reviewed literature, the following hypotheses were tested:
Basic mathematics skills are positively correlated with academic performance.
SAS scores are negatively correlated with academic performance

METHOD

Participants

The participants were 18 males (22.5%) and 62 females (77.5%) recruited from students enrolled in a statistics course. The participation was 84.2 % out of 95 students enrolled in the course. The course was one of the core courses for a psychology degree programme. Additionally, it is also a required course for students minoring in psychology, of which there were 15 students (18.8%). There were two sections of the course taught by the same instructor. Both sections received the same course contents (descriptive statistics, correlation, regression, t-test, ANOVA, and non-parametric statistics) and assessments (mid-semester examination, quizzes, and final examination). The medium of instruction used was English.

Instruments

The questionnaire comprised of three parts. The first part had eight demographic background items. The second part was the Statistics Anxiety Scale (SAS) and the third part is the basic mathematics skills.

Statistics Anxiety Scale (SAS). The instrument is a measure of statistic anxiety namely Statistical Anxiety scale (SAS) that is developed and validated by Vigil-Colet, Lorenzo-Seva, and Condon (2008). Some of the items were adapted from the Statistics Anxiety Rating Scale (STARS) by Cruise, Cash, and Bolton (1985). The SAS was revised by the researcher and used for this study as it is more suitable for the intended sample. For example, the IIUM students are more familiar with the term 'lecturer' (revised version) rather than 'teacher' (original version) when referring to the course instructors. The SAS had 24 items and it has three sub-scales which are Examination anxiety, Asking for help anxiety, and Interpretation anxiety. Each sub-scale have eight items. The items were measured on a 5-point Likert scale. All of the 24 items, the anchors are 1 to 5 where 1 indicates 'no anxiety' and 5 indicates 'strong anxiety'. Thus, the higher the score for these items, the higher the level of anxiety.

Mathematics Quiz. A quiz with 15 questions measuring basic mathematics skills was taken from Johnson and Kuennen (2006). The score on the quiz was found to be a significant predictor of grades obtained in basic statistics course (Johnson & Kuennen, 2006; Lunsford, 2011; Abd Hamid & Sulaiman, 2014).The quiz encompassed of items measuring skills on systems of equation, ratios and geometrics. A higher score means a higher level of mathematics skills.

Procedure

A set of questionnaire consisted of three parts were distributed among the participants during 30 minutes before the class end at the second week of the semester. Participants were not allowed to use any calculator. In the classroom, participants participated voluntarily in this research and need to respond to all of the three parts of questionnaire. The questionnaire were collected to be analysed by the researcher and before the end of the session, the participants were debriefed that their responses will no affects their grades in the course.

On top of descriptive data analysis for the demographic variables, Pearson correlations were obtained for the main variables. Hierarchical multiple regression analysis was carried out with stats performance as the dependent variable. Basic mathematics skills and the subscales of SAS were entered as predictors using the forward option in SPSS 19.

RESULTS

Table 1

Count and percentage for demographic variables

Demographic variables	*N*	*%*
Gender		
Male	18	22.5
Female	62	77.5
Section		
1	44	55
2	36	45
First attempt		
Yes	75	93.8
No	4	5
First language		
Malay	66	82.5
English	9	11.3
Others	5	6.3
Program		
Major	64	80
Minor	15	18.8

As can be seen in Table 1, the participants are predominantly Malay speaking, females, and psychology major. The number of students in both sections were equal (n=48) early in the semester. However, there were students (n=3) who were listed in the class list even though they did not turn up at all due to health problem, immigration problem, and change of university. There were also students who started the semester after the administration of the survey. Additionally, three students withdrew from the course and two changed their section. Thus, the final number of students in each section was not equal.

The students had an average statistics score of 53.45 (out of 100). This is just 3.45 points above the passing mark (50). This is considered low performance for the statistics course. The scores range from 18.75 to 95. The big spread of the scores is also reflected in the standard deviation value. The SD value has a very significant implication for the letter grade. A score of 53.45 (the mean value) is graded C, and one standard deviation above the mean would deserve a B+ grade (after rounding of decimals) which is four letter grade above C.

Table 2

Mean, SD and alpha Cronbach for the main variables

	N	*M*	*SD*	*α*
Statistics Performance	75	53.45	16.05	
Basic math skill	80	9.23	2.349	
SAS Total	80	3.2875	.97037	.946
Asking	80	2.8063	.90749	.939
Interpretation	80	2.7953	.82082	.873
Exam	80	3.7641	.78856	.866

The adapted SAS had adequate reliability for the full scale and the subscales as presented in Table 2. The level of anxiety, as indicated by the total SAS score is above 50%. This means the students are experiencing noticeable level of statistics anxiety. However, only the fear of examination appears as an anxiety-inducing component of SAS.

Table 3

Correlation matrix for statistics performance, basic mathematics skills, and statistics

	1	2	3	4	5
Basic mathematics skills					
Total SAS	-.280*				
SAS Interpretation	-.270*	.887**			
SAS Exam	-.267*	.854**	.641**		
SAS Asking	-.206	.897**	.704**	.637**	
Statistics Performance	.350**	-.332**	-.336**	-.252*	-.285*

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

The correlation among the main variables in this study is presented in table 3. Mathematics skills scores are positively related to performance in the statistics course.

The total SAS score and the SAS subscales score are negatively correlated with statistics performance. The total SAS scores are highly correlated with its subscale. The subscales are also strongly correlated with each other. The subscales, and the total scales, were negatively correlated with math skill, except for fear of asking for help.

The regression analysis yielded a two step solution as presented in Table 4. The final model derived from step 2 of the hierarchical multiple regression analysis is significant, $R^2 = .270$, $F(2,77)=14.244$, $p<.001$, and with a constant value = 49.84.

Table 4

Hierarchical multiple regression analysis relating statistical performance with math skill and statistics anxiety

Step and predictor variable	β	ΔR^2
1	.455**	.207**
math skill		
2		.063*
math skill	.384**	
SAS Interpretation	-.261*	

Note: *p<0.05, **p<0.001

DISCUSSIONS

Both hypotheses tested in this study were accepted: statistics anxiety and mathematics skills are related to academic performance in the expected direction. For describing the relationship among the variables, the correlation values show a clear and consistent picture. Students performed better when they have higher basic mathematics skills and lower statistics anxiety. Additionally, it was also found that basic mathematics skills are related to statistics anxiety, except for the sub scale asking for help. In short, it seems that math skills are important to be developed before taking the course.

The practical implications of the findings are discussed primarily in relation to study by Abd Hamid and Sulaiman (2014). They reported a study with similar samples and the same statistics course. In their study, none of the components of anxiety (as measured by STARS) emerged as a predictor of performance. However, in the present

study, fear of interpretation is identified as a predictor of academic performance. The interpretation aspect of statistics emerged as a predictor despite having a lower correlation value than fear of examination. This could perhaps be due to fear of interpretation being a more domain-specific anxiety than fear of examination. In other words, fear of interpretation is more likely to exert a specific influence on academic performance than the fear of examination.

Moreover, the majority of the students' first language is not English. Hence, the students are learning statistics in a second language. The language of instruction is important because language is "used to express, characterize, and apply .. [mathematical] .. concepts" (Cuevas, 1984, p 138). Thus, it would not be surprising that students who have difficulty with the English language would experience anxiety in interpreting statistical results which invariably involves explaining the numbers using clear sentences. Additionally, language competency is linked to higher mathematics achievement (Howie, 2003; Beal, Adams, & Cohen, 2009). For example, strategies to improve comprehension of mathematics problems had been linked to facilitative effect on the development of mathematics skills (Orosco, 2013). It is reasonable to postulate the same relationship exists between language competency and performance in a statistics course. Future studies should examine the effect of using second language instruction on academic performance. This is an advantage for using SAS for future studies with similar samples.

The present study also strengthens the earlier conclusion made by Abd Hamid and Sulaiman (2014) regarding the importance of basic mathematical skills in relation to performance in a statistics course. The mathematics skills explain more variability in the academic performance than components of statistics anxiety. This should be the emphasis in the future design of the teaching and learning activities for the course. For example, the mathematics quiz could be used as a diagnostic tool to identify students who are at risk for poor performance in a statistics course.

With regards to the measure of statistics anxiety, SAS showed a better reliability compared to STAR reported in Abd Hamid and Sulaiman (2014). The alpha Cronbach for the sub-scales of SAS are higher than the comparable subscales in STAR (interpretation = .75, asking for help = .84, examination = .81). This lends further credit for SAS to be used for future studies. It warrants further investigation into the psychometric properties of SAS such as confirming its factor structure.

In conclusion, this study achieved the objectives of describing the relationship among mathematic skill, statistics anxiety and performance in a statistics course. It also helped to identify basic mathematics skill and fear of interpretation as the predictors of statistics performance. These findings could be used by future instructors of the course to help students achieve better understanding and competence of statistics. Considering the level of performance achieved by the students in this study, there are much rooms for improvement to be made.

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The Relationship between Spirituality and Quality of Employee Management Behavior

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Abstract:

This research the notion of 'spirituality' as a dimension of human self, and its relevance and role in management behavior has studied. Growing interest in workplace spirituality and in management practices permit people to fulfill fundamental values at work. Human Relations, Organizational Development, Total Quality Management and Quality of Working Life were all more deeply researched than spirituality at work. Log spirituality in organization gives the ability to the staff to earn the integrated perspective of the organization, family and their community gain. In the management studies, there are this opinion that spirituality and spirituality in workplace can gives response for decrease Organizational inefficiencies such as alienation, stress, too much compromise and depersonalization. This model shows that the two components of spirituality in the workplace and organizational citizenship behavior have mutual interactions with each other. In other words, the rise of spirituality in the workplace organization makes, will behave efficient and excellent staff. In this paper the management behavior of employees and how this management is possible with spirituality will be discussed. And what kind of positive behavior in employees is produced of spirituality.

Key words: spirituality, management behavior

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Introduction:

World of work is experiencing rapid change and organizations (Blau, 1999, p.687). New issues is designating now. Although the idea of integrating spirituality and work in organization may be new in management studies, there are scholars (e.g., Quatro, 2004) who believe that this idea can be traced to the works of earlier scholars like Mary Parker Follett (1918) and Abraham Maslow (1998). Likewise, there was much discussion on spirituality by early psychologists like Carl Jung (1960). The interest in spirituality at the workplace is actually a revival of that in the past.
In this paper, reviewed the relationship between spirituality and quality of employee management behavior is studied. Simultaneously with the rise of customer orientation campaign and the emergence of new perspectives in management studies, the concept of organizational citizenship behavior has also been considered in studies related to the organization (Kakhaki & et al, 2007, p115). Organizations are social systems. If one wishes to work in them or to manage them, it is necessary to understand how they operate. Organizations combine science and people –technology and humanity. Over the past decade, and particularly in the past three years, employers and employees have faced human capital challenges and an uncertain economy. Today's, Managers are faced with different challenges at stressful business. Technological changes and innovation in one hand and complexity management at organization in other hand cause to rely just on the human resources. Accordingly, importance of employees is increasing today (Esmailie et al. 2014) organizations need to develop workplace improvement strategies with the scope of effects extending beyond the organizational environment and influencing the employ-ees' non-work life (Loscocco, KA .1991; Sirgy MJ et al.; 2001) Due to the importance and the role of manpower in any organization, the authors are attracted to the issues that increase employees' performance, decrease absenteeism and improve the productivity (Kamdideh, 2002: 10). Quality of work life was entered from work environment to human resource literature as important part of employee's experiences at 1970 and is mentioned as a variable to supply employee's satisfaction after several decades (lawler, 1983). If an employee feel improvement in work life quality, due to self-performance or companies strategies, so employees work with more motivation (KhaghaniZadeh et al, 2009). Work life quality can be including any improvement in organizational culture that supports the development and promotion of employees in organization (Dockel, 2003). Therefore, Value system of the quality of work life conceived individual investment as on the most important variable at strategic management, which means satisfying the needs of the organization will lead to long-term employees to improve performance (Richard, 2007) In contrast, Several researchers found that employees began to feel distanced, vulnerable, and cynical as a result of downsizing, restructuring, reengineering, delay ring, layoffs, and other current changes in organizations (Sparrow and Cooper, 2003; Bartlett and Ghoshal, 1995, Meyer and Allen, 1997; Biberman and Whitty, 1997). Sprituality at workplace and God in organization is the major trends in 21th century that have their roots in 1990s. According to Carrette & King (2005), most authors go to extraordinary levels to define the term and yet struggle to come up with a definitive meaning As Jennifer Laabs (1995) points out that "defining spirituality in the workplace is like capturing an angel - it's ethereal and beautiful, but perplexing" (p.63). One of the most important recent phenomena in quality management development and globalization is the relationship between spirituality and quality of employee management behavior. Territory of management and organization, theoretically and practically is influenced by a powerful force called spirituality. New perspective believes Spirituality enhances employee well-being and quality of life; Spirituality provides employees a sense of purpose and meaning at work; and

Spirituality provides employees a sense of interconnectedness and community (Karakas, 2010). There are more than seventy definitions of spirituality at work, and still, there is no widely accepted definition of spirituality (Markow and Klenke, 2005).Spirituality is mostly described as an idiosyncratic, multifaceted, elusive concept; difficult to be captured in a common definition (Guillory, 2000; Dehler and Welsh, 1994; Barnett, Krell, and Sendry, 2000, p. 563; Cavanagh et. al., 2001, p. 6; Nash and McLennan, 2001, p. 17; Delbecq, 1999, p.345). The term "spirituality" lacks a definitive definition although social scientists have defined spirituality as the search for "the sacred," where "the sacred" is broadly defined as that which is set apart from the ordinary and worthy of veneration. Some researchers view spirituality as anti-materialist (Lips- Wiersma, 2003; Gibbons, 2000) and anti-positivist (Fornaciari, Lund Dean, and McGee, 2003). Manning (2004) believes that spirituality can be experienced and felt either in the religious or in non-religious context and background. Spirituality is often related to a person's belief system. The spiritual power of a person guarantees his/her positive attitude to the problems and his interest in helping the people around him/her (Javaheri;2013). In spite of substantial inquiries on workplace spirituality and workers' attitudes associations, researchers have been unsuccessful to evaluate the direct impact of one's belief on their work behavior (Roundy, 2009).Humanizing the work and workplace by designing meaningful tasks, providing skill development and career growth opportunities, supporting job security, and promoting work safety and health has been shown to be correlated with higher job satisfaction and life wellness (Havlovic, 1991; Hian ,1990; Adhikari, et al. 2010 & Mosadeghrad, 2011). There is a growing consensus in workplace, health (spirituality) promotion community that effective interventions should target determining factors of workplace health and organizational causes of wellness (IPolanyi, 2000). The term "spirituality" has its roots in 17th century France, where it described a form of contemplation favored by the quietest movement. By the 19th century, it had become associated with mysticism and piety(Wright,2004,p.75). Spirituality allows the individual to have a sense of the sacred without the institutional practices and limitations that are associated with traditional religion (Zinnbauer, Pargament, & Scott, 1999). Spirituality discussion is considered in individual areas and organizational areas and In addition is entered to areas of psychological and other humanities fields such as management , too(Sagharvani, 2010, p39; Emmons ;2000; Harrington, 2004; Mitroff& Denton, 1999; Tischler et al., 2002,p.203; Garcia-Zamor, 2003). Spirituality, as defined by Mitroff and Denton (1999a), is "the basic feeling of being connected with one's complete self, others and the entire universe" (p.83).Spirituality is generally viewed as some "internal substance", "a value, belief, attitude, or emotion", "that affects people's behavior" (Moore & Casper, 2006, p. 109-110). Carrette& King (2005) argue that spirituality has become the 'brand label' for the search for meaning, values, transcendence, hope and connectedness in modern societies.

Review of literature:

The link between spirituality and wellbeing is well known (Paloutzian, Emmons, and Keortge, 2003), research is just beginning to support the view that the experience of spirit at work results in more fulfilling lives for individuals and positive outcomes for organizations (Fairholm, 1997; Groen, 2003; Kinjerski, 2004; Kinjerski and Skrypnek, 2006; Milliman, et al., 2003; Milliman, Ferguson, Trickett and Condemi, 1999; Mitroff and Denton, 1999; Moxley, 2000). Also the recent spurt of scholarly articles along with several authors currently writing on the work-spirituality connection (Benefiel, 2003a , 2033b ; Krishnakumar& Neck, 2002; Ashmos & Duchon, 2000; Dehler& Welsh; 1994) reflects the interest in the relationship of spirituality in the workplace, job satisfaction and organizational commitment (Connolly & Myers, 2003; Milliman, Czaplewski& Ferguson, 2003). Research is demonstrating a positive relationship between the presence of spirit at work and employee wellness as well as organizational performance (Kinjerski and Skrypnek, 2006). Sixty-six percent believe their company's financial performance would benefit from being more spirituality among their employees. Hard work and long hours can become unhealthy and dissatisfying for employees as they confuse meaning and their inner worth with external rewards, promotion, striving for mastery, and affluenza (Burke; 2006, p. 10-20) Ashmos and Duchon (2000) recognize that the world of corporate work is changing. Recent publications and studies have focused on the relationship between workplace spirituality and organizational performance (Giacalone & Jurkieweiz, 2003). Earlier studies showed a strong correlation between spirituality and increasing tolerance on face of problems. Turner (1999) has highlighted that the workplace spirituality has a huge impact on an organization since the organization is able to gain advantages by developing a humanistic environment in which workers can achieve their full capacity.
Spirit at work is reported to add meaning to one's life, enhance one's creativity, and increase one's commitment to and enthusiasm for work (Fairholm, 1997; Groen, 2003; Milliman et al., 1999; Moxley, 2000). Studies have indicated that employees with a high level of psychological well-being are more committed, and more productive than employees with a low level of well-being(Wright,2007; Wright;2004).High QWL has been linked to reduced loss due to absenteeism, lower rate of turnover, and improved job satisfaction(Havlovic'1991).Studies which have proceeded to examine the relationship between workplace spirituality and quality of employee management behavior such as organizational commitment (Rego& Cunha, 2008; Duchon & Plowman, 2005; Jurkiewics & Giacalone, 2004; Garcia-Zamor, 2003). They have found that when people find meaning in their activities and feel involved in heavily spiritual organizational climates, they become healthier and happier, where they act in a more committed manner, become more engaged and are able to apply their full potential to work.

An empirical relationship between spirit at work and job satisfaction (Kinjerski and Skrypnek, 2006; Looney and Brewer, 2003), and decreased absenteeism (Kinjerski and Skrypnek, 2006) is beginning to emerge. In (Kinjerski, V. & Skrypnek, B.J., 2006: 232-239.) own research, individuals with high spirit at work have reported that spirit at work has a positive effect on their personal wellbeing, relationships, consumer relations, and productivity. Stress caused by work a holism and long hours at work can result in loss of spirituality, chronic illnesses, pain, chronic fatigue, fear, and guilt (Killinger, 2006). Cartwright and Increasing stress in the workplace leads to higher absenteeism, lower productivity, and increased health compensation claims the

collective cost of stress for U.S. corporations have been estimated to be around $150 billion due to absenteeism, loss of productivity, health insurance and medical expenses (Karasek and Theorell, 1990). Reave (2005) mentions that summarize seven studies that have reported "a significant correlation between spirituality and mental health indices of life satisfaction, happiness, self-esteem, hope and optimism, and meaning in life" (p. 667). Another survey conducted in 1999 by a sociologist from Princeton University indicated that more than four in ten respondents reported an increased interest in spirituality over the previous year (cited in Higgins, 2000).

Spirituality

Traditionally, the study of spirituality falls under the domain of philosophy and religion. Spirit at work, which involves profound feelings of wellbeing and a belief that one's work makes a contribution, is about finding meaning and fulfillment, beyond self, through work (Ashmos and Duchon, 2000; Kinjerski and Skrypnek, 2004; Milliman, Czaplewski, and Ferguson, 2003; Mitroff and Denton, 1999; Sheep, 2004). According to Krishnakumar& Neck (2002), there are three main viewpoints of the workplace spirituality perspective which are intrinsic-origin view, religious view and the existentialist perspective. Jackson(1999, pp. 65-66) &Kriger & Hanson, (1999, p. 304) consider Equality, Honesty, Compassion, Avoiding Harm, Respect, Peace, Justice, Forgiveness, Service, Duty Trustworthiness, Being a Good Citizen, Peace, Thankfulness as spiritual values. Synder& Lopez (2001) focused on Optimism, Hope, Humility, Compassion, Forgiveness, Gratitude, Love, Altruism, Empathy, Toughness, and Meaningfulness as spiritual values. For Giacalone & Jurkiewicz, (2003a, p. 14), Integrity, Humanism, Awareness, Meaningfulness, Responsibility, Love, Inner Peace, Truth, Humility, Sense of Community, Justice are spiritual values. Fry (2003, p. 695) note that Forgiveness, Kindness, Integrity, Empathy, Honesty, Patience, Courage, Trust, Humility, Service to Others in spirituality. AndJurkiewicz & Giacalone, (2004, p. 131) point out to Benevolence, Generatively, Humanism, Integrity, Justice, Mutuality, Receptivity, Respect, Responsibility and Trust as spiritual values.

Workplace

Work sites have become the central pieces in our lives and the source of values in society. Workplaces are the places where people spend most of their lives, develop friendships, create value, and make their most meaningful contributions to society (Fairholm, 1996). The organizations where people spend most of their time become their most important community, their gemeinschaft where small numbers of People have simple and direct face-to-face relations with each other. For some people, work and colleagues at work have even taken the place of family or social groups as Conger (1994) observes workplace has become the fountainhead of community for many people. Together with the increasing importance and centrality of work in people's lives, associated problems also have increased (Karakas, 2010: pp. 89–106.). Solving this problem many corporations encourage the development of humanistic work environment as can create a win-win situation for employees, for employee's co-workers, and that it is good for the organization (Burack ,1999;Garcia-Zamor, 2003 and Wiersma, Dean & Fornaciari, 2009). Organizations, especially in underdeveloped and developing countries should provide the background so that employees and leaders operate the all experience, ability and their capacity to promote organizational goals (Hall et al, 2009, p382). An organization's success and

effectiveness is crucially dependent on how tasks and processes are performed by its employees (Barnett; 1998).

Workplace spirituality

Spirituality at workplace can be considered as a cure to the illness of modern management (Rego & Ecungh, 2008, p.57; Marques & Dhiman, 2008, 100). Gull and Doh (2004) argue that spirituality can be the basis for ethical conduct in business. Where spirituality is absent, there is a lack of understanding that we are deeply connected.
Kinjerski(2004) found persons with spirit at work report four actions which they perceive as contributing to their experience of spirit at work: (1) consciously living a life that is purposeful and meaningful; (2) working at cultivating and living a spiritual, value-based life; (3) recognizing one's own worth and the value of others and expressing appreciation for self and others; and (4) taking time to refill one's cup by pursuing that which is intrinsically rewarding and by engaging in self-care.
Managers should pay more attention to their employees' QWL. The concept attempts to identify measure and manage behaviors by employees that increase organizational effectiveness but are not sufficiently respected in traditional employees' job performance appraisal. One limitation of past researches was their focus on organizational citizenship behavior applied widely in different organizations and situations (Bettencourtet al. 2001). A number of scholars mention a paradigm shift in organizational sciences, management theory and practice in the past two decades (Capra, 1996; Giacalone and Dafna, 2000; Harman and Hormann, 1990; Ray and Rinzler, 1993; Wheatley, 1992).Changing in management include a shift from an economic focus to a balance of profits, quality of life, spirituality, and social responsibility concerns (Walsh, Weber, andMargolis, 2003; DeFoore and Renesch, 1995). Kinjerski & Skrypnek's (2006) conceptualization of individual spirituality at work has three of the four dimensions as follows: engaging work (meaningful work), sense of community, and spiritual connection (inner life).The need for a spiritual connection has become important to a wider audience, partly because of ongoing changes in organizational structure, which often results in feelings of insecurity regarding one's place in the system (Heaton, Schmidt-Wilk& Travis, 2004). More employers today are encouraging spirituality in the workplace as a way to enhance employee morale, commitment and productivity. Mitroff and Denton (1999b) argue that today's organizations suffer from a deep spiritual emptiness and many of problems in organizations result from this spiritual impoverishment.Workplace spirituality has risen to the forefront, partly due to the enormous cost of disregarding human resource standards as they relate to business practices. Over the last decade, scholars report a steady increase of interest in spirituality at work issues among management researchers and practitioners (Cavanagh, 1999) before that Spirituality, spiritual practices, and spiritual values, have been noticeably absent as variables in organizational research (Heermann, 1997). Spirituality and its components must be understood with greater precision to allow businesses to adopt policies and programs that energize the spiritual nature of their employees (Beheshtifar and Zare; 2013). Since the 1990s, social institutions have changed in ways to make environmental issues a more direct influence on managerial action (Hoffman 2000).A company must first understand what spirituality means for an employee to express him or herself spiritually and it involves the assumptions that each person has his or her own inner motivations and truths and desires to be involved in activities that give greater meaning to his or her life and the lives of others (Ashmos and Duchon, 2000).

Conclusion:

Some corporations incorporate spirituality into their strategies within the framework of corporate social responsibility. Research shows that Spirituality is in the center of scholar attention these days as efforts for increasing Spirituality of employers means reducing stress and being successful in management. Scientists achieved Spirituality is impact inequality of employee management behavior. The relationship between spirituality and quality of employee management behavior is significant and positive despite Managers cannot hope to cultivate spirituality at work simply by relying on a single intervention like training or job design, etc as it needs teamwork. The research on this subject is not for old time but before doing more research, scientists should agree on the definition of spirituality our have different concept on this subjects. Although the literature and interest on spirituality at work is growing rapidly; there is confusion around on how spirituality influences quality of employee management behavior and, due to the lack of precise critical thinking, studies are subject to criticism. The results show Role of God in the daily life of nonbelievers is also observed but the meaning of spirituality is not always equal to accepting the existence of God and the differentiation in meaning of spirituality is lead to create perplexing studies which can show different interpretations. Considering both spirituality at work", and at the individual level is helpful.

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Note on Publishing Intensity and Publishing Breadth

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Abstract

Given a set of leading scholars and a period of time, publishing intensity (PI) of a journal is defined as the total number of publications appeared in the journal that are co-authored by the leading scholars. Publishing breadth (PB) is defined as the total number of leading scholars who have contributed publications in that journal. While PI and PB have been applied in journal ranking, their dependency has not been investigated. In this regard, this paper presents empirical analyses on the relation between PI and PB, with focus on six areas namely Artificial Intelligence, Information Science and Library Science, Management, Anthropology, Geography, and Nursing. For each area, we first extract the list of journals from the JCR 2012 Version. Second, the list of leading scholars is compiled based on three rules: (1) a leading scholar must currently be an editorial member of a journal in which the journal is in our journal list, (2) a leading scholar must be affiliated with one of the Top 25 US universities compiled by US News, and (3) a leading scholar must have publications in the area during 1999 to 2003. The last rule ensures that a leading scholar has been active in the area for more than ten years. Third, based on the lists of journals and leading scholars obtained, we count from the Thomas Reuter WoK Database the PI and PB for each journal. Finally, we analyze the log-log relation between the PI and the PB of the journals in the list. Results show that log PI and the log PB have a linear correlation. The same result appears in all six areas. As the six areas have quite diverse natures, we argue that this log-linear relation is a common behavior across other research areas.

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Introduction

Scholars who are planning to publish their research paper to journals may face a question: which journal is better? The measurement of the quality of a journal can be in many ways. All of these measurement schemes have a same goal: giving journal a rank position to let people know which one is better. Nowadays, there are various journal ranking approaches that are being used commonly. They may rank journal in many aspects, for example, ”quality”, “influence”, “popularity” ,” reputation” or some other factors. However, these journal ranking approaches work rely on the indices it contained. A new journal ranking approach that can reflect the real quality is a must.
In the pass decades, a considerable amount of literatures has been published on methods of journal ranking. However, every ranking method has its drawbacks. Journal ranking using opinion-based indices may be subjective. On the other hand, ranking using citation-based reflects the frequency with which the journal’s articles are cited in the scientific literature. Nevertheless, the best way to characterize the productivity and prestige of journals is through the combination of various measures and indicators simultaneously (Bollen et al., 2006).
To solve the bias of the existing ranking approach, a better alternative would be the combination of different indices. Publication Power Approach mentioned two ranking indices, which are publishing intensity and publishing breadth. While PI and PB have been applied in journal ranking, their dependency has not been investigated. In this regard, this article has three purposes: to provide an empirical analyses on the relation between PI and PB, with focus on six areas namely Artificial Intelligence, Information Science and Library Science, Management, Anthropology, Geography, and Nursing.
There are various journal ranking approach that are commonly used nowadays, each journal ranking method can be composed of different indices. Take TR Impact Factor for example, it uses the number of citations to be its measure indices. For it is based on the citation number, we call it Citation-based index. It measures the quality and impact of a journal by its paper citation numbers.
In the paragraph below, we list the name of the ranking approach and the reference paper of the approach.

Citation-based index

- TR Impact factor (“Genetics Citation Index.” Garfield E, Shepard IH, 1963), it uses JCR to be its database.
- H-index. Google Scholar Metrics uses the concept of h-index to rank journal as well.
- Some are opinion-based. (“An index to quantify an individual's scientific research output” ,Hirsch 2005)
- C-index ("A Bibliometric Index Based on the Collaboration Distance between Cited and Citing Authors.", Domingo-Ferrera, Maria Bras-Amorósa Josep, and Vicenç Torrab., 2011)
- G-index (“Theory and practise of the g-index” , Leo Egghe 2006)
- Eigenfactor (Bergstrom, C. T., 2007)
- SCImago Journal Rank (SJR) (Guerrero Bote, Vicente P., Borja González-Pereira, and Félix de Moya-Anegón. ArXiv (2009)).

Opinion-Based Index

- Expert survey
- Author affiliation index ("IS Journal Quality Assessment Using the Author Affiliation Index", Ferratt, Thomas W.; Gorman, Michael F.; Kanet, John J.; and Salisbury, Wm. David, 2007)

Behavior-Based Index

Holsapple provides a different perspective when doing journal ranking. The factors he used are publishing intensity, publishing breadth and publishing mode. ("A Publication Power Approach for Identifying Premier Information Systems Journals", CW Holsapple, 2008)

Publication Power Approach (PPA) was proposed by Holsapple (Holsapple, 2008). It collects the publishing behaviors (includes how many papers a scholar published and in which journals in a given peroid) of a set of active scholars. Some people may say that it is a behavior-based approach, but in fact, there're so many cannot be separated or defined. So in here, we put it in the category of scholar opinion approach. The method is as follows:

Let M be the total number of active scholars, N be the total number of journals, I_j and B_j respectively be the publishing intensity and the publishing breadth of the j-th journal. The publishing intensity and breath are defined as follows:

$$I_j = \sum_{i=1}^{M} a_{ij},$$

$$B_j = \sum_{i=1}^{M} sign(a_{ij}), \quad \forall j = 1 \ldots\ldots N.$$

With the definition of publishing intensity and publishing breath, CW Holsapple proposed a measure called publication power which is defined as follows (Holsapple, 2008) :

Publication power = publishing intensity * publishing breadth

Let publication power be U, publishing intensity be

$$U = I_j * B_j$$

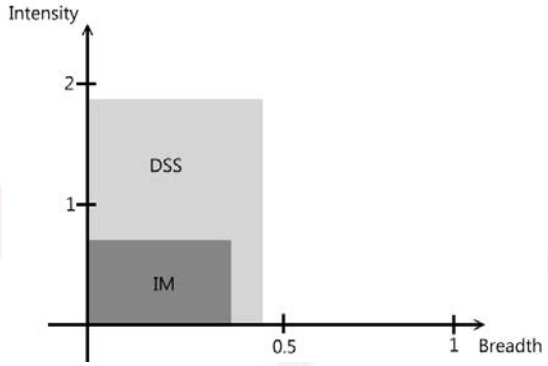
The benchmark faculty examined here is composed of all full-time, tenured professors in IS at these schools in June 2006. These results in 73 benchmark faculty members are tabulated from June 2006 back to 1980. In the results reported here, only those journals with publishing intensity of at least 10 are included.

Example :

	Breadth		Intensity		Power	
Journal	Total(score)	Rank	Total(score)	Rank	Product	Rank
DSS	34(.47)	1	136(1.86)	1	4624	1

I&M	27(.37)	2	50(.68)	2	1350	2

*A *breadth score* for a journal is obtained by dividing its publishing breadth by the total number of benchmark faculty members.
* A *intensity score* for a journal is obtained by dividing its publishing intensity by the total number of benchmark faculty members.



In this example, we can see that the publication power of DSS is higher than IM (4624>1350), so the ranking for DSS is No.1 and for IM is No.2

Hypothesis

While the author was collecting data for PPA, he used AAAI to be its benchmark scholars. We are curious that what the result will be if we change the benchmark scholars, for what is the standard to determine an association to be benchmark scholars is still debatable and there isn't always a prestigious association for every journal field. As a result, we choose IEEE CIS fellow to be our benchmark scholars and see whether the result may be different from the original one.

The definition of Publishing Intensity and Publishing Breadth

Let M be the total number of active scholars, N be the total number of journals, I_j and B_j respectively be the publishing intensity and the publishing breadth of the j-th journal. The publishing intensity and breath are defined as follows:

$$I_j = \sum_{i=1}^{M} a_{ij}$$

Publishing intensity is defined as the total numbers of articles authored by the active scholars

$$B_j = \sum_{i=1}^{M} sign(a_{ij}), \quad \forall j = 1 \ldots\ldots N.$$

Publishing breadth is defined as the total numbers of active scholars who have authored articles in the journal.
Here is an example showing how to calculate the publishing breadth and publishing intensity. For instance, there are two active scholars Prof. Ho and Prof. Sum respectively. There are the journals in the area of Technology Management, namely Journal of Information Systems (IS), Journal of Technology Management (TM) and Journal of Electronic Commerce (EC).

	IS	TM	EC
Prof. Ho	3 (articles)	1(articles)	0(articles)
Prof. Sum	2(articles)	3(articles)	2(articles)
Breadth	**2**	**2**	**1**
Intensity	**5**	**4**	**2**

Publishing breadth is the total numbers of active scholars who have authored articles in the journal. For IS and TM, both scholars have published papers in these journals. So, their publishing breadth is two. For the journal EC, only Prof. Sum has published papers on it. So, its publishing breadth is one. As the publishing intensity is defined as the total numbers of articles authored by the active scholars, their values are clearly five, four and two respectively.

Exam based on Publication Power Approach
Publication power approach is a new ranking approach that has our interests. Publication power approach uses the product of two indices to be its final ranking index. However, no one explore the relation of publishing intensity and publishing breadth. Therefore, we follow the guide from the original paper to obtain our own statistic. The results are in the table 2. Interestingly, when we applied log model to both of the indices and then plot them, it came out to a graph like fig 1-6. As a result, we make a hypothesis: Publishing intensity and publishing breadth are log-linear-related.

Methodology

Rules for data collecting process
Talking about the data collecting process, we need to clarify our standard for filtering valid journals and active scholars first. For the valid journal, the quality of journal is not easy to measure, thus, we make a simple rule: only to include the journals that have been published for no less than 15 years. We believe that the longer time a journal has been published, the more scholars and readers it may attracted. On the other hand, it need lots of effort and research output to become a journal editor. However, to make sure that each editor has the higher reputation and more research,

we add two more rules about the working place and publishing time. In sum, the active scholars must fulfill these three rules: A journal editor who also works in top 25 universities and has publishing record between 1999 and 2003. The purpose of having publishing record from 1999 to 2003 is to exclude the scholars that only publish papers in recent years.

Steps for data collection

In this section we illustrate the adjusted method in different fields. The principles to perform the analysis are as follows:

Step 1: Find Journal List

For the benchmark journals, the first step is retrieve the list of journals from JCR database in 2012 social science edition in Tomson-Reuters Web of Knowledge (WoK). All the list of journals we used was extracted from WoK.

Step2: Find Qualified Journals

To make sure the quality of the journal, we exclude the journals that have published for less than 15 years. The reason why we do this is journals with older published years may attract more professors to publish their papers in it and thus attract more reader. After the filtering, the remaining journals become our qualified journals.

Step 3: Find Editors

In order to find the set of active scholars, we must find a way to choose scholars who make great effort to the research area. Thus, we decided to use editorial board to be the potential active scholars list. Those scholars may come from all over the world and would have made significant and huge contribution to the research field. As a result, choosing this set will make the result more reliable and more convincing. We retrieve the editorial name from the office website of each journal; it includes editors, associate editors, editor member/board and advisory editors.

Step 4: Find Qualified Editors (Active Scholars)

We search the editorial teams/board of those journals and check if those editors are in the top 25 public schools proposed by USNews. It is now known as the leader for ranking colleges, graduate schools and hospitals. The schools are UCLA, UC Berkeley, UC Davis, UCSD, UCSB, UC Irvine, Georgia, Michigan, Maryland, Wisconsin, Texas, Texas A&M, Florida, William and Mary, Penn State, Rutgers, Illinois, Washington, Virginia, North Carolina, Georgia Institute of Technology, Ohio State, Pittsburgh, Connecticut, Purdue, Clemson and Minnesota. The professors teaching in these schools have higher chance to produce high quality papers. By comparing the editorial list with the top 25 public schools list, if they are matched, they become out active scholars. Moreover, we check whether they've been published in this field for more than 10 years to make sure that those active scholars are not publishing their articles only in recent years.

Step 5: Data Collection Process

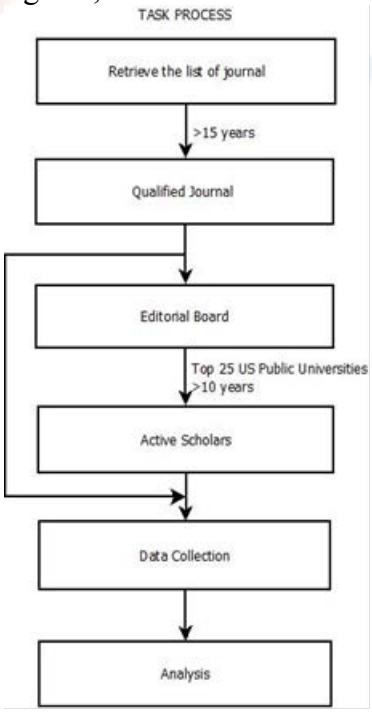
We use TR Web of Knowledge database in the data collection step. We match the list of active scholars and qualified journal to get the Publishing Intensity and Publishing Breadth.

Take Management field for example, 172 journals were found in the TR WoK database. 146 out of 172 journals published more than 15 years. By searching all the

editors in these 146 journals and matching them with top 25 public schools list, there still remained 643 editors. We traced the 643 editors' publishing history, came out that only 194 senior professors have published papers in Management field for more than 10 years (during 1999-2003). In other word, we compared about twenty eight thousands (194*146) items for management field. In the whole progress, this is the most time-consumed step.

Step 6: Analysis

Analyzing the data by Microsoft Excel and IBM SPSS software, we can calculate the linear regression equation and find the Slope, T-ratio and R-Squared value. In order to get the T-ratio, we set the confidence interval to be 95%. With these statistics and figures, we can understand the relation between LPI and LPB.



Data Analysis

After we collect the data, we enter the data analysis step. Linear regression is a statistic approach used to model the dependence of a scalar variable and one(or more) explanatory variables In our case, there is only one explanatory variable, so it is called simple linear regression. We can represent it mathematically

$$\text{Intensity} = \text{b} \cdot Breadth^{a}$$

$$\log Intensity = \text{a} \cdot \log Breadth + c$$

R-Squared Value:

R-Squared is mostly being used for measuring the strength of correlation in linear regression model. Its value indicates how well the resulting line matches the original data point. From the statistic point of view, if R-Squared value of a data set equals to 1 means that the regression line perfectly fits the data. In other words, R-Squared value of the regression is relatively high indicates the points will be very close to the regression line. In the case of Management field, the R-squared values for the line is 0.946, suggesting that LPI and LPB are highly correlated.

T-Ratio:
T-ratio value is the indicator to determine the significance of regression coefficient. The significance of a regression coefficient is determined by dividing the estimated coefficient over the standard deviation of this estimate in a regression model. We can look for the appropriate α/2 significance level to find the exact critical value from the t-distribution table. To find the significance of their relationships, we expect the t-ratio value to be greater than 2.

Result and Conclusion
Table1. The plot of log publishing intensity and log publishing breadth

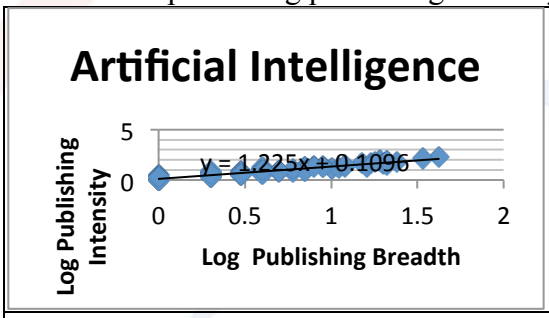


Fig1 Log relations in the field of Artificial Intelligence

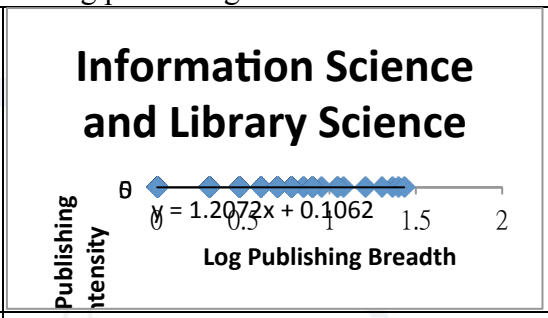


Fig2 Log relations in the field of IS &LS

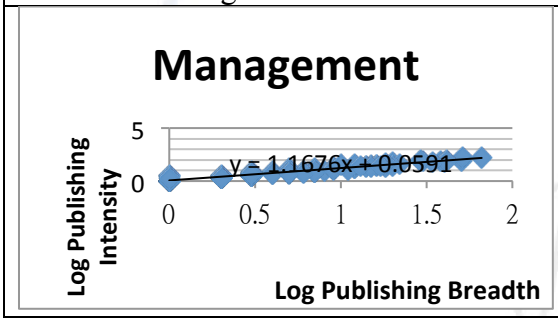


Fig3 Log relations in the field of Management.

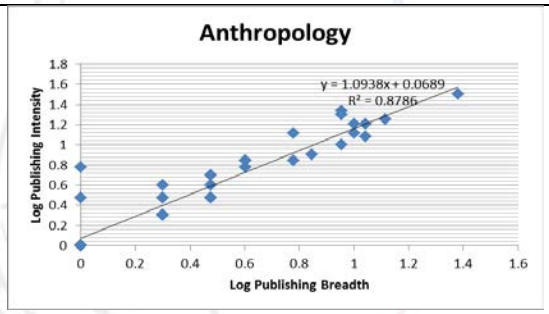


Fig4 Log relations in the field of Anthropology.

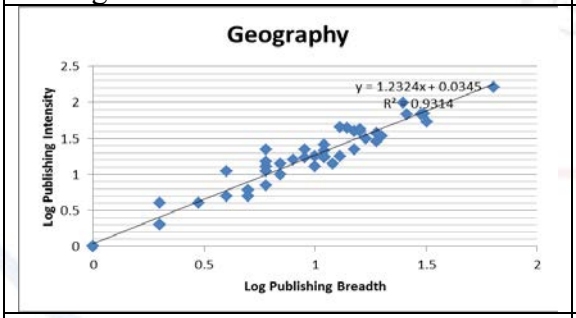


Fig5 Log relations in the field of Geography.

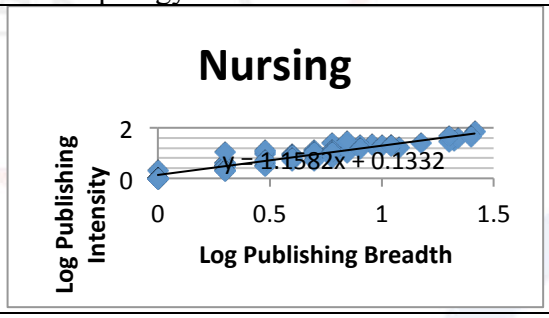


Fig6 Log relations in the field of Nursing.

Journal field	Slope (t value)	b value (t value)	R-Squared Value
Artificial Intelligence	1.225 (25.943)	0.110 (3.076)	0.899
Information Science and	1.207 (21.193)	0.106 (2.612)	0.894

Library Science			
Management	1.168 (44.478)	0.059 (2.666)	0.946
Anthropology	1.094 (19.024)	0.069 (2.158)	0.879
Geography	1.232 (24.433)	0.035 (0.677)	0.931
Nursing.	0.881 (20.345)	0.133 (3.205)	0.881

Table2. The statistic of each field of journal, including slope, b value and R-square value.

Journal field	Journals	Qualified Journals	Active Scholars
Artificial Intelligence	115	90	208
Information Science and Library Science	85	73	97
Management	174	115	194
Anthropology	83	73	164
Geography	72	47	120
Nursing.	104	81	168

Table3. The statistic of the total journal number, valid journal number, total active scholar number.

This paper examined the two factors in public power approach, which are publishing intensity and publishing breadth respectively. The result showed that the publishing intensity and publishing breadth have linear relations between them. From our analysis, we can consider PI & PB are identical in 6 different journal fields. When doing the ranking approach, we can choose either PI or PB to be the ranking index. This indicated that different indices may have relations between them and it provided us more options to the combination of journal ranking indices.

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A Structural Model of the Factors of Dissatisfaction Involved in Mobile Applications

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Abstract

Mobile Applications (Apps) has been increasingly popular in the recent years and are changing the people's daily lives in leisure and businesses. The Booming industry of Apps made great profit but the awareness to prevent customers or users from feeling dissatisfied are an important issue. Dissatisfaction may inflict switching behavior, decreasing loyalty, and negative word-of-mouth among customers which may be the potential cause of business losses. Scarce research has been done in discussing the effects of dissatisfaction among mobile products especially qualitative researches. The purpose of this research is to form a structural model and provide an explanation of factors influencing customer dissatisfaction involved in mobile applications. The study sample consists of 200 respondents with using online questionnaires to collect data. Data were analyzed by employing structural equation modeling (SEM) in order to test the proposed hypotheses. Test results can assist application providers and developers to have awareness in maintaining customer relationships with implications further discussed in this research.

Key words: Mobile Application, Apps, Customer Dissatisfaction, Customer Behavior, Structural Equation Modeling

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1. Introduction

Background and Motivation

Mobile Applications (Apps) has been increasingly popular in recent years. The development and improvement of wireless communication infrastructures in Taiwan popularized the use of mobile devices. Since the first smart phone was introduced in 2007, new types of mobile businesses emerged and accelerated the development of mobile related products. One of the growing part of the mobile industry is the App Store, which are platforms that users can download applications onto their devices and charged with each purchase (paid-for Apps) or free Apps that are charged within the use of applications called In-App purchases (IAPs).

The mobile applications market has a significant growth around these years. The global market of mobile applications contributed of revenues up to $18 billion USD in 2012 with 64 billion annual downloads, and a forecast of $26 Billion USD revenue with 102 billion downloads at the end of 2013 (Gartner Report, 2013). Predictions are made that there will be a 59.38% growth in annual downloads from 64 Billion to 102 Billion and a 44.45% growth in revenue from $18 Billion to $26 Billion over the year. Moreover, from the annual free App downloads in 2012, 89% of free App downloads increased to 91% in 2013, with an expected increase of 1% each year.

Table 1. Mobile App Store Downloads, Worldwide, 2010-2016

	2012	2013	2014	2015	2016	2017
Free Downloads	57,331	92,876	127,704	167,054	211,313	253,914
Paid-for Downloads	6,654	9,186	11,105	12,574	13,488	14,778
Total Downloads	63,985	102,062	138,809	179,628	224,801	268,692
Free Downloads %	89.6%	91.0%	92.0%	93.0%	94.0%	94.5%

Source : Gartner Inc. 2013 (Units in Millions)

According to Gartner reports, IAPs will account for 17 percent of the store revenue in 2013 and increase to 48 percent in 2017. However, as with downloads, IAPs are expected to have strong growth in 2013 and 2014 and slower in later years. This indicates that In-App purchases are growing and it is serving as a major source of revenue in the future. In-App purchasing rely on the continuance of using applications, users make purchases if they are willing to experience more of the App's content. According to surveys made by Foreseeing Innovative New Digiservices (FIND) in 2012, around 30% of mobile device users in Taiwan have made purchases on Apps with an average of $1.3 USD purchase per month. To be specific, 19.3% of the population spent less than $3.3 USD per month while 8.1% spent more than $3.3USD which the total population is estimate to grow in the next few years.

Despite the global trend of the increasing IAPs however, the continuance of using Apps is a crucial matter of whether purchases are made and Apps generate profit. Researchers have stated out the importance of understanding dissatisfaction,

which it may affect competitiveness, customer loyalty and economic successes. Moreover, researchers have found that dissatisfaction will cause negative word-of-mouth, switching behavior, complaints and impacts on the continuance of using products and services (Ahn *et al.*, 2006, Bhattacherjee, 2001, Deng *et al.*, 2010, Vargo *et al.*, 2007). Therefore, by identifying the causes of dissatisfaction, we can provide App developers or providers to have better understanding of what contents should be aware of and help them to prevent losses.

Based on the background and motivation, this research has raised two research questions, what are the factors that affect mobile App dissatisfaction and what factors influence dissatisfaction the most. Therefore this study aims to first provide an explanation of factors influencing dissatisfaction among the usage of mobile applications. Form a structural model in the content of mobile application dissatisfaction. Lastly, find out the degree to which factors are the key influential factors that affect dissatisfaction among the usage of mobile Apps.

2. Literature Review

2.1 Smartphones and mobile applications

Since the first smartphone was introduced in 2007, smartphones have been significantly bonded to us and has transformed many aspects in our daily lives (Smura *et al.*, 2009). Although smartphones have existed for a few years, there is no clear definition about what constitutes a smartphone nor clear definitions about what a smartphone is, since hardware equipped on smartphones are constantly changing , software related are also being created and updated constantly. Generally speaking, smartphones have the characteristics of computer mobility, universal data access and pervasive intelligence for business aspects in our daily lives (Zheng and Ni, 2006). Smartphones are phones that have more functions than receiving phone calls and text messages, it has the capability of accessing the internet to browse websites and receiving emails and other capabilities to work as a camera, data storages or even location based services, for instance, WIFI, camera, accelerometer and GPS are some of the features that smartphones have (Pitt, 2011). The popular use of smartphones links individuals together, influences of smartphones changes more than just communication habits, it changes our recognition in identity, relationships, community and the sense of culture (Trexler, 2008).

An addition to smartphones, mobile applications are software applications that operate on smartphones, tablets, and other mobile devices. Typically users can download Apps into their devices through application distributing platforms, which are owned by the developer of the mobile operating system, such as Apple App Store, Google Play, Windows Phone store and BlackBerry App World (Cybertegic, 2010). Such distributing platforms are generally called app stores or app markets. Mobile apps were originally used for retrieving information and general purposes such as email, weather and calendar information. Through the rapid development of information technology and user demands, new categories

of apps were developed, such as mobile games, GPS, location-based services, banking, social networks and mobile shopping. New types of business models emerged along with the rapid growth of the application market.

2.2 Review on Dissatisfaction

Dissatisfaction has been in research for many years. Though it is generally thought as the opposite of satisfaction, researchers have debated over time and yet there is no conclusion whether it is the opposite or different concept. No consensus in literature have pointed out the sources or determinants of satisfaction and dissatisfaction (Giese & Cote, 2000). In this research, we chose to distinguish satisfaction and dissatisfaction as different concepts. Meuter *et al.* (2000) stated that satisfaction and dissatisfaction are affected by different factors. Vargo (2007) have pointed out four attributes of the satisfactory and dissatisfactory factors called, dissatisfiers, criticals, and neutrals, some increase satisfaction when present but do not increase dissatisfaction when absent called satisfiers, some increase dissatisfaction when absent but do not increase satisfaction when present called dissatisfiers, some impact both satisfaction and dissatisfaction and negative evaluations to the extent that they are present or absent called criticals, and some have no impact on satisfaction and dissatisfaction called neutrals. Agreeing with Vargo's satisfiers and dissatisfier concept, satisfaction and dissatisfaction should be different concepts and thus dissatisfaction factors and variables should be investigated separately from previous satisfaction researches.

Customer dissatisfaction plays an important role in businesses. Dissatisfied customers are likely to stop purchasing the products, and provide negative word-of-mouth, and to complain, return and boycott the products, the brand, and causing damage and loss of sales to the seller or retailer (Day *et al.*, 1981; Hirschman, 1970). In contrast, satisfied customers will have brand loyalty, be longer customers, provide positive word-of-mouth, increase in purchases, and raises sales (Aaker 1992; Anderson, Fornell, and Lehmann 1994; Fornell, 1992; Oliver 1997). What's more, consumer dissatisfaction will also cause switching behavior and the discontinuance use of products and services (Bhattacherjee, 2001; Ahn *et al.*, 2006).

Much of the dissatisfaction and satisfaction research has employed disconfirmation of expectations model (DE), which it assumes that individuals gain satisfaction or dissatisfaction are by comparing expectations with their perceived performance (Cadotte, Woodruff, and Jenkins 1987; Oliver 1997; Parasuraman, Zeithaml and Berry 1985). When a perceived performance exceeds expectations, it will cause satisfaction among the customer, or dissatisfaction when perceived performance is below expectations. Although this model has been supported and used by numerous researches, it cannot incorporate to further complexities that may arise in specific product or processes (Vargo *et al.*, 2007). Giese and Cote (2000) noted that a consumer may be satisfied with one aspect of the product while dissatisfied with another aspect, therefore, the consumer's reactions to different components of the product may vary in the

degree of satisfaction or dissatisfaction, resulting in conflicting feelings of the overall product.

As noted by Vargo (2007), the DE model is used to operationalize global customer (dis)satisfaction, it is unable to reveal multidimensional aspects of specific products of customer (dis)satisfaction. To solve this problem, Giese and Cote (2000) mentioned that researchers should propose a context-specific (dis)satisfaction framework, which suggests that a researcher needs to define precisely the research context under investigation in order to operationalize the customer (dis)satisfaction construct accurately and it is crucial for a researcher to determine the research focus.

2.3 Mobile Dissatisfaction

In the mobile context, most researches focus on satisfactory and purchase intentions, while the dissatisfaction concept is scarcely reviewed upon and studied. Meuter *et al.* (2000) proposed five categories of dissatisfaction, technology failure, process failure, technology design problem, service design problem and customer-driven failure in the context of self service technologies. Salo and Olsson (2012) proposed three dimensions and nine dissatisfying factors in the mobile application context, which external sources are technical functionality, interaction, content, customer service, privacy, compatibility and overall usefulness, internal sources include consumer, and situational sources include context. In this research, we extract eight context specific sources of dissatisfaction from previous studies, which are functionality, interaction quality, content, customer service, privacy, perceived usefulness, compatibility and contextual quality to link up with the cause of dissatisfaction. Customer driven failure was not taken account in this research due to the similarity to poor design and interaction quality. Below are the sources and definitions we define for each of the sources.

Table 2. Definition and sources of dissatisfaction factors

Factors	Definition	Source
Functionality	The inability of applications to provide working features or services	Koivumäki *et al.*, 2008; Kuo *et al.*, 2009; Meuter *et al.*, 2000; Oliver, 1993; Park *et al.*, 2008; Vlachos & Vrechopoulos, 2008; Salo and Olsson, 2012
Interaction Quality	The difficulty of application usage	Davis *et al.,* 1989; Meuter, 2000; Koivumäki *et al.,* 2008; Vlachos & Vrechopoulos, 2008; Suki, 2011; Salo and Olsson, 2012;
Content	Irrelevant or non-preferred content that does not match user needs and expectations	Negash *et al.*, 2003; Seddon, 1997; Chae *et al.*, 2002; Wang and Liao, 2007; Park *et al.*, 2008; Salo and Olsson, 2012;
Customer Service	The failure and weakness of customer support in service	Meuter *et al.*, 2000; Parasuraman *et al.,* 2005; Choi *et al.*, 2008; Salo and Olsson, 2012;
Privacy	The insecurity and lack of control over personal information	Wolfinbarger and Gilly, 2003; Schaup and Bélanger, 2005; Choi *et al.*, 2008; Vlachos & Vrechopoulos, 2008; Salo, 2013;

Perceived Usefulness	the degree which the user does not feel useful	Koivumäki *et al.,* 2008; Suki, 2011; Salo, 2013;
Compatibility	The degree which Apps are unable of operating on different version of devices and operating systems	Tan and Chou, 2008; Kim *et al.,* 2010; Salo, 2013;
Contextual Quality	The physical environment and other situational conditions to function whenever and wherever	Chae *et al.*, 2002; Koivumäki *et al.,* 2008; Salo, 2013;

By examining the sources of dissatisfaction involved in the mobile category, we believe the factors have influences on dissatisfaction and hence this study proposes the hypotheses below to test the relation of the factors.

Table 3. The proposed hypotheses

No.	Description
H1	Functionality positively influence Dissatisfaction
H2	Interaction quality positively influence Dissatisfaction
H3	Content positively influence Dissatisfaction.
H4	Customer service positively influence Dissatisfaction
H5	Privacy positively influence Dissatisfaction
H6	Perceived usefulness positively influences Dissatisfaction
H7	Compatibility positively influence Dissatisfaction
H8	Contextual quality positive influence dissatisfaction

3. Methodology

3.1 Framework and Measurements

The main concept of this research is to find out the sources of dissatisfaction and form a structural model by using structural equation modeling (SEM) to test each of the hypotheses. Each variable are latent variables thus are necessary to deploy observable constructs to measure the scale of each latent variable and examine the hypothesized framework. Measures used in this research are derived from existing literatures. Figure 1 depicts the framework of this study.

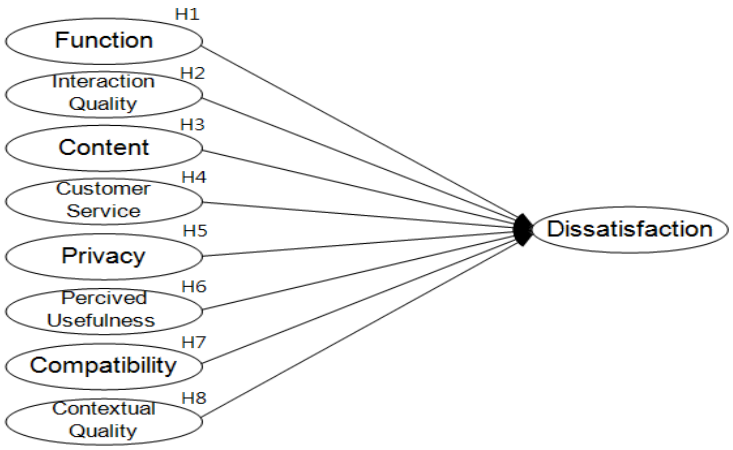

Figure 1. Research Framework

Note that previous research focuses on satisfaction which the measurements are positive perceptions of the researched context and no other research has measurements with negative perceptions thus we choose to derive positive measurements of the factors to match with existing literature and negative measurements for the dissatisfaction construct to collect the negative reflections of the respondents. Scenarios are formed to harness the perceptions of each construct of the respondents and the measures are translated from English to Chinese with necessary modifications to fit the social environment and to target mobile application users of Taiwan. The questionnaire was completed after the review and pretest by fifty active mobile application users. Ambiguous items are rephrased and scenarios with extra descriptions to the use of Apps are provided for respondents to improve readability. Note that in existing literature, there are no records indicating quantifiable measures of dissatisfaction in the mobile context. However, there are many researches that use measurements of satisfaction which we will adopt and modify the descriptions into negative perceptions to construct the dissatisfaction variable. We derive satisfaction measures from Deng *et al.* (2010) which is a research studying satisfaction in mobile instant message service which is relevant to mobile applications and suitable to this research.

In this research, we developed a questionnaire with two sections and twenty measurement items. The first section consists of demographic questions requiring gender, age, occupation, monthly income, type of mobile device, and the frequency of using Apps to ensure the respondent is an active mobile App user. The second part consists of the model-related items inquiring respondents about their perception of Apps. All of the items are measured with a 5-point Likert scale where 1 = strongly disagree , 3 = no opinion and 5 = strongly agree. To ensure that the questionnaire was clear and understandable, and to test the validity and reliability of the measuring instrument, a pre-test was conducted with 50 active App users. Modifications were made to eliminate any ambiguity and wording errors in the questionnaire. The questionnaires are then issued upon social networking websites and the samples are collected within a two week period of. The following table provides the measurement items of each construct and their sources.

Table 4. Research variables and measurement items

Variable	Measurements	Source
Functionality	I think the App is stable to use	Koivumäki *et al.*, 2008; Vlachos and Vrechopoulos, 2008
	I think the App responds to my commands quickly	
	I think the App to have has few errors	
Interaction quality	I think the content of the App are clearly categorized	Koivumäki *et al.*, 2008; Wu *et al.*, 2011
	I think it is easy to recognize where the information I need is located	
	I think the App is easy to operate	
Content	I think the content provided by the App is clear and understandable	Koivumäki *et al.*, 2008; Vlachos and Vrechopoulos, 2008
	I think the content of the App meet its objective	
Customer Service	I think the App company to have various ways to submit inquiries	Choi *et al.*,2008
	I think the response time to inquiries about content and services is rapid	
Privacy	I think my privacy is protected when using the App	Vlachos and Vrechopoulos, 2008
	I think the App have adequate security features	
Perceived usefulness	I expect the App to have useful services.	Suki, 2011
	I expect the App enables me to meet my requirements effectively.	
Compatibility	I expect Apps to be compatible with other existing technology	Kim *et al.*, 2010
	I expect Apps to be compatible with other mobile devices	
Contextual Quality	I think the App is accessible whenever I need	Vlachos and Vrechopoulos, 2008; Koivumäki *et al.*, 2008
	I think the Apps is accessible wherever I need	
Dissatisfaction	I think my choice to this App is not a wise one.	Deng *et al.*, 2010
	My feeling to this App is not satisfying	

3.2 Data Analysis Approach

Structure equation modeling (SEM) is the analytic tool used and maximum likelihood estimation is applied in this thesis. The analytical procedures are conducted with the help of statistical software, SPSS and AMOS. SEM is an approach to assess a given research model that includes multiple latent constructs with multiple observed variables. SEM consists of two parts of analysis, the measurement model and the structural model. First the measurement model should be tested by applying comfirmatory factor analysis (CFA) to ensure the convergent and discriminant validity and the reliability of

the data which the relations between latent and observed variables are decided. Second, the structural model studies path strength and the direction of the relations among the latent variables (Anderson and Gerbing, 1988; Suki, 2011).Unlike traditional regression models, various dependent variables are allowed in SEM, and it evaluates the structural model and corresponding measurement model at the same time which is considered to be appropriate for this research (Kline, 2011).

4. Results

4.1 Sample Structure

A total of 206 samples were retrieved, 6 samples were excluded due to insincere or unanswered questions or lack of App usage. Table 4.1 displays the sample structure of the respondents. For gender, 55% were male respondents while 45% are female. The age of the respondents are mainly aged 20 to 30 years old which are 86.5% and 10.5% ages below 20, 1.5% from 30 to 39, and 1% above 50. The occupation structure of the respondents mainly consists of students, which consists of 74% of the population. The level of education of the respondents stand 53% which have masters degree and above, 44.5% having bachelors degree indicating a high rate of degree pursuers being involved in the sampling.

Table 5. Sample Structure

Attribute	Distribution	Frequency	Percentage
Gender	Male	110	55.%
	Female	90	45.%
Age	20 to 30	183	86.5%
	Under 20	21	10.5%
	30 to 39	3	1.5%
	Above 50	2	1%
	40 to 49	1	0.5%
Occupation	Student	148	74.%
	Service	12	6.%
	Military, Government, Education	11	5.5%
	Business	9	4.5%
	Technology	8	4.%
	Freelance	3	1.5%
	Others	9	4.5%
Level of Education	Masters and above	106	53.%
	Bachelor	89	44.5%
	High School	4	2.%
	Junior high school or less	1	0.5%

Most of the respondents carry smartphones to use Apps (93.5%) where the second amount of people uses tablets (4.5%). The daily usage of Apps having 45.5% of respondents using 2 to 4 hours a day, 23% using 4 to 6 hours, 16% below 1 hour and 15% using for more than 6 hours. As for the experience of using Apps, 56% have 1 to 2 years of experience, 22% for 3 to 4 years, 16% less

than 1 year and 6% of respondents having more than 5 years of experience. Lastly, there are 65.5% of respondent that does not have experience in purchasing Apps while 34.5% have, this result is similar to the data from FIND (2012) that 30% of App users in Taiwan have made purchases.

Table 6. Attributes of App usage

Attribute	Distribution	Frequency	Percentage
Type of device	Smartphone	187	93.5%
	Tablet	9	4.5%
	Others (such as iPods etc.)	2	1.%
	Personal digital assistant(PDA)	1	0.5%
	Electronic readers	1	0.5%
Daily usage	2 to 4 hours	91	45.5%
	4 to 6 hours	47	23.5%
	Below 1 hour	32	16.%
	More than 6 hours	30	15.%
Experience	1 to 2 years	112	56%
	3 to 4 years	44	22%
	Less than 1 year	32	16%
	More than 5 years	12	6%
Experience of Purchasing Apps	No	131	65.5%
	Yes	69	34.5%

4.2 The Measurement Model

Before analyzing the relationships of the structural model, tests and reliability and validity are conducted to evaluate the quality of the obtained data. Cronbach's alpha is used in the reliability test. It is a widely used statistic tool to evaluate the reliability of measurement; in other words it shows the degree of a group of items representing a common construct (Garson, 2009). Table 7 depicts the alpha values of the constructs. All values are higher than 0.7, which is the construct is considered as unidimensional when alpha value is higher than 0.7 (Tenenhaus *et al.*, 2005). Comfirmatory factor analysis was then conducted to examine the validity of the measurement model. CFA examines the convergent validity and the discriminant validity of the items (Hair, 2009).

Table 7. Factor loading, Composite Reliability, and Cronbach's Alpha

Construct	**Item**	**Standardized Factor Loading**	**Composite Reliability**	**Cronbach's α**
Functionality	F1	0.752	0.833	0.863
	F2	0.799		
	F3	0.821		
Interaction Quality	I1	0.753	0.861	0.878
	I2	0.827		
	I3	0.881		
Content	C1	0.809	0.820	0.851
	C2	0.859		
Customer Service	CS1	0.791	0.754	0.836
	CS2	0.766		
Privacy	P1	0.896	0.905	0.822

	P2	0.923		
Perceived Usefulness	PU1	0.901	0.880	0.877
	PU2	0.930		
Compatibility	COM1	0.835	0.847	0.824
	COM2	0.880		
Contextual quality	CQ1	0.787	0.880	0.796
	CQ2	0.896		
Dissatisfaction	D1	0.679	0.740	0.848
	D2	0.849		

Convergent validity shows whether the observed variables are correlates with their assigned latent variables (Garson, 2009). In order to achieve convergent validity, standardized factor loadings of each item should exceed 0.5. Second, composite reliability of each latent variable should be over 0.6 (Bagozzi and Yi, 1988). Third, average variance extracted (AVE) of each latent variable should be greater than 0.5 (Fornell & Lacker, 1981). As Table 7 shows, standardized factor loading of each item is greater than the threshold value of 0.5, and the composite reliability of each variable is greater than 0.6. Also, AVE of each construct exceeds 0.5. Above all, convergent validity of the constructs are within satisfactory level.

Discriminant validity refers to how low correlation between groups of items representing different latent variables (Anderson and Gerbing, 1988), and it can be tested by examining the correlations between each pair of constructs. This is done by comparing a construct's square root of AVE with the correlation coefficient of each pair of constructs. The square root of AVE of the construct must be greater than the correlations coefficient of each pair of constructs (Byrne, 2001). As Table 8 demonstrates, no correlations were equal to or greater than the square root of the AVE indicating there was discriminant validity. Each AVE value is found to be more than the correlation square, thus discriminant validity is supported.

Table 8. Correlation between the Factors

Construct	Square root of AVE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)Functionality	0.791	**0.791**								
(2)Interaction Quality	0.822	0.655**	**0.822**							
(3)Content	0.778	0.644**	0.702**	**0.778**						
(4)Customer Service	0.834	0.438**	0.578**	0.436**	**0.834**					
(5)Privacy	0.909	0.409**	0.460**	0.323**	0.460**	**0.909**				
(6)Perceived Usefulness	0.915	0.296**	0.429**	0.373**	0.403**	0.343**	**0.915**			
(7)Compatibility	0.857	0.328**	0.288**	0.385**	0.482**	0.225**	0.317**	**0.857**		
(8)Contextual Quality	0.887	0.429**	0.356**	0.424**	0.466**	0.293**	0.447**	0.538**	**0.887**	
(9)Dissatisfaction	0.768	0.244**	0.177*	0.168*	0.191**	0.193**	0.016	0.123	0.155*	**0.768**

4.3 The Structural Model

After evaluation of reliability and validity, it is necessary to conduct assessment of model fitness to understand the relations between the acquired data and the proposed model (Anderson and Gerbing, 1988). Table 8 lists the goodness of fit measures showing how well the obtained data fit into the research model. All the measures are within the recommended value or an acceptable range indicating the data obtained from the questionnaire fit well with the research model.

Table 8. Goodness-of-fit Measures

Fit Indices	Model Value	Recommended Value
Absolute Fit Measures		
χ2 (Chi-square)	298.5	
df (Degrees of Freedom)	134	
Chi-square/df (χ2/df)	2.22	<3
GFI (Goodness of Fit Index)	0.892	>0.9
RMSEA (Root Mean Square Error of Approximation)	0.065	<0.08
Incremental Fit Measures		
AGFI (Adjusted Goodness of Fit Index)	0.878	>0.9
NFI (Normed Fit Index)	0.91	>0.9
CFI (Comparative Fit Index)	0.956	>0.9
IFI (Incremental Fit Index)	0.957	>0.9
RFI (Relative Fit Index)	0.872	>0.9
Parsimony Fit Measures		
PCFI (Parsimony Comparative of Fit Index)	0.674	>0.5
PNFI (Parsimony Normed Fit Index)	0.642	>0.5

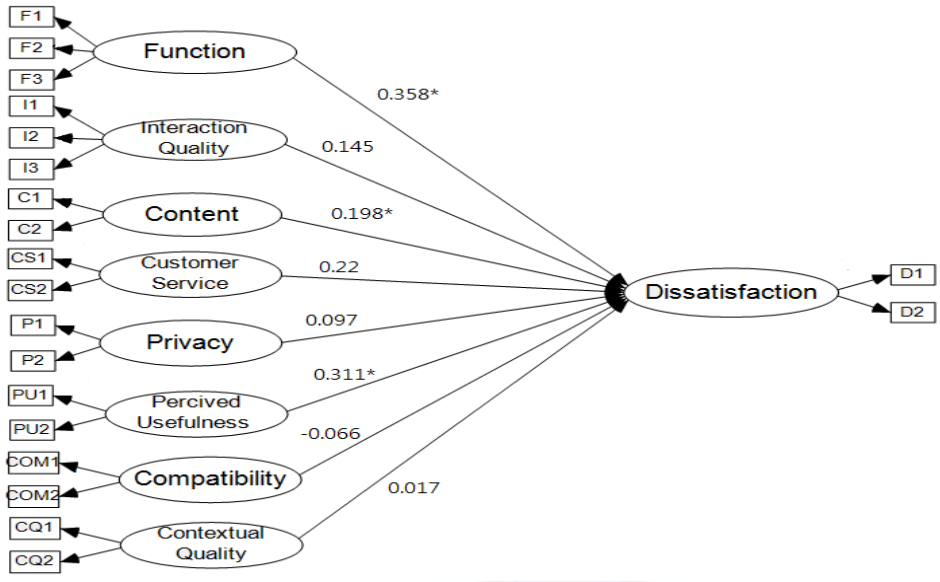

Figure 2. Structural Model Testing Result

The result of the structural model test is shown in Table 9 and Figure 2. The standardized regression weights listed in describe the relationships between each pair of constructs. Three hypotheses were found to be supported in this

research, which functionality, perceived usefulness and content has positive influence on dissatisfaction with the standardized coefficient of 0.358 ($p<0.05$) for functionality, 0.311 ($p<0.05$) for perceived usefulness and 0.198 ($p<0.05$) for content. Thus hypothesis 1, functionality positively influencing dissatisfaction, hypothesis 3 content positively influencing dissatisfaction and hypothesis 6 perceived usefulness positively influencing dissatisfaction are confirmed. The other hypotheses, hypothesis 2, 4, 5, 7 and 8 are not supported due to the p-value of those constructs did not fit below the significant level of $p<0.05$.

Table 9. Hypotheses Testing Result

Path	Estimate (β)	S.E	C.R	*p*	Result
Dissatisfaction ← Function	0.358*	0.098	3.969	0.039	Supported
Dissatisfaction ← Perceived usefulness	0.311*	0.079	4.278	0.027	Supported
Dissatisfaction ← Content	0.198*	0.096	2.333	0.023	Supported
Dissatisfaction ← Interaction	0.145	0.18	0.905	0.136	Not supported
Dissatisfaction ← Customer service	0.22	0.162	1.489	0.244	Not supported
Dissatisfaction ← Privacy	0.097	0.193	1.234	0.217	Not supported
Dissatisfaction ← Compatibility	-0.066	0.127	-0.653	0.418	Not supported
Dissatisfaction ← Contextual Quality	0.017	0.102	0.303	0.274	Not supported

*Note: β = standardised beta coefficients; S.E. = standard error; C.R. = critical ratio; *p< 0.05*

5. Conclusion

5.1 Summary

The aim of this research is to first find the factors affecting dissatisfaction and which factor holds the strongest impact in the mobile App context. The results of the research revealed several findings. First, from reviewing previous researches in the dissatisfaction discipline, despite the lack of researches in the mobile context, eight factors are found to cause user dissatisfaction, which are functionality, interaction quality, content, customer service, privacy, perceived usefulness, compatibility and contextual quality. Secondly, to prove the impacts of the proposed hypotheses, the results of the SEM showed that only functionality, content and perceived usefulness are considered to be significant factors of dissatisfaction. Third, the most affecting factor is functionality with a path coefficient of 0.358 being larger than perceived usefulness (0.311) and content (0.198). Compared with previous literature, three factors found to be significant factors of dissatisfaction in this research are consistent with Salo and Olsson's (2012) finding that 83.3% of respondents feel dissatisfied by functionality issues, 54.8% to content related issues and 38.1% related usefulness which are considered to be highly influenced to dissatisfaction.

5.2 Managerial implications

Dissatisfaction causes users of such particular product or service to have switching behavior and the discontinuance use of those products and services. More likely they will spread negative word-of-mouth, to complain, return or boycott the products or the brand, causing damage and loss of sales. With the results from this research, App providers or developers should give attention and be aware to three aspects of dissatisfaction. First, developers and providers

should design or provide applications that are properly functioning which the App should work properly and have less errors in the features or core functionalities and also the maintenance of the App such as updates in errors and bugs should also be a high priority task. Second, the content of the App should be consistent with the title, introductions and specs, which the promise of the features and content should be exact when users download and experience the application. Thirdly, applications should be effective in satisfying user's demand and not let users feel the App is not useful or alternatives are better. In order to do so, the App should be put to a series of pre-tests about overall sensations when using and obtain feedback to do modifications and adjustments to the App before launching into operation.

5.3 Limitations and Future Study

There are several limitations concerning research design. First the research target of this study is limited to App users in Taiwan and the sample structure does not include or represent foreign or populations of different geographical areas. Hence, future research can expand or increase the involvement of respondents by using other sampling techniques or be tested in other countries. Second, the literature involved in dissatisfaction among the mobile context are scarce, the development of the measurements could be better to be derived directly from existing dissatisfaction measures to be more precise in harnessing user's perspectives. Third, due to the lack of mobile related dissatisfaction literature, the post-dissatisfaction influences are not taken account or formed as a part of the model, the precise behavior of which dissatisfaction will cause is a topic that should be researched on in the future. Lastly, this research does not focus on a particular type of application, which there might be differences between different categories of Apps, hence it is suitable for future studies to aim at a particular category of applications.

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Measuring Performance Using Data Envelopment Analysis and Balanced Scorecard for Taiwan Medical Equipment Industry

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Abstract

Nowadays, the rapid changes of industrial environment led to fierce competition among enterprises, evaluating performances have become crucial in maintaining competitive advantage. Researchers have developed different ways of evaluating performance over the past, but there are some errors in which using single method in analyzing performances will occur. Therefore, in this research we adopt application of innovative methods that will combine Data Envelopment Analysis (DEA) and the Balanced Scorecard (BSC) to complement the shortcomings arising under a single method. The study is provided with performance of scientific assessment methods and we hope to find out the effectives way to solve company operating problems.

The government introduced six new rising industries in the past few years, giving them development subsidies and the budget spent on subsidy are increasing over the years. With population rapidly aging and people healthcare concept gradually mellow, the biotechnology becomes future star industry. In this study we choose the 26 medical equipment listed companies to be our research sample, using Balanced Scorecard （BSC）and Data Envelopment Analysis（DEA）to find the key successful factor (KSF) of the industry. Through this study, we can know Taiwan medical equipment industry operating status and we will give some suggestion to increase whole industry performance. This study intends to use DEA performance assessment tools and based on four BSC perspectives to analyze the data under the medical equipment industry in Taiwan, in the result of paper we know that over 64% medical equipment companies, they operation is relative efficient, it means the whole industry is in keep growth up status. The study also provides much better contribution that we strengthen the DEA application to judge inefficient resource.

Key Words: Balanced Scorecard (BSC), Data Envelopment Analysis (DEA), Performance Evaluation, Key Successful Factor (KSF)

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1. Introduction

Background and Motivation

According to Ministry of Economic Affair (2009), they classify Biotechnology industry into three categories, including three major areas respectively (1) pharmaceutical industry (2) medical equipment industry and (3) emerging biotech industry. In 2011 years, Taiwan biotechnology industry total sales revenue achieved NTD 2403 billion and medical equipment industry individual occupy NTD 993 billion then we can know that the medical equipment industry plays a very important role in biotechnology industry. Taiwan Institute of Industrial Economics Database (2012) show that global economy was suffered from European debt crisis, economy of America recovery slowly, but the medical equipment industry was suffered very small effected. The Ministry of Economic Affair data (2012) show that the medical equipment industry is keep 13.18% growth rate and output value was NTD 109.77 billion in 2012 Q2. The whole medical equipment industry is still in growing stage.

Although the Economy and Trends in Industrial Research Center (2011) estimates that medical equipment industry will have stable growing rate, however, due to market saturation, the growth rate slowed down and foreign manufacturer enter Taiwan market make the industry more competitive. According to Espicom (2012) implicate that our market scope rank is 25 in the world, because we are in aging society and people health care knowledge maturity that make people increasing purchase relative products. Kaplan and Norton (1996), the inventors of the Balanced Scorecard, proposed that “measurement per se had created the focus”. When what is to be measured is determined, the determinants identify the actual indicators. This the reason why to select inputs or outputs for the DEA is the subject of never ending debate. Our research is dedicate to analysis the listed company operating performance in medical equipment industry, through the Balance Scorecard (BSC) four dimensions and Data Envelopment Analysis(DEA), Finally we can understand our medical equipment industry global competitiveness. In this study we wish to establish the standard model which can assess manufacturer efficiency and through this method enhance their competitive capability.

In the recent years, We have some common measuring performance method respectively, BSC (Peng *et al.,* 2006*;* Wang *et al.,*2006*;* Li *et al.*,2008*;* Xue *et al.,*2008*;* Yeh *et al.,*2009) and Data Envelopment Analysis (Hsieng *et al.,*2007*;* Chen *et al.,*2008*;* Hong *et al.,*2009*;* Lu *et al.,*2010); However, these two methods independence application have their own shortage. Data Envelopment Analysis is for the quantitative assessment method, and the Balanced Score Card focuses on the analysis of qualitative indicators. Therefore, Richard (2006) suggest that if we can base on BSC four dimensions indicator to measure performance with DEA, then we can solve the problem of using independent method contradiction.

2. Literature Review

2.1 Medical Equipment Industry Development Status

Medical equipment industry is people's livelihood necessary industry which is

integrate the technology across biomedical technology, materials, machinery and electronics. With the economic development and the improvement of living standards, we face the aging society and chronic population increasing, it makes health care equipment product necessary increase and Medical equipment industry has shown a trend of high growth. Furthermore Medical industry symbolizes the country's level of economic prosperity, and health and quality of life of all citizens' attainment.

Based on Industrial Economics & Knowledge Center (2012) data implicate that we have more 700 relative companies in our medical equipment industry. The main scope is small and medium enterprise and employee under 300 people. Manufacturer are OEM/ODM based, the main operation is production. Compare with 2011, our sales revenue achieved NTD 760 billion, the growth rate is 11.5%. The main reason is Europe and America market economic growth slowed and our product price is more elasticity further emerging market demand for medical equipment product is emerge. In addition to our manufacture provide location based product, we also innovate our marketing and place strategy to occupy emerging market. Therefore, we enhance whole production value.

Taiwan medical equipment industry structure is unlike to global medical equipment industry structure. Compare with global medical equipment industry structure, they provide hospital product and our main product is home health care product like sphygmomanometer, thermometer, and scooters. Our manufacturer technical production is mature and we also help foreign manufacture produce. Now our medical equipment manufacture is in the leader position in the global market.

According to Frost & Sullivan survey (2012), they classify medical equipment industry into medical devices industry, medical imaging industry and patient monitoring industry, combine cardiovascular surgery, orthopedics, respiratory surgery, ophthalmology, neurology, urology which product they provide in equipment and disposable equipment used in various subject. IEK (2012) indicated that we have more than 700 companies total employee number are 34,200 and we based on financial report we can know the average profit rate is 34% ; research development expensive take 3.3% on sales revenue .Compare with 2011, the medical equipment industry sales revenue is NTD 760 billion and the growth rate is 11.4%. Blood glucose monitoring products and contact lenses products have become Taiwan's top two export items and it also become the medical equipment industry growth energy.

IEK also forecast 2013 total revenue of Taiwan's medical equipment industry will reach NTD 814 billion, according to this growth rate, estimated in 2015 will reach NTD 927 billion.

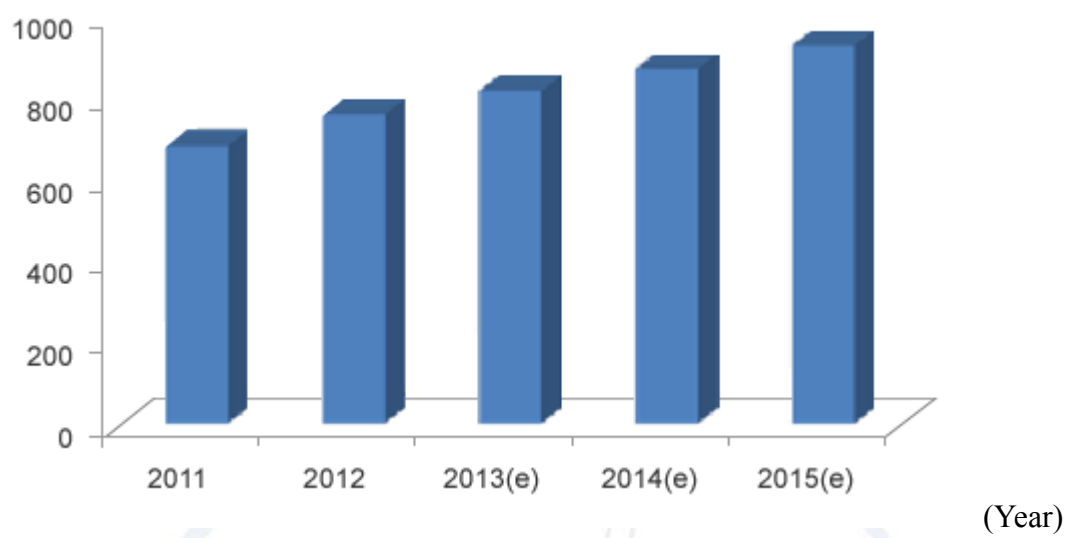
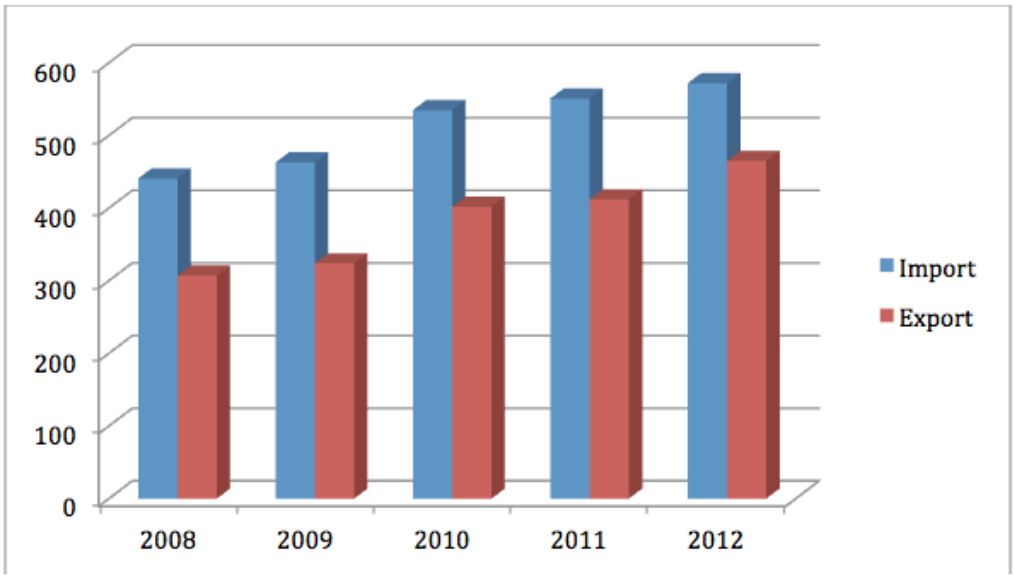


Figure 2.1 Taiwan medical equipment industry forecast sales from 2011 to 2015
Source: IEK (2013)

Even if our market scope is not bigger than America, but Taiwan population structure is orient to aging society besides domestic market demand increasing and people health care knowledge is maturity take the medical equipment product consume growth up. The data based on Republic of China customs database. The figure 2.1 show that Taiwan medical equipment industry imports is NTD 572 billion and export is NTD 465 billion, while imports amounted to grow up 3.6% in 2011and export value growth of 12.9% compared to 2011. Therefore Taiwan medical equipment industry is in growing status and the industry is provided with very strong export competitive strength. Taiwan's dependence on imported medical supplies products to maintain roughly about 4:6, the main structure of the domestic manufacturers as well as hospitals which need high-end medical products with medical supplies and related products mainly rely on imports to provide.

(NTD billion)



(Year)

Figure2.2 Republic of China Customs import and export statistics

2.2 Performance Evaluation

Peter Drucker (1990) is the first researcher who proposed performance evaluation and consider that performance evaluation is used to measure organization and employee performance. Performance evaluation is applying scientific method and establishing standards procedures to evaluate performance. The performance definition, means efficient use of resources to provide cost-effective services or products and it combine efficiency, effectiveness and satisfaction. We can defined Performance as broad that is activity (or a group) results (Spronk and Vermeulen, 2003). Efficiency emphasis on economic efficiency, response efficiency and production efficiency; Effectiveness focus on the output quality; Satisfaction refers to employee working feeling and emotional respond. In brief to said, efficiency is do the things right; effectiveness is do the right things right .However, Ho and Zhu (2004) apply the return on assets (ROA) concept to define performance as company operation efficiency multiply company operation effectiveness, furthermore develop data envelopment analysis (DEA) model to measure Taiwan Commercial Bank performance. We have a lot of performance evaluation method like following：(1)Multiple Statistic Analysis(Huang, 1986; Chen, 1991; Fielding *et al*., 1985); (2) DEA(Chen & Yeh, 1998; Feroz *et al*., 2003; Ho & Tan, 2004; Seiford & Zhu, 1999; Zhu, Ho & Lin, 2005; Wang *et al*., 2010); (3) Analysis Hierarchy Process (Ho & Tan, 2004; Ho & Oh, 2010); (4) Fuzzy Set Theory (Ho & Tan, 2004); (5) Grey Relation Analysis(Feng & Wang, 2000; Ho, 2006; Wang, Ho, Feng & Yang, 2006); Balanced Scorecard (Kaplan, 1998; Maisel, 1992, Norreklit, 2000); Financial Statement Analysis(Feroz *et al*., 2003, Pantalone & Platt, 1987; Espahbodi, 1991). Using performance measure way mostly is various types of inputs and a single output, or need a default type of a function, or need through a subjective judgment. However, Data envelopment analysis method used

without pre-production function, and mathematical programming models to measure by the relative efficiency of the assessment unit correspond objective mental, DEA can also provide advice and direction to improve the management. But using single method still have their own shortage, DEA focus on fiancé aspect neglect others aspect Therefore, this study we combine DEA and BSC four aspect to assess operation performance.

3. Research Methodology

3.1 DEA and BSC approach

In this study we apply the Balance Scorecard (BSC) concept and through Data Envelopment Analysis (DEA) to measure medical equipment industry performance. Our research adopts the four major aspects of the balanced scorecard, including the financial, customer, internal process, learning and innovation aspects. In each process, we used the DEA software to discover the relative efficiency scores and results of each decision making unit (DMUs) then calculated total efficiency. In data collection we will use the Market Observation Post System (MOPS), and through their provide data to explore 26 medical equipment list companies.

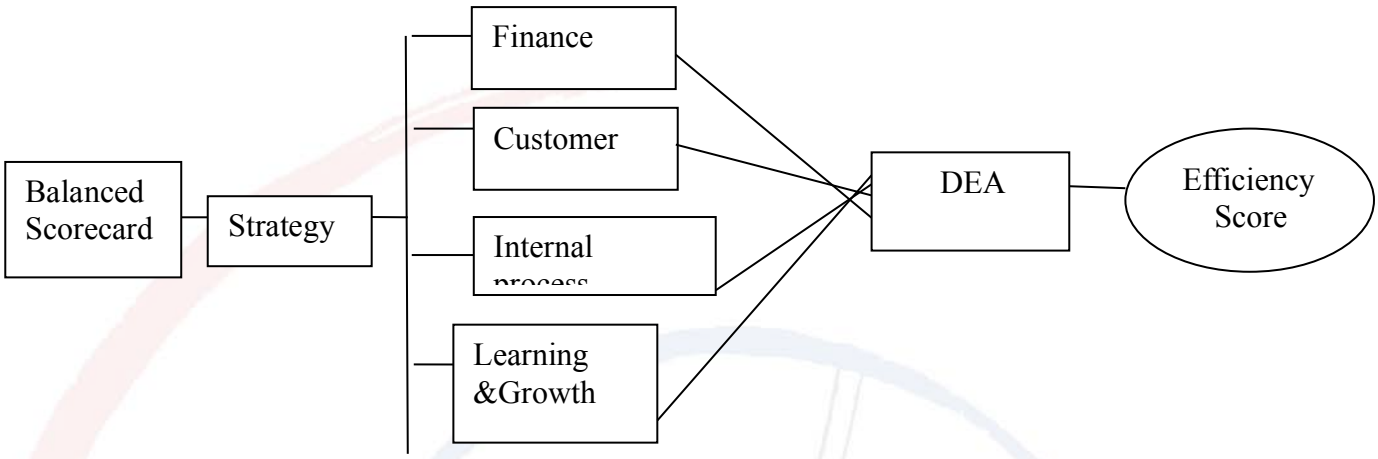


Figure 3.1 Research framework

3.2 Input Item and Output Item Selection

When we select input item and output item we should reference expert suggests, relative research paper discuss or using factor analysis method. In this study we apply indicator is based on Niven (1999), Chan (2004), Hsu (2005),Tan (2006), Wang (2006), Chen (2006), Chen *et al.,*(2010) ; Although medical equipment industry is capital intensive so they need to focus on medical equipment development and innovation so that we put research development expense to be our input indicator.

Financial Perspective

Kaplan & Norton（1996）indicated that if we using financial perspective, we can assess the implementation of a company's strategy and profit make better, which relate to the ability to reap profits, operational revenues, capital returns, profit growth, and cash flow. Different financial objectives depend on different lifecycle phases. They classify three different and three kinds of phase.

In the growth phase, Firms require minimum expenditures, due process, and employee abilities to develop new markets, new customers, and new products; during the maintaining phase they emphasize traditional financial measures; and companies are absorbed on cash flow and capital returns during the harvest phase. Our study select operation revenue and total assets financial indicator to measure our performance.

1. Operation Revenue: By inspecting a company's operating, or "regular," revenue an investor can often gain meaningful insights into the health of a business, especially because waning companies often sell underperforming stores and/or assets, making the income statement look more attractive than it might otherwise be. Operating revenue is not the same as operating profit, operating revenue is more commonly used general in financial statement analysis.(source：http://www.investopedia.com/)

   In this study through operating revenue we can know the medical equipment

earnings and the data collection base on each company financial report.

2. Total Assets: In Financial accounting an asset is an economic resource. Anything tangible or intangible that is capable of being owned or controlled to produce value and that is held to have positive economic value is considered an asset. Measuring the asset we can know the medical equipment operating result and the data collection base on each company financial report.

Customer Perspective

Kaplan & Norton (1996) identifies target customers and segments markets to build relationships with customers, which reflect the execution of strategic business units (SBUs). The outcome indicators include increasing customer satisfaction, customer retention, the customer base, profit rates, and market shares. Our study is choosing marketing expense and employee to measure the performance.

1. Marketing Expensive: Marketing expenses are calculated in the equation to determine business profit. When calculating business profit, marketing expense is subtracted from business profit. The profit on a particular business is always a function of the amount of units the business sells, times the margin made on each unit, less the marketing expense involved, less the direct overhead. Marketing expenses include things such as advertising, promotions and public relations efforts. (source: Ivy Liu, Demand Media. http://smallbusiness.chron.com/)
   Tong (1997) and Chen (2010) *et.al* also propose that marketing expense will enhance the company image. Therefore company using marketing expensive to struggle the customer order become the part of competitive strategy.

2. Employee Number : Company from develop new product after selling, all of process need employee that can achieve. Therefore, this study must put employee to be our indicator.
3. Market Share: The percentage of an industry or market's total sales that is earned by a particular company over a specified time period. Market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over the same period. This metric is used to give a general idea of the size of a company to its market and its competitors. Kaplan and Norton (1996) and Hsu (2005) also used market share to be BSC Indicator
   (source: http：//www.investopedia.com)

Internal Process Perspective

Kaplan and Norton (1996) and Niven (1999) consider that different between traditional performance method is Balance scored card providing with innovation process, Thus company need to continue to innovate their product to increase their revenue ,so we choose research development expense to be this aspect indicator. Research development expense：R&D expense (short for research and development expense) is essentially the amount of money that a company spends to develop new

products and services each year.

Learning and Growth Perspective

According to Kaplan & Norton (1996) and Niven (1999) also discussed a learning and growth perspective, Company need to define their core competence , technologies, employee skill and innovating information technology, then company through learning to make routine operations more efficient. We can base on employee productivity to know the company if have better performance in Learning and Growth. Employee productivity is a performance measure method, the purpose is to find out employees and manufacturing production relative and investigate the resource whether using good or worse.

Table 3.3 Input and output select

	Measure Indicator
Input item	Total Assets、Marketing Expense、Employee number、Research Development Expense
Output item	Operating Revenue Market Share Employee Productivity

4. Empirical Results

The Performance of Taiwan Medical Equipment Companies

In chapter four we apply the DEA Frontier software to discover the DMUs score, our research is based on BCC output oriented .The results provide the efficiency scores for all companies, based on each company's combination of inputs and outputs, compared to those of the others in the sample. Efficient DMUs all receive scores equal to one in the DEA analysis (Thomas, Barr, Cron, and Slocum, Jr. 1998) .As we can see the table4.2 that 17 companies(Health &Life, Microlife, Rossmax International, Radiant Innovation, Actherm, Apex Medical, Avita, Dr.Chip Biotechnology, Polylite Taiwan, Diva Laboratories, Genesis Genetics Asia, Info-Tek, EBM Technologies, Fuburg Industrial, Sunmax Biotechnology) get the 100% score take over 68% in the relatively to other companies is efficient ;. Bioptik Technology, Taidoc, Pihsiang Machinery, Pacific Hospital Supply, Medigen Biotechnology, Mldex Optical, United Orthopedic, Bioteque and Bionet are in the distinctly inefficient unit. In 4.2 chapter we will discuss each inefficient company and give the suggestion to them. According to Michael Norman and Barry Stocker (1991) proposed that efficiency analysis can main classify into four categories as follow: Robustly efficient unit, Marginally efficient unit, Marginally inefficient unit and Distinctly inefficient unit.

4.2 The Result of Difference Variance

According to DEA balance variance result we can know that relative inefficient company's potential improvement whether or not companies need to put more resource or reduce the resource and based on BSC four dimensions. For example Taidoc company needs to reduce 06.16% Assets and reduce 44.57% R&D Expense that can make resource efficient and Taidoc company also need to add Sales Revenue 3.64%, Market Share 3.64%, Employee Productivity 52.22% that can make the company operation relative more efficient.

Table 4.3 The Result of Difference Variance

	Assets	Marketing Expense	Employee Number	R&D Expense	Sales Revenue	Market Share	Employee Productivity
Bioptik Technology	0%	0%	-21.14%	0%	00.74%	00.74%	18.88%
Taidoc	-6.16%	0%	0%	-44.57%	3.64%	3.64%	52.22%
Pihsiang Machinery	-71.55%	0%	0%	-07.76%	14.24%	15.48%	34.57%
Pacific Hospital Supply	0%	-30.15%	0%	0%	21.44%	21.44%	104.76%
Medigen Biotechnology	-83.52%	-23.88%	0%	-89.49%	66.61%	54.61%	23.69%
Mldex Optical	-05.04%	0%	0%	0%	67.30%	67.30%	150.35%
United Orthopedic	0%	-38.72%	0%	-58.61%	86.38%	86.38%	200.88%
Bioteque	-13.72%	-58.2%	0%	0%	100.01%	103.30%	257.21%
Bionet	-28.84%	-79.63%	0%	0%	104.83%	108.41%	141.20%

4.3 Inefficient DMUS Suggestion

In 4.2 we know that inefficient DMUs potential improvement and in 4.3 we through BSC four aspect and give each suggestion to inefficient DMUs. Bioptik Technology (99.26%), we based on customer aspect, they put too much resource into employee number make resource waste so the solution we suggest to Bioptik Technology is reduce the employee number can make operation more efficiency; Taidoc (96.49%), we based on Internal Process aspect, Taidoc put too much research development expense but didn't get very good return, in Fiancé aspect, the assets need to be reduced that can make performance better ether; Pihsiang Machinery (87.54%),
we based on Fiancé aspect, they need to reduce 70% assets to make operation performance more efficiency, in output aspect and we can know that there operation revenue market share, employee productivity didn't achieve the goal; Pacific Hospital Supply (82.34%), we based on customer aspect, the company put too much marketing expense to promote products, the budget need to reduce 30% that can let resource using more efficiency; in output aspect, the operation revenue market share, employee productivity didn't achieve the goal; Medigen Biotechnology (80.85%),we based on input factor aspect: We know that Medigen Biotechnology put too much asset, marketing expensive and R&D expensive to run business but the performance is bad; Mldex Optical (59.77%), we based on Fiancé aspect, the resource of assets is the main reason that make company operation inefficiency; United Orthopedic (53.65%), we based on customer aspect, United Orthopedic emphasize the marketing they put a lot of resource but they need to reduce 38.72% budget of marketing that can make operation efficiency, in internal process aspect,United Orthopedic emphasize the

R&D they put a lot of resource but they need to reduce 58.62% budget of R&D expense that can make operation efficiency; Bioteque (50%) and Bionet (48.2%), These two companies face the same problem the resource of assets and marketing doesn't appropriate using that make operation inefficiency.

5. Conclusion

5.1Finding and Implication

Taiwan medical equipment industry is government emphasis investment industry and called future star industry. In this study we learn from different aspect (customer, internal process, learning growth) to analysis the industry performance ,we apply BSC four aspect to choose the input indicator then using DEA to get the research result, Finally we find out over 64% medical equipment companies, they operation is relative efficient. It means the whole industry is in keep growth up status, especially the main business is Diagnostic Monitoring or Surgery belong with this secondary industry the performance is very good. Also we can based on our study provide the score to give each DMU there operation problem through finance, customer, internal process, learning and growth four aspect. From our research result we can learn from benchmark companies who get 100% score For example, Microlife Corp and Rossmax International Ltd .they put a lot of budget to do marketing and there companies development strategy is integrate the place and service then get very good return. Other inefficient companies we have already to give suggest and comment in chapter 4.

The medical equipment companies face external companies enter, the opportunity to Taiwan medical equipment companies is develop the innovation product, so in this study we can see each DMU input a lot of research development expensive to create new product make competitive advantage.

5.2 Limitations and Future Study

There are several limitations considering this research design. First, the research target we focus on 26 medical equipment listed companies but there are 700 small and medium-size enterprises in this industry. Therefore in the future study we may through issues survey to get more data then the research can be more representative. Second, our research is using classical DEA model so it can't reveal good leadership from firms and if the efficiency result is all equal to100% we can't discriminate. Therefore, Anderson and Petersen (1993) have been already proposed super DEA to solve the problems. Third, medical equipment industry plays an important role and has huge influence in sustainable economic development ,the product they provide also consider health care but our research can't not provide the social responsibility and product using satisfaction . However BSC through it looks at social responsibility and product using satisfaction, is rather weak in this area .Therefore we need to extend the BSC learning and growth aspect through add social responsibility factor to evaluate performance and customer aspect add product using satisfaction ether, the way we can issue survey to company.

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Exploring the Effect of Service Recovery Strategy on Internet Consumers' Satisfaction and Word-of-Mouth

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Abstract

On the Internet, the consumers can easily change their mind and switch to other online shops if they encounter service failure (i.e., in appropriate packing). However, if the service failures can be recovered successfully, the customers will retain. Thus, the objective of current study was to examine the customers' satisfaction and positive word-of-mouth spread intention after the online retailers adopt different service recovery strategies when the participants experienced service failure. A laboratory experiment was conducted in which three types of service recovery strategies (correction, replacement and unsatisfactory correction) were designed to deal with the most popular online service category: the packaging problem. There are 75 subjects voluntarily participated the experiment, with 25 respondents in each experimental condition. The experimental results suggested that three types of service recovery strategy resulted in significantly different responses in satisfaction ($F(72, 2) = 65.907$, $p<0.001$) and word-of-mouth spread intention ($F(72, 2) = 32.707$, $p<0.001$). Specifically, correction and replacement will resulted in significantly higher satisfaction and word-of-mouth intention. While unsatisfactory correction caused the lowest responses on both dependent variables. Results from current study can provide theoretical contribution to service recovery literature in e-commerce context, as well as practical contribution to online retailers regarding the choice of appropriate service recovery strategies.

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I. INTRODUCTION

Taiwan online shopping market rapidly increases. In recent years, the domestic's Internet population continues to rise, coupled with 2010 mobile device sales began to grow significantly. Mobile Commerce and the integration of actual and virtual channel began to prevail in the e-commerce industry. According to Industry intelligence (MIC), the population of regular Internet users in Taiwan came to 1,097 million in 2011. Ever-increasing population provides excellent foundation for the development of online shopping and other commercial activities.

Many online shopping stores are of small scale and lack of enough number of employees. It is hard to avoid make mistakes in the service delivery process. Once the service failure occurs, the online stores may not be able to give consumers a timely and satisfactory service recovery. The research displayed that there are up to 50-67% of customers who experienced service with companies were not satisfied with the outcome (Zeithaml, Berry, & Parasuraman, 1991). Therefore, customers who have experienced service failure are not often satisfied about how the problems are resolved. However, complained customers who were satisfied with the service recoveries have higher repurchase intentions than those original customers who were satisfied and did not complain (Gilly, 1987).

Thus, the objective of current study was to examine the customers' satisfaction and positive word-of-mouth spread intention after the online retailers adopt different service recovery strategies when the participants experienced service failure.

II. RESEARCH METHOD AND DATA ANALYSIS

A laboratory experiment was conducted in which three types of service recovery strategies (correction, replacement, and unsatisfactory correction) were manipulated. The focal product in the experiment is a set of personal computer (including: ASUS LCD 24 inch, ASUS Core i5/8G DDR3/500GB host hard disk drive, ASUS wired set of keyboard and mouse). The participants were exposed to a description of packaging problem, and three service recovery strategies were presented to three groups of participants. Their satisfaction and word-of-mouth spread intention were collected to indicate the effect of different service recovery strategies.
There are 75 subjects voluntarily participated the experiment, with 25 respondents in each experimental condition. There were more female (58.7%) participants than male (41.3%). The data also show that most respondents were student (98.7%) and aged 15-24 years (100%).

The Analysis of Variance (ANOVA) was used to test the main effect of service recovery strategy on two dependent variables. The results indicated that different service recovery strategies resulted in significantly different responses in satisfaction ($F(72, 2) = 65.907$, $p<0.001$) and word-of-mouth spread intention ($F(72, 2) = 32.707$, $p<0.001$). Specifically, correction and replacement will resulted in significantly higher satisfaction and word-of-mouth intention. While unsatisfactory correction caused the lowest responses on both dependent variables.

III. CONCLUSION

The results from current study showed that both correction and replacement resulted in significantly higher satisfaction level and word-of-mouth intention than unsatisfactory correction. Thus, the result was consistent with the findings from previous study which suggested that the satisfaction level for "correction" is the highest, and no buyer was satisfied with "unsatisfactory correction" (Kuo, Yen, & Chen, 2011). In addition, although "packaging problem" is a popular and critical service failure, effective recovery strategy can actually increase the consumers' satisfaction and word-of-mouth spread intention. In the online shopping industry, there are many possible different types of service recovery strategies can be adopted, while the important thing is to choose an appropriate one so as to effectively reduce damage caused by service failures to the online retailers.

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The Driving Factors of Key Value Influence Online B2B Banking Satisfaction

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Abstract

Purpose –In the case of rapid technological progress, online business-to-business (B2B) banking services provide efficient and convenient finical services for corporate users. However, there are some problems when it comes to maintaining the value assessment and cost expenditure, such as, companies have to consider the financial situation or enhancement of the company's value creation. As a result, this paper aims to examine the factors in Small and Medium-Sized Enterprises (SMEs) that affect the adoptions of B2B online banking value in Taiwan.

Originality/value –We hope this predicting discovery allows the factors to influence the value of B2B online banking. Furthermore, these findings of research framework may be helpful and beneficial for executive managers or banking systems investors when implementing online B2B banking, therefore, it is worthy for researchers who are developing related theories.

Keyword: Business-to-Business (B2B), Business Information Systems, E-Business, Information Value & Quality, Small and Medium-Sized Enterprises (SMEs)

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1. INTRODUCTION

The rapid growth of the Internet as a global distribution platform, and more significantly, as a trans-border has importantly changed the blueprint of the banking sector (Lee, 2007b). The way of using internet technologies for businesses to improve working performances is a common sight. There is an increase in applying e-commerce in businesses in the past decades. (Chong, A. Y. L., Ooi, K. B., Lin, B., & Tan, B. I., 2010). The advantage of using e-commerce in enterprise encloses diminishing in transaction cost, expanding and business opportunities; however, it as well as decreases administration time and provides more efficient personalized services for different users (Turban et al., 2008). The financial systems in Taiwan have an incomplete bridge for transferring cash between firms and banks, but it is gradually improving. The performance of specific banking firms and the baking industry can be interfered by regulations and other interference from the government policy. In the other hand, it may also lead the firm to decrease their efficiency in banking systems. It is necessary to establish the banking systems under the government regulation (Yang, Y. H., 1994). Under this situation, this paper has three major research purposes: (1) recognizing the propel of B2B banking value for employees and also the perspective from the employee; (2) determining the sensible research framework of Technology-Organization-Environment (TOE) structure; and (3) identifying the factors that create B2B banking value for company under government policy. Consequently, this research explores the relevant factors in technological, organizational, and environmental parts that drive value in B2B banking value. The factors may be useful for executive managers and banking systems researchers' to better understanding of the enterprise success.

2 LITERATURE REVIEW

2.1 E-Banking Background in Taiwan

Internet banking is an efficient and inexpensive financial services delivery channels. Besides, it has considerable developmental potential in the future. According to the survey of Institute for Information Industry in Taiwan (June, 1996), the industrial activities have shifted from the previous emphasis in assembly, production to high value added marketing services extension. In Financial Services Industry, such as the large or small and medium enterprises doing personal finance advice and investment banking operations, B2B Banking, personal banking and other financial instruments, are all planning the online transaction services.

Taiwan's financial institutions were forced to rebuild in order to improve service quality, operational efficiency, and competitiveness (Liu, 2010). In the existing online banking services supply a platform for enterprise to devote services and ensure combination of internal resources and reduction of the transaction costs... The constant of previous studies employee's values are important, the employee perspective has been agreeably found in e-commerce literature. (Mairesse & Greenan, 1999; Uusi-Rauva & Nurkka, 2010)

Therefore, value assessment of online B2B banking from employees' perspective would be helpful for this research. Besides, in order to understand the value of employee would be interesting to managers seeking organizational alignment and business strategies.

2.2 Importance of Enterprise Culture and Strategic Policy

In today's society, enterprise culture is considered as a major determinant element in the success of a company in terms of performance, especially through improvements in employee spirit. Various researches described that enterprise culture, with its values, is of essential purport via fostering business ethics in the sense of ensuring a successful enterprise (Belak, J., & Milfelner, B. 2012) An enterprise culture is made up with the people who are prepared to challenge existing ways of doing things, and to come up with new ideas and solutions for the benefit of whole the company. [17] Therefore, It is important not only to understand the employee's perception but also to realize the business strategy on e-commerce.

Business automation, wireless communications and other related technology devices affect the delivery of financial products and services [39]. Legislation related to e-commerce legal matter in Taiwan for a particular part of the country to take the technical standard of the model law professionals, such as "Electronic Signature Law" and "Electronic Signature Law Enforcement Rules". However, there are other related laws and issues arising from e-commerce transactions problem, such as the legal relationship between transactional behavior, consumer protection and intellectual property protection are all the basis of the existing legal norms, blending traditional laws and technology brought new laws to impact and enrich the development of e-business legal environment. [18]

On this background, this research aims to investigate the relationship between the cultural elements and strategic policy.

3 RESEARCH FRAMEWORK AND HYPOTHESES

The TOE framework was developed in 1990 (Tornatzky and Fleischer 1990). It identifies three aspects of an enterprise's contextual relation that influence the online B2B baking process by adapting and bringing out: Technological factor, organizational factor, and environmental factor (Figure 1). Oliveira, T., & Martins, M. F. (2011).

3.1 Technological Factors

Information technology (IT) was once predicated to be the source of a sustainable competitive advantage for a company. Empirical evidence has shown that IT can improve a company's performance and competitiveness. On the other hand, a firm has to maintain its IT implementation in an efficient way when the employees are using in the internal systems. (Dehning, & Stratopoulos (2003). While online banking features have made banking services convenient and obtainable, the advancement of technology and the evolution of the Internet have also caused people to concern the security of employees' personal information (Bakar et al., 2011). Furthermore, in the marketing field of e-commerce literature ponders convenience and securities have become a significant determinant to the perceived value of Internet technology (Yang & Peterson, 2004).

H1: The higher the level of using convince, the greater the online B2B banking value will be;

H2: The higher the aegis of the system security, the greater the online B2B banking value will be.

3.2 Organizational Factors

The culture of an enterprise's has been defined by its values, rules, beliefs and assumptions in handling and behavior of an enterprise's (especially internal), which reflects the behavior of an enterprise. It also can express its organizational culture, with its values and norms, is needed for ensuring the long term success of an enterprise (Belak, J., & Milfelner, B. 2012) Furthermore, an innovation culture would be valuable for a firm to implement e-banking. It is necessary for enterprise to build and create an innovative culture and take advantage from the value of e-banking. (Coffman, 2011) In the other hand of banking industry, it has gradually transformed to provide multi-channel development of internal internet banking services, as well as it allows users to obtain the necessary financial services via an online B2B banking. These technological progresses gradually improve and gather the added information, so those conventional banking services have to be revolutionized. In enterprise, excusive user managers such as the vice president, financial officers, or the operations frequently were able to understand how systems were being used and the business value they provided. It was necessary to lead the userss to realize IT strategy instrument (Sedera, D., & Tan, F. 2005). This study aims to highlight the importance of the innovation culture and aggressive IT use as two of the essential constructs within the organizational context by linking it directly to online B2B banking performance. For these reasons, researchers should be regarded as the degree of implementation of aggressive IT users in organizational innovation performance.

H3: The higher the extent of aggressive IT use, the greater the online B2B banking value will be;

H4: The higher the degree of innovation culture, the greater the online B2B banking value will be.

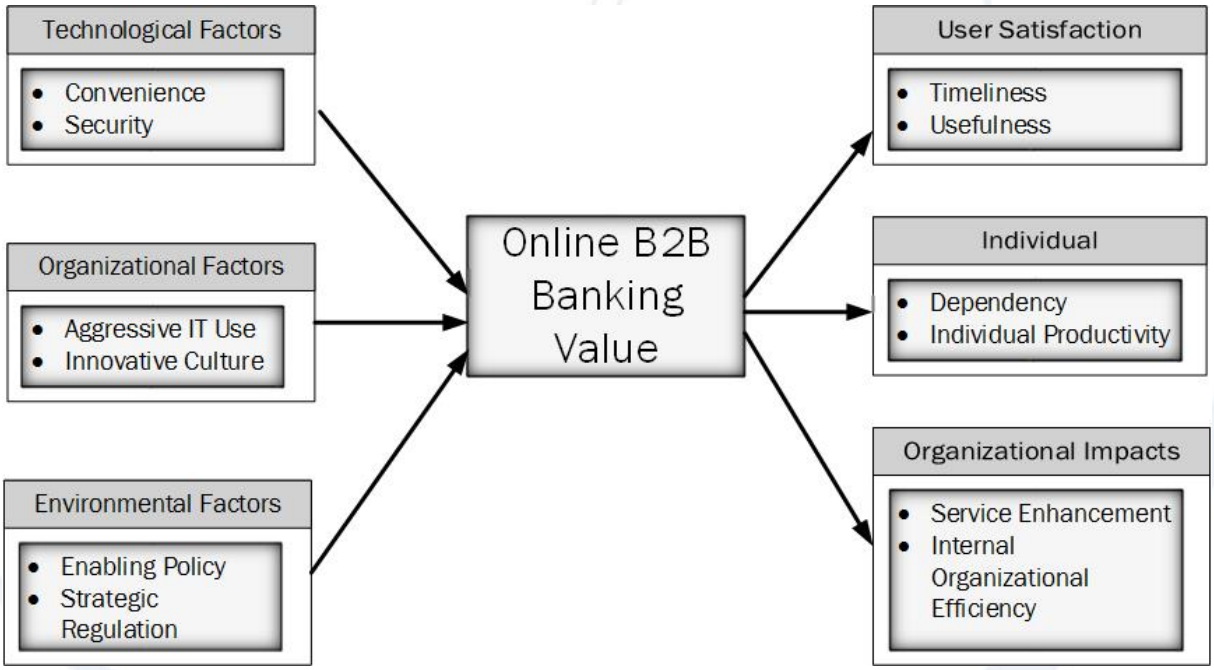
3.3 Environmental Factors

It is commonly known that the majority of jobs in the economy are created by small and medium size enterprises (SMEs). They contribute between 60-80% of a nation's total employment. (MOEA 2012) It is also recognized that such kind of enterprises create immediate income sources for society. Information systems (IS) have been shown to be important for government administration among different agencies or functional areas (Chen, Chen, Huang & Ching, 2006). Government agencies often organize their services and operations into programs that may be changed in response to a host of factors, including information technologies implementations (Walker, 2001).The e-Government policy in Taiwan claims that all agencies need to implement electronic records management systems (ERMS) for the fulfillment of the Information Freedom Act. . Hsu, F. M., Lin, Y. T., Fang, C. T., & Chiu, C. M. (2012). For these reasons, researchers should be regarded the government's policy and regulation.

H5: The higher the level of carrying out the enabling policy, the greater the online B2B banking value will be;

H6: The higher the extent of strategic regulation, the greater the online B2B banking value will be.

Figure 1. Research Framework



4 RESEARCH METHODOLOGY

A questionnaire containing 36 items including convenience, security, aggressive IT use, innovation culture, enabling policy, and strategic regulation in the independent variables of TOE framework. Besides, the banking value about timeliness and usefulness in user satisfaction, dependency and individual productivity in individual impacts, and service enhancement and internal organizational efficiency in organizational impacts are proposed in dependent variables. These different variables test were conducted in order to develop the instrument. We consider scholar paper and selected these 36 items in a questionnaire in preparation for research data collection.

Nine items for measuring convenience, service enhancement, and internal organizational efficiency i.e., C1, C2, C3, SE1, SE2, SE3, IOE1, IOE2 and IOE3 were adopted from Mahmood and Soon (1991). Three items for measuring security, i.e., S1, S2 and S3 were adopted from Aladwani, A. M., & Palvia, P. C. (2002). Items for measuring aggressive IT use, i.e., AU1, AU2 were adopted from Venkatraman(1985). Items for measuring innovative culture and dependency, i.e., IC1, IC2, IC3, IC4, IC5, D1, D2 and D3 were adopted from Delone, W. H. (2003). Another seven items for measuring enabling policy, strategic regulation and individual productivity, i.e., EP1, EP2, SR1, SR2, IP1, IP2 and IP3 were adopted from (Burton, Lichtenstein, Netemeyer and Garretson 1998; Batra and Sinha 2000). Items for measuring timeliness, i.e., T1, T2 and T3 were adopted from Doll, W. J. and Torkzadeh, G. Items for measuring innovative culture, i.e., U1, U2, U3, and U4 were adopted from Ong, C. S., Day, M. Y., & Hsu, W. L. (2009). Therefore, we use these related reference to design the questionnaire and measure the reaction from the employees. The item list was differentiating into independent variables and dependent variables. Besides, according the related reference we further modified and leaving the six variables in Table 2 for formal surve

Table 1: Related Reference of Independent and Dependent Variable

Independent Variable		**Related Reference**
Technological Factors	Convenience	Mahmood and Soon (1991).
	Security	Aladwani, A. M., & Palvia, P. C. (2002).
Organizational Factors	Aggressive IT use	Venkatraman(1985).
	Innovative Culture	Delone, W. H. (2003).
Environmental Factors	Enabling Policy	Burton, Lichtenstein, Netemeyer and Garretson 1998; Batra and Sinha 2000.
	Strategic Regulation	Burton, Lichtenstein, Netemeyer and Garretson 1998; Batra and Sinha 2000.
Dependent Variable		**Related Reference**
User Satisfaction	Timeliness	Doll, W. J. and Torkzadeh, G
	Usefulness	Ong, C. S., Day, M. Y., & Hsu, W. L. (2009).
Individual	Dependency	Delone, W. H. (2003).
	Individual Productivity	Burton, Lichtenstein, Netemeyer and Garretson 1998; Batra and Sinha 2000.
Organizational Impacts	Service Enhancement	Mahmood and Soon (1991).
	Internal Organizational Efficiency	Mahmood and Soon (1991).

The items were measured using a five-point Likert-type scale on ranging from (1) ‘‘strongly disagree ’’ to (5) ‘‘strongly agree’’ (see Table 1). This research target area will direct in Taiwan, therefore this scales will translate into Chinese language. Besides, in this situation we can better understand the employee’s perspective.

4.1 Data Collection

In this research, we used quantitative approach. A questionnaire was constructed with 36 items comprising six dimensions: technological factors, organizational factors, environmental factors, user satisfaction, individual impacts and organizational impacts. Thus, this study uses items selected for measuring the constructs from previous inventories.

Table 2. Profile of Surveyed Companies

	Number of Companies	Percent (%)
Industry		
1. Banking	59	34.50
2. Manufacturing	25	14.02
3. Service Industry	15	8.77
4. Hi-Tech Electronic Industry	15	8.77
5. Construction Industry	14	8.19
6. Business	13	7.60
7. Accounting Firm	11	6.43
8. Transportation and Warehousing	2	1.17
9. Others	17	9.49
Number of Employees		
5	11	6.43
5-19	13	7.60
20-49	26	15.20
50-99	16	9.36
100-500	105	61.40
Capital (NT$ Million)		
<5	21	12.28
5-30	20	11.70
31-60	13	7.60
60-100	10	5.85
>100	107	62.57
Employees of Finance Department		
<5	48	28.07
6-9	44	25.73
10-29	21	12.28
>30	58	33.92
Online B2B Banking Service		
1. Booking	145	31.25
2. Loan	73	15.87
3. Factoring	15	12.17
4. Searching	113	24.57
5. Foreign Exchange/trading	73	15.87
Number of Using Online B2B Banking		
<1	11	6.43
2-5	48	28.07
6-10	58	33.92
11-15	29	16.96
>16	25	14.62

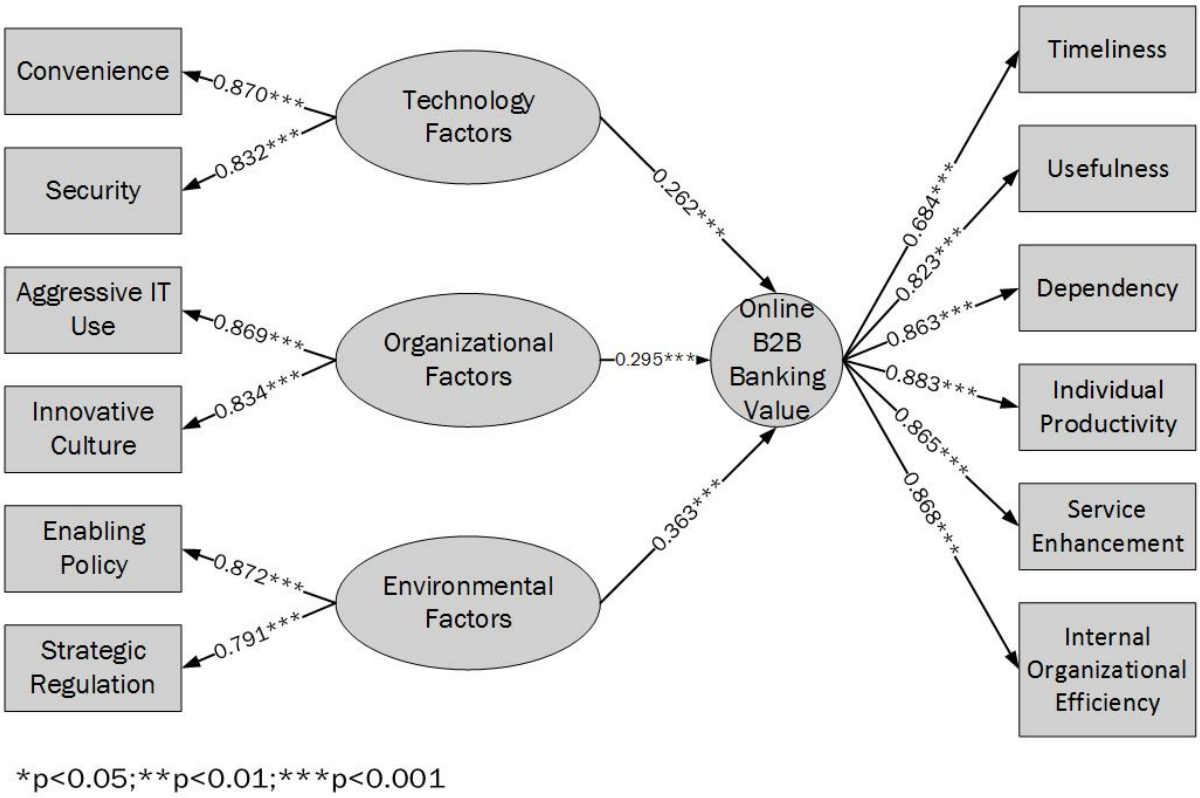
4.2 Data Analysis

In this research, we adopt the partial least squares (PLS) technique to execute the data analysis. Partial least squares method is a novel multivariate statistical data analysis method, which was first proposed in 1983 by the Wood (S.Wold 1983 and Albano). In recent decades, it has been developed rapidly in theory, methods and applications. Hence, PLS has been proved to achieve regression modeling (multiple linear regressions), correlation analysis (canonical correlation analysis) to simplify the structure of the data (principal component analysis) in two sets of variables. Therefore, we use PLS to do the multivariate statistical data analysis in this research.

4.3 Structural Modeling

The measurement model was evaluated to use partial least squares (PLS). The examination of research model was tested with the structural equation modelling method. The resulting scrutiny from PLS are shown in Figure 2. The path coefficients, P-values, was examined in the statistical model in order to test the coefficients are remarkable or not. The entire paths are positively significant at the 0.05 level. Therefore, according to the expected significant results is support all hypotheses.

Figure 2. Results of the PLS Analysis



*p<0.05;**p<0.01;***p<0.001

5 CONCLUSION

According to the previous study, using technological, organizational, and environmental factors of e-banking value can provide enterprises a chance to understand their company business process. However, this research still has some limitations for the study. First off all, most of the data are from bank user or its employee, so it may fail to take the response and influence from other industry enterprise financial users into consideration. Second, the data only consisted with 171samples in this previous research, besides this research conduct in Taiwan; it may have some limitation of internationalization blueprint in generalizability in the findings. In future researches, based on our findings there still have some existing issues, such as risk or trusts in online B2B banking environment.

The last but not the least of this study contributed to our understanding of TOE framework in e-banking value can provide enterprise the banking value and opportunity to deeply realize their business procedure characteristics. Moreover, in this survey from employee of the company can provide their using banking systems experience and reflect the pros and cons to the systematic manager.

6 ACKNOWLEDGMENTS

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APPENDIX

Table 1. Survey used to research the value of B2B banking in SEMs

		1=Strongly disagree/5=Strongly agree				
Convenience						
C1	Online B2B banking is useful in our daily jobs	1	2	3	4	5
C2	Online B2B banking is relevant for decision making.	1	2	3	4	5
C3	Online B2B banking is convenient for my work.	1	2	3	4	5
Security						
S1	Online B2B banking provides highly-secured services.	1	2	3	4	5
S2	Online B2B banking protects information privacy.	1	2	3	4	5
S3	Users will feel safe in their transactions with online B2B banking.	1	2	3	4	5
Aggressive IT Use						
AU1	My company encourages aggressive of using information technology device.	1	2	3	4	5
AU2	My company used the information technology unit to help us monitor changes in online B2B banking.	1	2	3	4	5
Innovative Culture						
IC1	My company helps users create and try out new ideas in their work.	1	2	3	4	5
IC2	My company helps the user create value for the firm's internal or external customers.	1	2	3	4	5
IC3	I often exchange ideas and opinions with colleagues and supervisors in an open-minded circumstance.	1	2	3	4	5
IC4	My company encourages employees use new methods to perform tasks and jobs.	1	2	3	4	5
IC5	My company is supported to let employees learn from trial-and error.	1	2	3	4	5
Enabling Policy						
EP1	Online B2B banking reaches a wider audience to enable broader participation.	1	2	3	4	5
EP2	Online B2B banking provides relevant information and access to enable more informed contributions.	1	2	3	4	5
Strategic Regulation						
SR1	The government has formally or informally offered the online B2B banking of relevant laws and regulations.	1	2	3	4	5
SR2	The government has formally or informally offered the online B2B banking of relevant policies.	1	2	3	4	5
Timeliness						
T1	Online B2B banking gives the information you need in time.	1	2	3	4	5
T2	Online B2B banking's system provides up-to-date information.	1	2	3	4	5
T3	Online B2B banking gives prompt service to users.	1	2	3	4	5
Usefulness						
U1	Using the online B2B banking would improve my job performance.	1	2	3	4	5
U2	Using the online B2B banking would enhance my	1	2	3	4	5

	effectiveness on the job.					
U3	I would find online B2B banking useful in my job.	1	2	3	4	5
U4	Using online B2B banking would make it easier to do my job.	1	2	3	4	5
Dependency						
D1	Online B2B banking is dependable.	1	2	3	4	5
D2	Online B2B banking helps to regulate work processes and performance.	1	2	3	4	5
D3	Online B2B banking can help us complete the works by ourselves.	1	2	3	4	5
Individual Productivity						
IP1	Online B2B banking improves my productivity.	1	2	3	4	5
IP2	Online B2B banking provides all the functions I need.	1	2	3	4	5
IP3	Online B2B banking improves our decision making.	1	2	3	4	5
Service Enhancement						
SE1	Online B2B banking maintains high services innovation.	1	2	3	4	5
SE2	Online B2B banking adds value to existing services.	1	2	3	4	5
SE3	Online B2B banking helps us to make the services information available to customers.	1	2	3	4	5
Internal Organizational Efficiency						
IOE1	Online B2B banking helps us to ensure high efficiency of decision making process and high quality in final decision.	1	2	3	4	5
IOE3	Online B2B banking ensures high efficiency in internal meetings and discussions.	1	2	3	4	5
IOE4	Online B2B banking is efficient to run of current systems.	1	2	3	4	5

Using the Elaboration Likelihood Model (ELM) to Investigate Consumers' Purchase Intention: Usana as an Example

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Abstract
According to the Fair Trade Commission survey, the personnel participate in the Multi-Level Marketing (MLM) accounted for 17 percent of Taiwan's population of 23 million until 2012. This industry output value has reached $ 22 billion USD, the data show that this industry continues vigorous development. This study explores the impact that two independent variables, which are argument quality (central path) and source expertise (peripheral path), have on dependent variable purchase intention by using questionnaire survey within the framework of Elaboration Likelihood Model (ELM). It also uses initial trust as its mediator variable. Both argument quality and source expertise contain four variables in total: information quality, service quality, reputation, and structural assurance. This study tries to verify the association of how argument quality and source expertise correlate with initial trust, which in turn results in the changes of consumers' purchase intention. The authors of this work intend to verify whether there are positive correlations between (a) information quality of direct selling products and initial trust; (b) the service quality of direct salespersons and initial trust; (c) the reputation of direct selling company and initial trust; (d) structural assurance of direct selling company and initial trust. In addition, this study may help direct selling company establish consumers' initial trust in purchasing direct selling products based on their various paths, and develop a better marketing strategy.

Keywords: Initial Trust, Direct Selling, Multi-Level Marketing, Elaboration Likelihood Model

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1. Introduction

The concept of Multi-Level Marketing (MLM) has been increasingly popular in business around the world. According to a report issued by Fair Trade Commission, the number of MLM operators in Taiwan has exceeded 3.8 million (Fair Trade Commission, 2012). From 2007 to 2012, legal MLM companies increased dramatically from 127 to 363 (Fair Trade Commission, 2012). New MLM companies are keeping entering. Therefore, how to attract customers is the top issue for MLM operators. To satisfy the customers' need, good information quality and service quality has become an essential tool to influence initial trust of customer, particularly in MLM industry. Nowadays, due to pyramid schemes and various frauds customers expect more guarantee such as reputation and structure assurance when they choice the MLM company. In addition, the MLM operators need to keep up with the growing expectation of customers about the overall MLM experiences. Thus, it is important for MLM operators to fully recognize the needs of customers and build their initial trust. Researchers also acknowledged there's a positively influence between initial trust and purchase intention (Everard & Galletta, 2006; Korgaonkar, 1982; Wakefield *et al.*, 2004).

Drawing on the elaboration likelihood model (ELM), this research examined users' initial trust in MLM industry. The research indicated that initial trust develops along a dual route including the central route and peripheral route. Central cues include information quality and service quality, whereas peripheral cues include structural assurance and reputation. These two dimensions determine the level of customer initial trust, and ultimately enhance customer purchase intention. Despite there are indications that central cues, peripheral cues, and initial trust are essential components in explaining the formation of purchase intention. But there are surprisingly few researches for MLM industry, has examined the roles of these variables in forming purchase intention. Thus, the effect of the elements that make up purchase intention in the MLM industry should be empirically tested to create an overall research model.

The rest of this paper is organized as follows. We review related literature on direct selling, MLM customer adoption and ELM in the next section. Section 3 develops research model and hypotheses. Section 4 describes instrument development and data collection. Section 5 presents results, followed by a discussion of these results in section 6. Section 7 presents theoretical and managerial implications. We conclude the paper in Section 8.

2. Literature review

2.1 Direct Selling

Direct selling is a marketing method defined as "face-to-face selling away from fixed retail location" (Peterson & Wotruba, 1996; Wotruba *et al.*, 2005). Despite being the oldest method of commercial distribution known to mankind, direct selling is not well understood (Albaum, 1992; Peterson & Wotruba, 1996). At times, direct selling is improperly equated with undesirable manifestations like the pyramid scheme (Vander & Keep, 2002), and frequently direct selling is confused with direct marketing (Bauer & Miglautsch, 1992). Direct marketing is defined as "Relational marketing process of prospecting, conversion, and maintenance that involves information feedback and control at the individual level by using direct response advertising with tracking codes" (Bauer & Miglautsch, 1992).

2.2 Multi-Level Marketing

Multi-Level Marketing (MLM) is a marketing strategy in which the sales force is compensated not only for sales they personally generate, but also for the sales of others they recruit, creating a downline of distributors and a hierarchy of multiple levels of compensation (Hossan *et al.*, 2012). Most commonly, the salespeople are expected to sell products directly to consumers by means of relationship referrals and word of mouth marketing (Hossan *et al.*, 2012). Some people equate MLM with direct selling, although MLM is only one type of direct selling (Hossan *et al.*, 2012; Vander Nat &, 2002).

MLM companies have been a frequent subject of criticism. Criticism has focused on their similarity to illegal pyramid schemes, price-fixing of products, high initial start-up costs, emphasis on recruitment of lower-tiered salespeople over actual sales, encouraging if not requiring salespeople to purchase and use the company's products, potential exploitation of personal relationships which are used as new sales and recruiting targets, complex and sometimes exaggerated compensation schemes, and cult-like techniques which some groups use to enhance their members' enthusiasm and devotion (Carroll, 2011). In contrast to MLM is single-level marketing. In single-level marketing, the salesperson is rewarded for selling the product, but not for recruiting or sponsoring other salespeople.

2.3 Elaboration Likelihood Model

Based on previous social psychological research on attitude change, Petty and Cacioppo (1986) propose the elaboration likelihood model (ELM) in order to explicate how an individual deals with various persuasive appeals, suggesting that the cognitive effort a person devotes to processing an argument depends on his or her likelihood of elaboration. Based on elaboration likelihood, the ELM supposes there are two different routes to persuasion: central and peripheral. On the premise that individuals have the time or opportunity to process the incoming messages, attitude

changes will be induced via central route when the individuals are highly involved with the arguments and when they have a high level of ability to process the arguments (Petty & Cacioppo, 1986). In the instance of lower involvement or processing ability, the peripheral route to persuasion occurs.

2.4 Initial trust

According to the degree of increased mutual trust, trust can be divided into two kinds of trust, initial trust and continuing trust, when users get more direct experience, the initial trust will be converted to continuous trust (Zhou, 2012). Trust is an interactive conduct between the customer and the service provider, ability to maintain long-term relationships are depends on whether each other can mutual trust or not, so trust is the key to maintaining relationships when the transactions is going (Chaudhuri & Holbrook, 2001, 2002). The service providers and their customers will establish a long-term benefit relationship instead of the short-term one, only when the level of trust between them is high. The long-term relationship will also help to increase competitive advantage and reduce the transaction costs (Zeithaml *et al.*, 1996). Therefore, trust plays an important role in the development of high-quality relationships (Morgan & Hunt, 1994).

Through the review of the above mentioned literatures, we have understood some aspects of the ELM and MLM industry. ELM provides a useful theoretical lens to understand MLM customer behavior. ELM argued that individual customer changes their attitudes via both central route and peripheral route. Thus, we draw on ELM to examine MLM customer trust and expect to reveal initial trust development processes.

3. Research framework and hypotheses

3.1 Relationship between central cues and initial trust

Information quality reflects information relevancy, sufficiency, accuracy and currency (Zhou, 2012). Customers use online shopping platform to get the information on their account balance and payment. If this information is irrelevant, insufficient, inaccurate or out-of-date, users may doubt whether the service providers have enough ability, integrity and benevolence to provide quality information to them. This may decrease their initial trust in online shopping platform. Yang *et al.* (2006) has reported the effect of information quality as central cues on initial trust in online stores. Information quality are also found to be a significant determinant of users trust (Nicolaou & McKnight, 2006; Zahedi & Song, 2008), Thus, we suppose:

H1. Information quality could positively influence initial trust.

Service quality reflects the service reliability, promptness, assurance and personalization (Gefen, 2002). If the consumers cannot get proper assurance and trustful services, real-time service, personalized service, they will opinion that the

company is not able to provide the service they need. This may lead to their lack of trust in MLM companies. Customers may also compare the service between other companies. This behavior requires additional investment in consumer themselves as consumers needs invest more time and effort on searching information which about MLM products, then the service quality may take a central path way to affect the initial trust. Thus, we suppose:

H2. Service quality could positively influence initial trust.

3.2 Relationship between peripheral cues and initial trust

Reputation has been identified to be a significant determinant of initial trust (Beldad *et al.*, 2010). Chang and Chen (2008) has also disclosure the reputation affects online initial trust which is similar to initial trust. Then some extant research has noted that source credibility which is similar to reputation affects user attitude via the peripheral path (Bhattacherjee & Sanford, 2006). Thus, we propose:

H3. Reputation could positively influence initial trust.

Structural assurance reflects on exist technological and legal structures to ensure security (McKnight *et al.*, 2002a, 2002b). According to trust transference (Pavlou & Gefen, 2004), users may transfer their trust in these third-parties to online shopping platform. Thus, structural assurance may affect initial trust. Structural assurance may also act via the peripheral route to effect on initial trust as it represents information cues and does not require much effort investment from users. Thus, we propose:

H4. Structural assurance could positively influence initial trust.

3.3 Relationship between initial trust and purchase intention

The unique nature of internet environments is relevant to the acceptance of e-commerce and consumers' purchase intentions (Pavlou, 2003). Consumers evaluate a web store through online trust positively influencing their attitude toward conducting online purchases at the site; moreover, their attitude affects their purchase intentions (Wang, 2003). Moreover, The previous studies on e-commerce have revealed the importance of trust in affecting consumers' behavior (Everard & Galletta, 2006; Gefen *et al.*, 2003). Thus, we suppose:

H5. Initial trust could positively influence purchase intention.

Figure 1 presents the research framework. Central cues include information quality and service quality, whereas peripheral cues include reputation and structural assurance. Initial trust moderates the effects of central cues and peripheral cues on purchase intention.

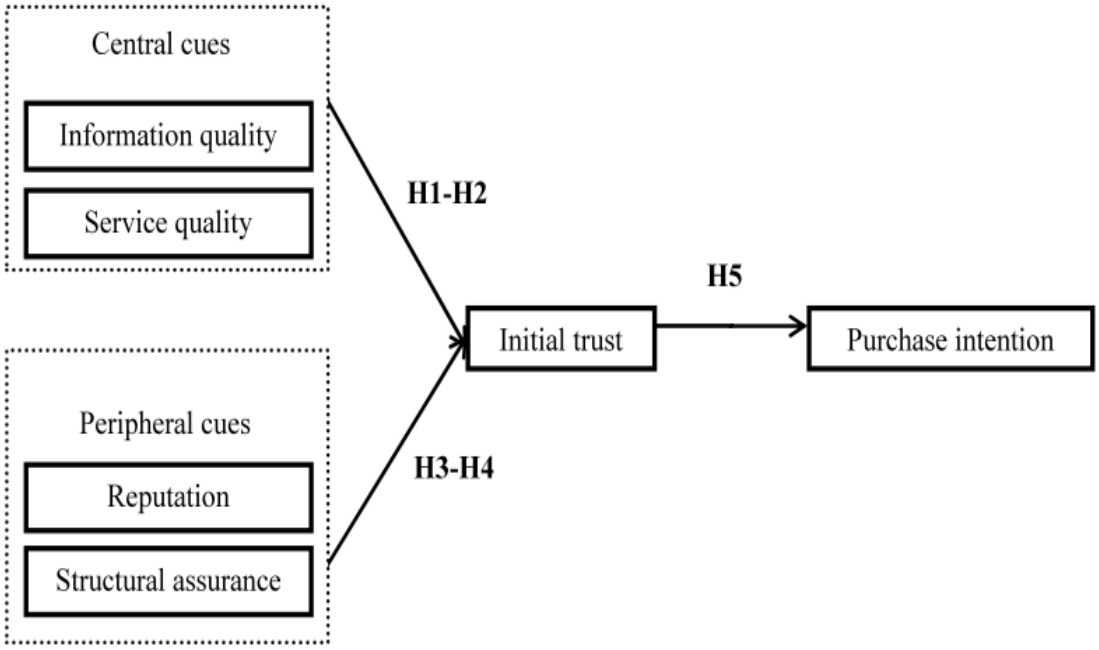

Figure 1. Research Framework

4. Method

Measures employed in this research are derived from several existing literatures the items are translated form English to Chinese and adjusted necessarily to suit the research subject in this thesis. The questionnaire was completed after pretested by 30 customers. In order to improve the readability and relevancy some ambiguous items are rephrased while some items are added extra. Besides, the items definition of each variable will be shed light on following sections, along with measures and their sources.

The questionnaire was distributed to randomly selected customers who share their experience after buying products at USANA. The each total number of collected questionnaires was 165. The number of effective samples was 157 after discarding 8 which has not previously bought or repeats responses. A total of 165 respondents from a survey were used to assess overall fit of the proposed model and test hypotheses using structural equation modeling. After deleting incomplete responses, 157 respondents were coded for data analysis, representing an effective responses rate of 95%. The proportion of the sample gender is a big gap, for which female are 32% and male are 68%. This kind of proportion is almost same as the annual report by gender report from Taiwan Fair Trade Commission website (male: 30%, female: 70%). For the range of sample age, most of them are between 31 to 40 years old (41%). Followed up is between 41 to 50 years old (15%). In this research, the population is

defined as MLM customer in Taiwan. The formal questionnaire was collected based on social media. According to Gorsuch (1983), the least sample size is equal to five times of the items and should higher than 100. There were totally 157 usable questionnaires collected after two weeks of fieldwork (February 1th to 14th in 2014).

We propose a Confirmatory Factor Analysis (CFA) with partial least squares (PLS) estimation to assess the relationships between the constructs. PLS was proposed by Wold (1985) as an analytical alternative for situations where the theory is weak and the available variables or measures would be unlikely to conform to a rigorously-specified measurement model. The correlation analysis is performed to check the reciprocal relationship between variables and to avoid the linear dependencies among them. Finally, the proposed model and hypothesis testing was conducted using SmartPLS software to analysis the data (Ringle *et al.*, 2005). We analyze and interpret our PLS model in two stages: the assessment of the reliability and validity of the measurement model, and the assessment of the structural model. The stability of the estimates was tested via a bootstrap re-sampling procedure involving 1000 sub-samples (Hair *et al.*, 2011). The core variables and dimensions adapted from existing literature about information quality, service quality, reputation, structure assurance, initial trust and purchase intention are defined in Table 1 below.

Table 1. Development of Items

Information quality (INF): [Source:Kim *et al.* (2004)]
INF1: USANA provides me with information relevant to my needs.
INF2: USANA provides me with sufficient information.
INF3: USANA provides me with accurate information.
INF4: USANA provides me with up-to-date information.
Service quality (SEV): [Source: Kim *et al.* (2004)]
SEV1: USANA provides prompt services.
SEV2: USANA provides professional services.
SEV3: USANA provides personalized services.
Reputation (REP) : [Source: Koufaris and Hampton-Sosa (2004)]
REP 1: USANA has a good reputation.
REP 2: USANA has a reputation for being honest.
Structural assurance (SA) : [Source: McKnight *et al.* (2002a)]
SA1: I feel confident that encryption and other technological advances on the Internet make it safe for me to use USANA's shopping platform.
SA2: I feel assured that USANA provides for payment mechanism is credible and reliable
SA3: I feel comfortable that on the internet shopping environment from USANA
Purchase Intention (PI) : [Source: Agarwal and Prasad (1998)]
PI1: will buy USANA's products
PI2: I am willing to purchase USANA's products
PI3: I believe that experience of buying goods at USANA is good
PI4: When I want to buy direct selling product, USANA will be my first choice
PI5: Even other direct selling company has cheaper price, I will buy goods at USANA.

5. Results

Reliability analysis (Cronbach's Alpha) was conducted to test the reliability of gathered data with the selection criteria questionnaire. As shown in Table 2, because all values of Cronbach's alpha estimates were between .74 and .90, that is considered acceptable as an indication of reliability for basic research (Nunnally, 1967). All composite reliabilities were above the recommended value of .70, ranging from .87 to .93 (Nunnally, 1994). The results indicated a strong reliability of measures. A construct validity test was conducted using the factor loading within the constructs, average variance extracted (AVE), and the correlation between constructs. As shown in Table 2, all standardized factor loadings emerged fairly high, ranging from .73 to .91. This showed that the measurement had convergent validity (Anderson & Gerbing, 1988). As shown in table 2, convergent validity was also indicated because all AVE values exceeded Fornell and Larcker (1981) suggested cutoff of .50 to assess the discriminant validity, the square root of the AVE measure on each construct must exceed the estimated correlations shared between the construct and other constructs in the model (Fornell & Larcker, 1981). As shown in Table 3, the discriminant validity for the constructs used in our study was acceptable, since the square root of AVE on each construct (i.e., the diagonal elements shown in bold italic font in Table 3) was greater than the correlations of the construct with other constructs (i.e., those related off-diagonal elements in Table 3).

Table 2. Confirmatory Factor Analysis

Construct	Item	Standardized item loading	AVE	Composite Reliability	Cronbachs Alpha
Information quality (INF)	INF1	0.72	0.64>0.5	0.87>0.7	0.81
	INF2	0.85			
	INF3	0.84			
	INF4	0.76			
Service quality (SEV)	SEV1	0.83	0.73>0.5	0.89>0.7	0.82
	SEV2	0.89			
	SEV3	0.83			
Reputation (REP)	REP1	0.91	0.82>0.5	0.90>0.7	0.78
	REP2	0.89			
Structural assurance (SA)	SA1	0.77	0.65>0.5	0.85>0.7	0.74
	SA2	0.76			
	SA3	0.88			
Initial trust (TRU)	TRU1	0.87	0.74>0.5	0.92>0.7	0.88
	TRU2	0.88			
	TRU3	0.83			
	TRU4	0.85			
Purchase intention (PI)	PI1	0.86	0.72>0.5	0.93>0.7	0.90
	PI2	0.85			
	PI3	0.79			
	PI4	0.88			
	PI5	0.84			

As mentioned above, the bootstrap re-sampling procedure (1000 sub-samples) is used to generate the standard errors and the t-value, which will allow the **β** coefficients to be made statistically significant. The path coefficients for the endogenous latent variables and R-square statistics were derived. The structure model results are presented in Figure 2. As indicated, information quality and service quality has significant impacts on initial trust, with path coefficients of .17 ($t = 2.114$, $p < 0.05$) and .26 ($t = 2.61$, $p < 0.001$), supporting H1 and H2. (See Figure 2). Reputation also has a significant effect on initial trust ($\beta = 0.452$; $t = 20.155$, $p < 0.001$), supporting H3. H4 was not supported by our empirical results; therefore, structural assurance does not have a direct and significant effect on MLM customers' initial trust. Then initial trust has a significant effect on purchase intention ($\beta = .80$; $t = 21.1$, $p < 0.001$), supporting H5. The result of the structural model test is shown in Table 4 and Figure 2.

Table 3. Inter-construct Correlations and the Square Root of AVE Measures

Latent variable	INF	SEV	REP	SA	TRU	PI
INF	***0.80***					
SEV	0.71	***0.85***				
REP	0.47	0.53	***0.91***			
SA	0.61	0.61	0.55	***0.81***		
TRU	0.60	0.66	0.70	0.57	***0.86***	
PI	0.56	0.65	0.74	0.54	0.79	***0.85***

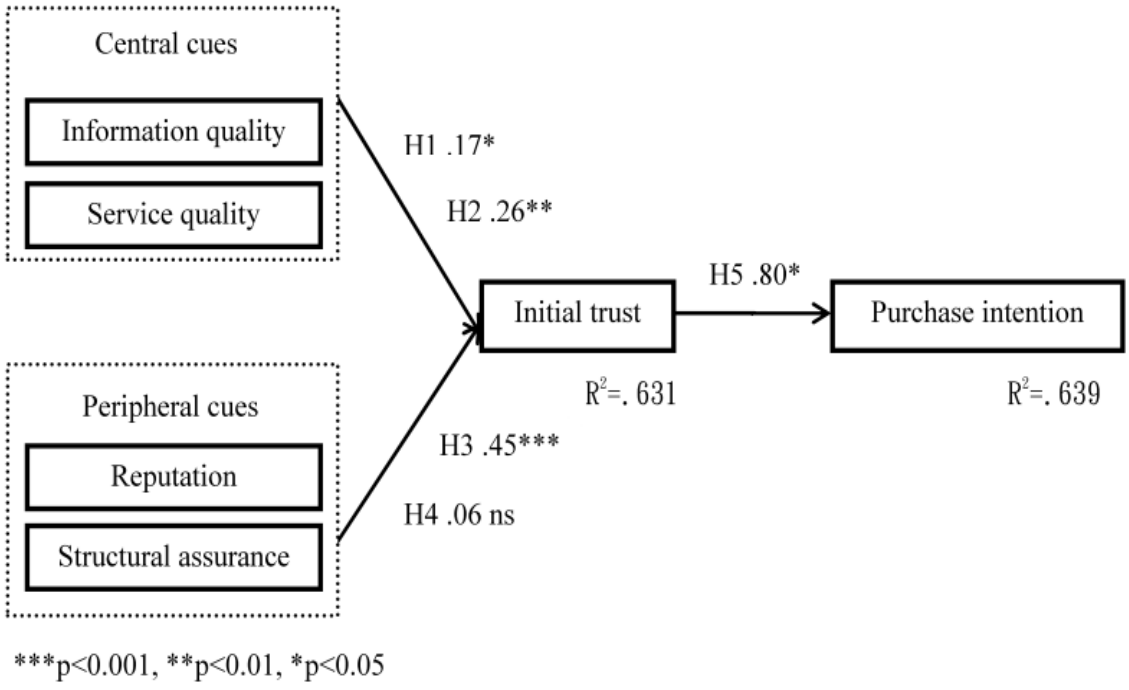

Figure 2. Result of PLS analysis

Table 4. Summary of the Results

H1. Information quality could positively influence initial trust.	Supported
H2. Service quality could positively influence initial trust.	Supported
H3. Reputation could positively influence initial trust.	Supported
H4. Structural assurance could positively influence initial trust.	None supported
H5. Initial trust could positively influence purchase intention.	Supported

6. Discussion

The structural assurance is none supported in this study. Because of the dimension structure assurance is confirmed to be positive correlation with initial trust in researches about technology acceptance and network usage. And these research industries are mostly those who emphasis on information safety, such as network information sectors and banking sectors. To use in MLM industry, due to the differences in industries, consumers will more emphasis on the quality of product information, the impact on service quality, and the level of reputation; Consumers spend more effort to concern about the connection of the products and them. Thus the service, brand awareness and reputation of the company become the source to assess the pros and cons of the company. Therefore, we believed the reason why the structure assurance and initial trust is not significant in this study, might be the differences of the industries.

7. Theoretical and managerial implications

From a theoretical perspective, this research examined MLM customers' initial trust from the perspective of ELM. In the related research of MLM industry has seldom considered using ELM examined hypothesis. We know that trust is the very important variable in the direct selling industry to customer. Previous studies for the MLM were more focused on motivation. This research tries based on the viewpoint of ELM to fill the gap and discloses initial trust development process. The results indicated that initial trust develops through a dual route including the central route and peripheral route. Information quality and service quality act as central cues, whereas reputation and structural assurance act as peripheral cues.

From a managerial perspective, the results imply that service providers need to adopt differentiated strategies to build customers' initial trust in MLM companies. When the target customers have relatively high initial trust, such as housewife, MLM operators need to highlight the well reputation and convey the image of honesty and integrity to them as these users mainly build their initial trust via the peripheral route. On the

other hand, when the target customers have low initial trust, MLM operators need to present quality of information and quality of service, such as high level of education people, MLM operators need to present quality of information to them as these users mainly build their initial trust via the central route. Then, users may build their initial trust in MLM products and increase their purchase intention.

8. Conclusion

Aim of this study is to understand factors that affect customers' initial trust, and then results in the changes of their purchase intention when choosing MLM companies. That also helps MLM operators to know how to increase their initial trust and purchase intention. This study also suggests MLM operators to consider central cues as a main factor to satisfy their customers. For example, the information relevant to customers' needs of the MLM company, the sufficient information of the MLM company, the accurate information of the MLM company, the up-to-date information of the MLM company. Also, the dependable services of the MLM company, the prompt services of the MLM company, the professional services of the MLM company, the personalized services of the MLM company. Our study shows that if MLM operators could take all this suggestions in mind, they can attract more customers to purchase their products.

There are several limitations considering this research design. First, our subjects are focused on USANA. Although they represent potential MLM customers, future research needs to generalize our results to other samples, such as the other MLM companies. Second, the research model in this thesis is combined with central cues and peripheral cues using in MLM industry. However, there might be other potential variables influencing customer's initial trust and purchase intention to direct selling industry, for example age, or gender differences might result in different opinions. Third, we only considered the mediator effect of an elaboration likelihood– initial trust on purchase intention. Besides, we can put some moderation factors to examine the effect of the model, for example perceived ability, user motivations such as personal involvement may also affect initial trust building. Future research can examine their possible effects.

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Predicting Consumer's Intention to Buy Local Specialty Online

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Abstract

The purchases of local specialties were usually seen in conventional physical stores in the past. The potential consumers were the tourists who visited the stores. Renowned products did not necessarily imply big business in this pattern of trading. As online shopping becomes more and more popular, consumers are no longer limited to tourists. Given the purpose of promoting local development and boosting the consumption of local specialties through online shopping, we've directed the focus of this study toward the factors that affect consumers' intention of shopping local specialties online. This study presents a behavior model for online purchase of local specialties, and tries to verify the influence that "purchase intention of local specialties" and "online purchase intention" have over "online purchase intention of local specialties" by using questionnaire survey, and verify the model by using structural equation model (SEM). Six independent variables affect purchase intention of local specialties and online purchase intention. They are consumption values, purchase motivation, self-efficacy of purchasing local specialties, internet self-efficacy, perceived risk, and online experiences. We explored these variables separately. This study expects to verify the fit of the model by using SEM, and even seeks to verify whether independent variables have positive impacts on purchase intention of local specialties and online purchase intention of local specialties. The practical propositions to boost sales and encourage online trading of local specialties are what we expected to find through this study.

Keywords: local specialty, online shopping, purchase intention

1. Introduction

Background and Motivation

There are various well-known local specialties everywhere in Taiwan, when tourists go on a sightseeing tour they will purchase some specialties home with them. Tasting local specialties is becoming a very important part for many tourists. The purchases of local specialties were usually seen in conventional physical stores in the past. The potential consumers were the tourists who visited the stores. Renowned products did not necessarily imply big business in this pattern of trading. However traditional consumer behavior is changing little by little. According to the information of Taiwan Network Information Center (2013), there are nearly 18 million people who use the Internet; the proportion of those who had used the Internet is 77.4%, to be a 2.9% growth compared with 2012. Data of the same year also pointed out that smartphone has replaced notebook to be the major Wi-Fi connecting equipment. People can connect to Wi-Fi at any time and any place they want, that's why there's a growth trend in the frequency and time of using, also means using Internet is becoming an important part of people's lives (TWNIC, 2013). Furthermore, it not only increase the number of Internet users, also increase the output value of online shopping.

In recent years, when customers want to have local specialties, they not really need to spend time, money or effort to purchase locally. He can order them online and pay orders by ATM or even at convenience store, and get the goods via home delivery or also get them at convenience stores. It also make consumers who never been to where the specialties from but purchase the specialties they want online after viewing the introduction on store's website or such medias like magazines and food programs.

The above shows that along with changes in living environment, the public acceptance for online shopping is also increasing. While the data also show that the sales turnover of overall retail grew 4.13% at the end of 2013, for online channel the turnover has increased significantly over 203%, but just 2.1% increase for physical stores (DGBAS, 2013). Under such kind of trend, there is a 3.53% decrease of physical stores in Taiwan, but a significant increase in online stores of 1.9 times in these five years (DGBAS, 2013). It can be seen that relative to physical stores, online shopping market still seems energetic.

Therefore, this study aims to explore the factors that influence consumer online purchase of local specialties by presenting a behavior model for online purchase of local specialties. A well-known statistical method, structural equation modeling (SEM), is used to test the conceptual relational model that whether “purchase intention of local specialties” and “online purchase intention” will affect “online purchase intention of local specialties” or not. SEM analysis also provides the levels of convergent and discriminant reliability of the proposed model. To test the conceptual relationships of the model, this study also raised five independent variables to see if they will affect "purchase intention of local specialties" and "online purchase intention" and will explore the variables separately.

2. Literature Review

2.1 Online Shopping

The rise of online shopping allows consumers to have more purchasing channels to select. Unlike the physical stores, online shopping is a virtual concept. Customers cannot touch the products before purchasing them and there are no personnel that provide face-to-face services in online shops (Zhilin Y. & Peterson, 2003). Furthermore, C. M. Cheung *et al.* (2009) has collated relative research about online shopping theory, and thought online shopping is the behavior for consumers to purchase online (C. M. K. Cheung *et al.*, 2005). According to Haubl and Trifts (2000), potential consumers often use a two-stage process in making purchase decisions. First, consumers will view a variety of products in order to identify appears of a subset of alternatives that meet their needs. Next, they will evaluate the subset deeper and deeper, performing relative comparisons across products that based on some desirable attributes and at last make a final decision. In summary, online shopping is what as long as consumers order products or services after browsing appropriate information online in this study.

2.2 Consumption Values

Sheth *et al.* (1991a) proposed theory of consumption or called TCV to integrate different models and frameworks of consumption. TCV is based on the composition of an extensive literature review and includes five different types of values that provide a comprehensive understanding of consumer experience according to consumer choice. The five values are briefly described as follows:

2.2.1 Functional Value

Functional value follows economic utility theory and assumes economic rationalism to concern the utilitarian functions and services that a product can offer. According to Sheth *et al.* (1991a), functional value is composed by the ability of product to perform its functional, utilitarian, or physical purpose and while it may be based on any outstanding physical property, sometimes price is the most important functional value.

2.2.2 Social Value

Social value has been defined as the “perceived utility acquired from an alternative’s association with one or more specific social groups” (Sheth *et al.*, 1991a). Things like highly visible products or services and objects to be shared with others are often driven by social value (Sheth *et al.*, 1991a, 1991b). Therefore, Social value related to the approval of social and self-image enhancing among others (Jillian C Sweeney & Soutar, 2001). The motivation of purchasing and using products depends on how you want to be seen by others and how you want to be seen (Sheth *et al.*, 1991b; Jillian C Sweeney & Soutar, 2001). The purchasing behavior can be a way for an individual to express his self-image socially to others.

2.2.3 Emotional Value

Emotional value is a social-psychological dimension that is dependent on the ability to arouse feelings or emotional states by a product (Sheth *et al.*, 1991a). That is to say, Feelings that people get after purchasing products or services, and other positive or negative feelings are all emotions. Thus, A product will have the value when related to some specific feelings or when precipitating or continuing those feelings. (Morris B Holbrook & Hirschman, 1982).

2.2.4 Emotional Value

Epistemic value applies when consuming or experiencing new products or services. That means the value is created when a product or service arouses consumers' curiosity, provides them novelty and satisfies their desire for knowledge. Therefore, factors of this value will be in decisions when consumer is bored with a current product, curious about something different, or just wants to experiment with something new. In some contexts, it could refer as novelty value and the value from learning new ways to do things. (Sheth *et al.*, 1991a)

2.2.5 Emotional Value

Conditional value is defined as the perceived utility acquired by an alternative as the result of the specific situation or set of circumstances facing the choice maker (Sheth *et al.*, 1991a). In addition, M. B. Holbrook (1994) presumes that conditional value depends on the context in which the value occurs and exits only when a specific situation happens. Therefore, conditional value applies to products or services whose value is strongly tied to use in a specific situation. It might be caused by temporary functional or social value (Sheth *et al.*, 1991a). Thus, conditional value could be described as a specific case of other types of value (Jillian C Sweeney & Soutar, 2001).

2.3 Purchase Motivation

Motivation would not necessarily trigger behaviors, but if the stimulate demand enhance to a certain extent, it will encourage consumers to take appropriate behaviors to solve the demand problem. That is if sellers can grasp consumers' purchase motivation, in order to do corresponding response to different purchase motivation, and provide greatest satisfaction for their consumers, the sales volume would be increase. Henry (1998) thought purchase motivation is a driving force that leads consumers to behavior in order to meet their needs. Lyles and Gilbert (1991) proposed a decision-making model for tourists that consumers' purchase decisions will be influenced by intrinsic factors such as motivation, personality, and cognition. Thus, purchase motivation is important, and will influence consumers' subsequent purchase decisions and behaviors. In summary, this study attempts to depth analysis by three aspects that are culture, products, as well as sellers.

2.4 Self-Efficacy

Self-efficacy was proposed from Social Cognitive Theory (Bandura, 1977), refers to the cognitive that whether a person has the ability to do a particular behavior or not, people may trust their abilities to engage in a particular behavior thus obtain a favourable result, resulting in behavior intention or actual behavior. Bandura (1982) considered self-efficacy as a belief of people who want to measure their performance in a particular field. Individuals have inner perception and judgment for their own work ability, the perception and judgment will influence the degree to involve in work, and the status of ongoing work for individuals. Bandura (1977) argued the self-efficacy is the cognitive of organizational ability and behavior capacity that an individual need when finishing a specific outcome or achievement. This study divides self-efficacy into two parts that are "Internet Self-Efficacy" and "Self-Efficacy of Purchasing Local Specialty."

2.5 Perceived Risk

Perceived risk will be higher when shopping at home, such as telephone shopping (Cox & Rich, 1964) or mail order (Spence *et al.*, 1970). Cox and Rich (1964) pointed out that consumers' perceived risks of telephone shopping is from the fear of if they can't get what they want. Spence *et al.* (1970) considered that consumers cannot check products before purchasing and the difficulty to return products after purchasing is why consumers will aware of high risks. Furthermore, consumers may aware of risks like time loss or unsuccessful purchase. Similarly, consumers may aware of higher risk when purchasing online (Tan, 1999). Cox and Rich (1964) conceptualized perceived risk as the considerations and the uncertainty results that consumers may face in a particular purchase decision. Julian C Sweeney *et al.* (1999) defined perceived risk as the subjective expectations of loss. It can be seen that there are two ways to define perceived risk; one is the uncertainty that consumers aware, another one is the subjective expectations of loss to consumers. After reviewing relevant literatures, this study defines the perceived risk as the considerations and the uncertainty results that consumers may face in a particular purchase decision.

2.6 Purchase Intention

Morwitz and Schmittlein (1992) pointed out that in many marketing studies; purchase intention is usually used as the predictive measurement of purchase behavior. Axelrod (1968) analysed purchase intention with attitude to predict the actual purchase behaviors. Silk and Urban (1978) have put purchase intention into a new product model as an input factor. With the rise of e-commerce, purchase intention can also be used in the Internet field. Jarvenpaa and Todd (1997) found out that product perception, shopping experience and customer service will affect consumers' purchase intention online. Brown *et al.* (2003) thought the factors that influence purchase intention online shopping are product categories, previously purchased experience, and even the gender. And for Liaw *et al.* (2005) found out the higher brand awareness and the richer the product information will lead to lower perceived risks and higher purchase intention for consumers. In summary, purchase intention is defined as whether consumers want to purchase online or to purchase local specialties online.

By examining the sources of purchase intention involved in online purchase local specialty, we believe the factors have influences on purchase intention and hence this study proposes the hypotheses below to test the relation of the factors.

Table 1. The proposed hypotheses

No.	Description
H1	Consumption values positively influence purchase intention of local specialty.
H2	Purchase motivation positively influence purchase intention of local specialty.
H3	Self-efficacy of purchasing local specialty positively influence purchase intention of local specialty.
H4	Internet self-efficacy positively influence online purchase intention.
H5	Perceived Risk positively influence online purchase intention.
H6	Purchase Intention of Local Specialty positively influence Online Purchase Intention of Local Specialty
H7	Online purchase intention positively influence Online Purchase Intention of Local Specialty.

3. Methodology

3.1 Framework and Measurements

The main concept of this research is to find out the factors that will influence purchase intention and form a structural model by using SEM to test each of the hypotheses. Each variable are latent variables thus are necessary to deploy observable constructs to measure the scale of each latent variable and examine the hypothesized framework. Measures used in this research are derived from existing literatures. Figure 1 depicts the framework of this study.

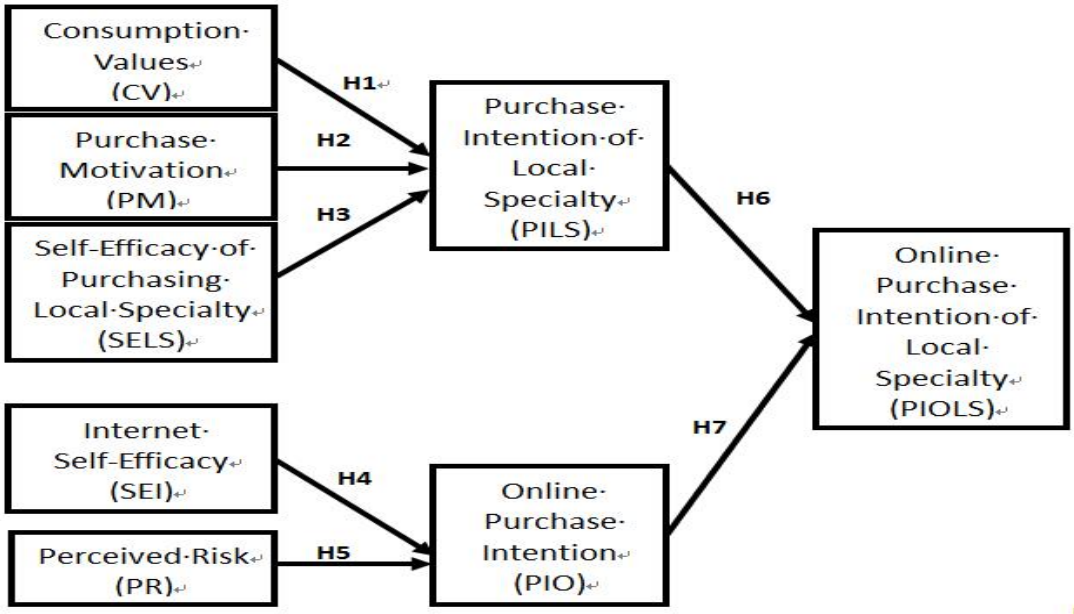

Figure 1. Research Framework

3.2 Questionnaire development

Based on a comprehensive literature review, we developed a self-administered questionnaire. The questionnaire was divided into eight sections. The first section measured the five consumer values and the self-efficacy of purchasing local specialty on the basis of an extensive review of the relevant literature. The five values are: social value, epistemic value, functional value, emotional value, and conditional value (Ajzen, 1991; Sheth *et al.*, 1991a). The respondents evaluated each criterion based on a 5-point Likert-type scale where 1 = very unlikely and 5 = very likely. The second section asked respondents to rate the motivations that they will consider when purchasing by using a 5-point Likert-type scale. These 9 questions were translated into 9 statements influencing them when purchasing local specialties. The third section measured the consumer's usage of the Internet. 3 questions were put in this section and measured by 5-point Likert-type scale. The fourth section is about the perceived risk that consumers will face when purchasing, and can be divided in three parts: financial risk, psychological risk, and time risk. There are 3 questions for each part and evaluated based on a 5-point Likert-type scale. The section 5 to 7 measured the intention of consumers when purchasing local specialties or purchasing online, and also evaluated by a 5-point Likert-type scale. The final section elicited relevant personal information, including their age, sex, education, income, and the other information we need.

To ensure that the questionnaire was clear and understandable, and to test the validity and reliability of the measuring instrument, a pre-test was conducted prior to administration of the actual survey. Moreover, in order to improve the convenience of sampling, save time and money and to eliminate the geographical limitation, the survey conducted online is more desirable than offline survey (Granello & Wheaton, 2004). Hence, the data in this study was collected by questionnaire placed on "my survey" website.

Table 2. Research variables and measurement items

Variable	Items
Social Value	Purchase local specialties consistent my identity and image.
	Purchase local specialties can get agreement of families.
Epistemic Value	I want to know the difference between local specialty & others.
	I'd be attracted by local specialties which are special packaging.
Functional Value	I think is more assurance to purchase famous local specialties.
	Famous local specialties have unique flavors.
Emotional Value	Purchasing local specialties made me love this land.
	Purchasing local specialties made me feel satisfied.
Conditional Value	I will purchase local specialties as gifts during festivals.
	I will purchase local specialties due to promotional activities.
Culture Motivation	Local cultural characteristics
	Limited local selling products
	History of the businesses
Product Motivation	Packaging design
	Convenient to carry
	Product prices
Store Motivation	Brand awareness
	Decorations of the store
	Service attitude
Self-Efficacy of Purchasing Local Specialty	I can distinguish which products are famous local specialties.
	I know where to buy local specialties.
	I have ample time to buy local specialties.
Internet Self-Efficacy	I think I have the ability to shop online.
	I can easily find the product I want on the Internet.
	I can easily find someone to help or teach me to use the net.
Financial risk	I am worried the product will not have the value that I imaged.
	I am worried about information of the credit card will be stolen.
	I am worried the delivery costs of online shopping are too high.
Psychological risk	Online shopping makes me have unnecessary worries.
	I am worried of the goods purchased online do not meet my.
	I am worried about the effect of online shopping is not good.
Time Risk	I am worried I have to spend time to browse related products.
	I am worried to spend time understanding the product.
	I am worried that I need to spend time waiting for the product.
Purchase Intention of Local Specialty	I will purchase local specialty with combination of local culture.
	I will purchase local specialty which has a story.
	I will purchase local specialty which provide inspection report.
Online Purchase Intention	I will shop online under this kind of network transaction stage.
	I am will shop online for online shopping is the worthy to use.
	I think I will still purchase the things I need online in the future.
Online Purchase Intention of Local Specialty	I think the experience to purchase local specialty online is good.
	I think the service of online is good compare with the cost I paid.
	Online shop is my first choice when purchasing local specialty.

3.3 Data Analysis Approach

We propose a Confirmatory Factor Analysis (CFA) and use the software AMOS 20 to investigate the reliability of the constructs and items. Next, the correlation analysis will be performed to check the mutual relationship between variables. Thirdly, we employed SEM to analyse the proposed hypotheses. This study included 327 respondents meeting the recommendation of prior studies that we need more than 200 respondents for accurate SEM (Anderson & Gerbing, 1991). In addition, the descriptive statistics of this study will analysis include gender, age, education, industry, place of residence, income and other demographic variables. And also analysis online experience, channels to purchase, and sources of information.

4. Results

4.1 Sample Structure

A total of 327 out of 358 people completed the questionnaire, representing a response rate of 91.3. Table 4.1 illustrates the demographic characteristics of the respondents. When employing SEM, the sample size must not be smaller than 200, nor must be greater than 400 because some indicators of model misspecification are sensitive to sample size. As the sample size in this study is 327 that falls within that range (J. F. Hair *et al.*, 1998; Pla-Barber & Alegre, 2007; Shook *et al.*, 2004).

Table 3. Sample Structure

Attribute	Distribution	Frequency	Percentage
Gender	Male	126	39%
	Female	201	61%
Age	Under 20	6	1.8%
	21-30	241	74%
	31-40	57	17%
	41-50	13	4%
	Over 51	10	3.2%
Education	High School	23	7.1%
	College/University	221	67.5%
	Institute	83	25.4%
Marriage	Unmarried	268	82%
	Married	59	18%
Profession	Teachers & Public servants	42	12.8%
	Business	30	9.2%
	Manufacturing	29	8.9%
	Service Industry	58	17.7%
	Others	7	2.1%
	Student	139	42.5%
	Retired	3	0.9%
	Unemployed	19	5.9%
Monthly incomes	Under 20,000	147	45%
	20,001-40,000	122	37.3%
	40,001-60,000	40	12.2%
	60,001-80,000	11	3.4%
	Over 80,001	7	2.1%

4.2 The Measurement Model

The general fit indices of the measurement model were all accepted, $x^2/df = 2.75$, IFI = 0.972, NFI = 0.954, NNFI = 0.904, CFI = 0.962, GFI = 0.983, AGFI = 0.914, SRMR = 0.038, and RMSEA = 0.073 (Bonnet, 1980; J. Hair *et al.*, 2006; Hoelter, 1983; Hu & Bentler, 1999). Values of Cronbach's alpha and composite reliability of the constructs were computed to test the reliability and validity of the measurements. Previous studies have indicated that Cronbach's alpha values greater than 0.70 and factor loading values higher than 0.50 indicate internal and convergent reliability (Cronbach, 1971). Therefore, the present study satisfied the recommended values for reliability (Table 4). Examining discriminant reliability, previous research of SEM has indicated that the square root of the average variance extracted (AVE) of all constructs should be greater than the correlation values between two constructs. All values met these recommendations for discriminant validity (Table 5).

Table 4. Discriminant results with the square roots of average variance extracted

	CVSO	CVEP	CVFU	CVEM	CVCO	PMC	PMP	PMS	SELS	SEI	PRF	PRP	PRT	PILS	PIO	PIOLS
CVSO	0.836															
CVEP	.180**	0.829														
CVFU	.314**	.280**	0.802													
CVEM	.377**	.343**	.419*	0.824												
CVCO	.285**	.275**	.305**	.477**	0.858											
PMC	.109*	.255**	.236**	.178**	.181**	0.853										
PMP	.277**	.257**	.112*	.199**	.207**	.239**	0.830									
PMS	.195**	.277**	.261**	.251**	.292**	.171**	.539**	0.833								
SELS	.263**	.228**	.368**	.500**	.458**	.183**	.091	.269**	0.851							
SEI	.088	.168**	.181**	.094	.215**	.235**	.056	.110*	.332**	0.864						
PRF	.018	.136*	.053	.083	.045	.124*	.265**	.139*	.038	.034	0.797					
PRP	.128*	.003	.054	.216**	.032	.059	.195**	.173**	.109*	.125*	.475**	0.808				
PRT	.102	.083	.069	.149**	.111*	.098	.240**	.226**	.082	.002	.425**	.565**	0.816			
PILS	.259**	.266**	.441**	.286**	.321**	.429**	.304**	.349**	.324**	.216**	.154**	.111*	.226**	0.891		
PIO	.152**	.274**	.143**	.120*	.172**	.185**	.181**	.132*	.153**	.483**	.052	.162**	.081	.253**	0.908	
PIOLS	.291**	.170**	.294**	.262**	.341**	.043	.088	.219**	.306**	.270**	.029	.013	.010	.184**	.231**	0.855

Table 5. Factor loading, Composite Reliability, and Cronbach's Alpha

Construct	Items	Factor Loading	Cronbach's α	CR
Social Value	CVSO1	0.837	0.748	0.836
	CVSO2	0.767		
Epistemic Value	CVEP1	0.842	0.732	0.829
	CVEP2	0.728		
Functional Value	CVFU1	0.758	0.707	0.799
	CVFU2	0.737		
Emotional Value	CVEM1	0.831	0.761	0.824
	CVEM2	0.751		

Conditional Value	CVCO1	0.761	0.704	0.858
	CVCO2	0.824		
Culture Motivation	PMC1	0.871	0.816	0.853
	PMC2	0.731		
	PMC3	0.830		
Product Motivation	PMP1	0.764	0.730	0.830
	PMP2	0.749		
	PMP3	0.832		
Store Motivation	PMS1	0.805	0.805	0.833
	PMS2	0.637		
	PMS3	0.816		
Self-Efficacy of Purchasing Local Specialty	SELS1	0.739	0.748	0.851
	SELS2	0.795		
	SELS3	0.889		
Internet Self-Efficacy	SEI1	0.793	0.766	0.864
	SEI2	0.799		
	SEI3	0.878		
Financial Risk	PRF1	0.805	0.751	0.797
	PRF2	0.788		
	PRF3	0.763		
Psychological Risk	PRP1	0.728	0.811	0.808
	PRP2	0.864		
	PRP3	0.694		
Time Risk	PRT1	0.716	0.806	0.816
	PRT2	0.718		
	PRT3	0.877		
Purchase Intention of Local Specialty	PILS1	0.737	0.719	0.891
	PILS2	0.767		
	PILS3	0.765		
Online Purchase Intention	PIO1	0.868	0.908	0.908
	PIO2	0.890		
	PIO3	0.869		
Online Purchase Intention of Local Specialty	PIOLS1	0.738	0.775	0.855
	PIOLS2	0.744		
	PIOLS3	0.841		

4.3 Hypothesis testing

This study tested the hypotheses in the research model to investigate the relationships in the structural. As summarized in Fig. 2 and Table 6. , five of the proposed causation were statistically supported and 2 of them were not. Without CV (H1, β = 0.090, CR = 0.882, p < .001); PM, and SELS significantly affected PILS (H2, β = 0.358, CR = 3.741, p < .001; H3, β = 0.325, CR = 3.215, p < .001). Also compared to the moderate effects of PR (H5, b = 0.003, CR = 2.058, p < .001), SEI had notable and positive effects on PIO (H4, β = 0.622, CR = 7.908, p < .001). And PIOLS was significantly determined by PILS and PIO (H6, β =0.157, CR = 2.406, p < .001; H7, β = 0.349, CR = 5.501, p < .001).

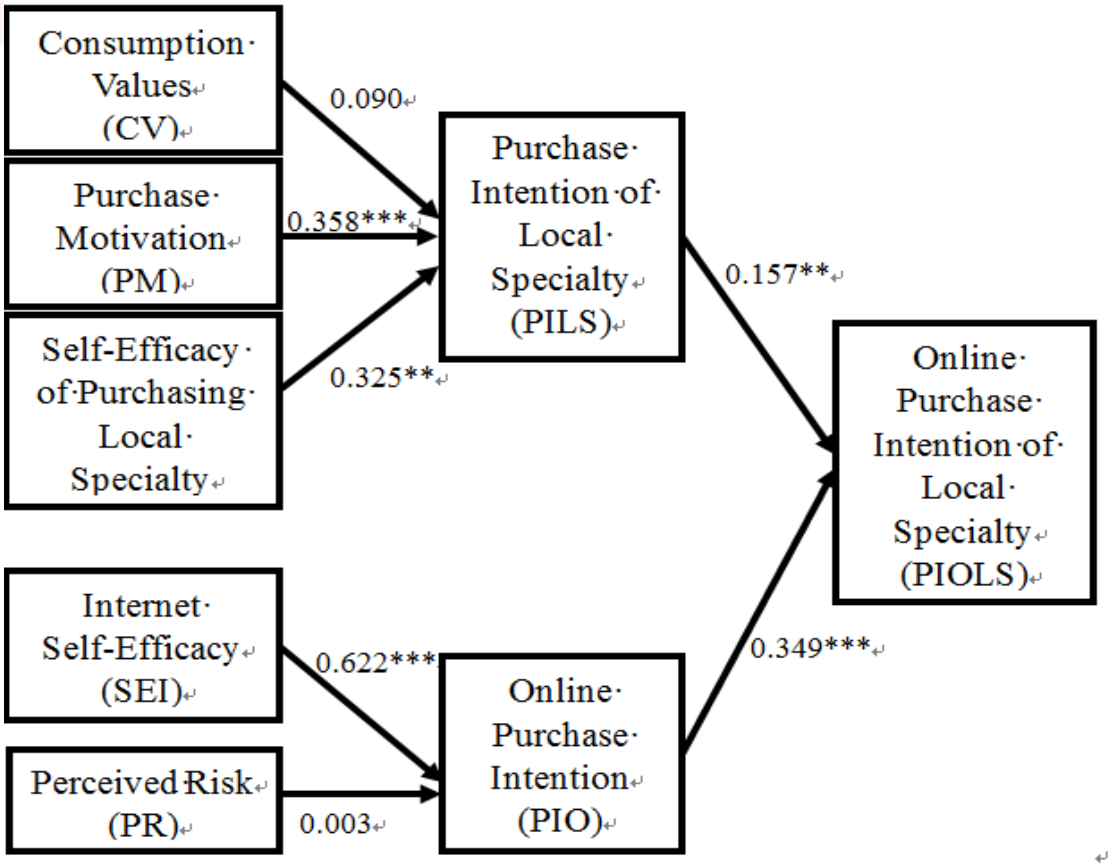

Fig. 2. Results of hypothesis tests; p < 0.001

Hypotheses	β	SE	CR(t)	Results
H1.CV→PILS	0.090	0.117	0.882	Non Supported
H2.PM→PILS	0.358***	0.197	3.741	Supported
H3. SELS→PILS	0.325**	0.100	3.215	Supported
H4. SEI→PIO	0.622***	0.102	7.908	Supported
H5. PR→PIO	0.003	0.068	2.058	Non Supported
H6. PILS→PIOLS	0.157*	0.068	2.406	Supported
H7. PIO→PIOLS	0.349***	0.055	5.501	Supported

5. Conclusion

5.1 Discussion

This study identified consumption values, purchase motivation, and perceived risk as key psychological factors that affect consumers' perceptions of purchasing local specialties online. These elements were identified through depth literature review and divided into two groups: purchase intention of local specialty and online purchase intention. And this study proposed an integrated conceptual model that incorporated the selected factors with TAM, using "Perceived Usefulness" and "Perceived Ease of Use" of its constructs to investigate consumers' self-efficacy of Internet and the purchase of local specialties. The statistical results of the SEM analysis indicate that our proposed model is not sufficient enough. Also, this study finds that PILS and PIO are the notable determinants of PIOLS. These determinants reveal the current state of online local specialty market: (1) Consumers will choose local specialties which meet their expectations. (2) Whether consumers will purchase local specialties online or to repurchase or not is still to be considered.

In addition, PILS and PIO each influence consumers intention of PIOLS, and PILS has a more powerful effect on PIOLS than PIO does, suggesting that consumers weight the characteristics of local specialties more heavily than the Internet transactions and experience. Moreover, there are two reasons why the model is not significant enough.

The first one is the consumption value. As the degree of recognition is general high in epistemic value, functional value, and conditional value ($M > 3.5$). And not to say high nor low in social value and emotional value ($3.5 > M > 3$).This is probably because social value is the estimate of the inner image and the social identity that gain by purchasing local specialties. Since local specialty is not a luxury good that can be showed off. Therefore, consumers will not care whether purchase local specialties is fashion or not, but the feeling get from purchasing. In addition, in the part of emotional value, consumers will more emphasis on the current situation when purchasing local specialties, rather than specifically to meet their satisfaction or show the love for the country.

The second one is the perceived risk. As can be seen in this study, the SEI will affect PIO, and thus to enhance the intention of purchasing local specialties online. And the self-efficacy is important to sellers who are trying to expand online shopping. It is because the detailed understanding will indirectly establish a good relationship between consumers and sellers. The originally prediction of this study is the lower the PR, the higher the PIOLS, but the result showed that although the PR of purchasing local specialties online is high to consumers, the PILS is still positive. Therefore we can presume the understanding of Internet plays an important role at this time, the perceived risk of purchasing local specialties online will be inhibited when consumers fully understanding of the usage of Internet.

5.2 Contribution of the Research

With the aim of this study is to understand the factors that are able to affect consumers' purchase intention when purchasing local specialties online, and understanding of what causes consumers to choose the products and repurchase them. Sellers of local specialties could also know how to increase the loyalty and intention of their consumers. This study also suggests that PILS and PIO will both influence PIOLS. Therefore, sellers should improve not only the products but the service online to attract more customers. This study also suggests sellers of local specialties to consider purchase motivation as a main factor to satisfy customers. For example, the good design of the package, the safety materials with certification, the clear way of decoration, and the good service of employee are very important to customers. Moreover, consumers usually get the information of local specialties from their friends and relatives also the Medias like TV program and Internet, sellers need to promote their products by these ways more frequency. Our study shows that if sellers of local specialties could take all this suggestions in mind, they can make their customers to repurchase again.

5.3 Limitation and Future study

The followings are the limitations and how we can improve them in future studies. First, the research target of this study is limited to local specialty, but there are a wide variety of products online. Thus, we hope the proposed model in this study can be used in other products in follow-up studies. Next, this study only discusses the consumption value of local specialty, but not depth discussion the consumption value of online shopping. Therefore, future scholars can investigate consumption value more widely for online shopping. Third, this study has made a complete discussion in the demand side of local specialty. But in reality, the success is caused by the balance of demand side and the supply side, so scholars can try to do more researches on the supply side of local specialty to create a complete supply chain, and make this market more mature. Finally, since the questionnaire of this study is only exposure through "my survey" as the limitation of time and cost, the quantity and the sample representativeness of respondents were also limited. Thus, future scholars can consider to cooperate with large online shopping websites, in order to make more people see their questionnaire, as well as to increase the representativeness of samples.

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Collaborative Conflict Resolution Strategy, Emotional Maturity, and Subjective Well-being on the Nurse

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Abstract
Nurses are the spearhead of medical services at the hospital, so their Subjective Well-Being (SWB) becomes very important to consider for improving the quality of patient care there. The complexity of the situations and conditions of service in hospitals, make many problems easily lead to conflict. That's why nurses SWB may be low, especially if the nurses themselves also lack the emotional maturity. The purpose of this study is to determine the role Collaboative Conflict Resolition Strategy (CCRS), which is used by supervisor, and Emotional Maturity (EM) on the formation of SWB on nurse. Research data collection use SWB scale, EM scale, and the scale of CCRS supervisors. The subjects are 82 nurses consist of 78 women and 4 men. By using statistical analysis of Multiple Regression can be concluded that there is influence CCRS used by supervisors, and emotional maturity on the formation of SWB on nurse with multiple regression coefficient R= 0.706 ($p<0.01$). CCRS contribution to SWB is 39.4 %, while the emotional maturity is 10.4 %.

Keywords: Subjective Well-Being, Collaboative Conflict Resolution Strategy, Emotional Maturity, Nurse

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Introduction

Subjective Well-Being (SWB) of nurses in the workplace is very important (Page, 2005). This is because the number of conflicts that may be faced by nurses in the hospital. Conflicts can not only occur by changes in government policy, which makes nurses feel treated fairly (Abubar, 2013), but can also be caused due to a conflict of nursing must consider certain aspects in the context of their work, for example in order to unify the professional staff of different types of knowledge, technology and infrastructure.

The ability of leaders or supervisors in resolving workplace conflict becomes very decisive to SWB of his subordinates. Conflict is considered a "natural process, which occurs between the various parties, and this is an inevitable aspect of a manager's job". There are five conflict resolution strategies offered by Kilmann & Thomas (1977), namely competition, colaboration, compromise, avoidance, and accommodation, Collaborative Conflict Resolution Strategies (CCRS) are the most thought to bring satisfaction to all parties who are in conflict. This was confirmed by studies that found that cooperative styles of handling conflict, in which is shown more concern for others, generally the yield beneficial outcomes in the workplace, whereas uncooperative styles generally produce negative outcomes (eg, Rahim & Buntzman, 1989). Other studies show that the use of conflict strategies supervisors (or managers) is related to various outcomes of subordinates, such as job satisfaction, supervision satisfaction, supervisor-subordinate relationships, long-term cooperation, and attitudinal and behavioral compliance (Thomas & Kilmann, 1978). That is why when his supervisor resolves conflicts using CCRS, it can be predicted that the subordinates can become more welfare, and optimize work performance. As well as a research by Alper, Law, & Tjosvold (2000), which tried to related the conflict resolution strategies in organizations with well-being. This study also wants to see the relationship between the perception created by nurses towards conflict resolution strategies used by the nurse supervisor with SWB. Due to the high SWB someone will show a good quality of life as well. According to Diener (1998), individuals who have a high quality of life will feel the happiness, well-being and satisfaction in life.

The work environment of nurses which easily lead to conflict, also easily lead to job stress. It can be caused by the pressure of working time, work load, the dual role, and emotional problems when nurses are performing their duties in the hospital (Lambert *et al.,* 2004). However, the demand of the nurses who are running the health service to the patient is to be always fit. In order to face the conflict they experienced with others, the nurse must have the good ability to control their emotions. Mature emotions help individuals to build a sense of tolerance in facing problems without showing excessive emotionality. Emotional maturity (EM) has become very important to every nurse. This is necessary so that the display of nursing care can be received by the patient gracefully. Chaurasia, *et al.* (2012) proved that EM was important in determining the level of SWB in the education of students with different environmental conditions.

Given the complexity of the situation that occurred in the hospital, then it becomes very important in this study to determine what is the role of Collaboative Conflict Resolution Strategy (CCRS), which is used by the supervisor, and Emotional Maturity (EM) nurse, on the nurse SWB formation.

Subjective Well-Being

SWB is a topic that is often discussed by experts in the past twenty years. According to Diener (1984) notion of SWB can be categorized in three groups, namely the first SWB is defined as something that is outside the individual, such as chastity, virtue, and wisdom. Definition of SWB is not an individual, but a norm adopted by the culture. Feelings of SWB is determined by how the norms that apply to most people in a society, so happiness according to Tatarkietwict (1976) is a success, because it has to meet certain standards set by society. The second view is triggered by questions from scientists about what can cause an individual evaluates himself in a state of positive or comfortable? The definition of SWB was associated with feelings of satisfaction with life, which he discharged. Shin & Johnson (in Diener, 1984) defines happiness as a global assessment of the quality of one's life according to his chosen criteria. The third view of happiness is derived from everyday sense, namely that defines happiness or SWB as a more positive feelings appear to happen in his life rather than negative feelings. This definition emphasizes the experience of positive or negative feelings.

In this study, Subjective Well-Being (SWB) has been defined as a person's evaluation of his or her life, including both *cognitive judgments* of life satisfaction and *affective evaluations* of moods and emotions (Campbell, Converse & Rodgers, 1976). In other words, SWB measures how people feel about their lives. The notion of SWB incorporates positive factors and not just the absence of negative factors (Park, 2004). As stated by Diener (1984), the notion of SWB is characterized by three things, first is subjective sense. According to Campbell (1976), this is something that is individual not objective as wisdom, health, comfort normative. This may be in contact with SWB, but it is not a part thereof. Second, SWB is characterized by a positive measure, so that SWB is not just measured by the absence of negative feelings in a person alone. Third, the measurement of SWB should include a global measurement of the overall aspect of a person's life. Veenhoven (1993) argued that global judgment, such as life satisfaction, is very important in assessing SWB because it best reflects the philosophical notion of the good life. In this case it may be measured in most aspects of life, but this should be an integrated measurement in all aspects of life. Similarly, in terms of measurement time can be limited few weeks months or years, but in principle should be that a person believed to be an overall feeling of the time aspect of life (Myers & Diener, 1995). Diener, *et al.* (2003) concluded that the SWB is an individual evaluation of a situation or a longer period of her life, and that includes the past. The evaluation covered the emotional reaction to a situation, the mood and the assessment of their life, fulfillment, and satisfaction with marital and employment. Furthermore, Philips (2006) states that SWB is more complex than just happiness.

This study as well as research from several experts (Diener, 1984; Diener & Lucas, 1999), which states that SWB has three components: positive affect, lack of negative affect and life satisfaction. Lucas, Diener, and Suh (1996) demostrated that multi-item life satisfaction, pleasant affect, and unpleasant affect scales formed factors that were separable from each other. Diener and Lucas (1999) explained that pleasure and displeasure is a separate feeling, not like two sides of a coin because someone could occur at the level of an equally high for the two feelings or both are at a low level for the two feelings. Diener and Lucas states there are four classifications of feelings,

namely (1) a high level sense of excitement coupled with the low feeling happy: so-called happy, (2) good feeling low level plus the high feeling unhappy: called unhappy, (3) Level feelings of pleasure and displeasure are all high: so-called emotional, (4) Level feelings of pleasure and displeasure are all low: called not-emotional. Based on this, the individuals who have high SWB are individuals who are happy and satisfied with his life, while an unhappy and dissatisfied with his life is feeling low SWB. SWB is something that is important, because if the individual has this condition, quality of life can be achieved (Philips, 2006).

Colaborative Conflict Resolution Strategy and SWB

Conflict is a social problem in which two or more persons, families, parties, communities, or districts are in disagreement with each other (Dzurgba, 2006). Interpersonal conflict is a disagreement between two or more persons. Organisational conflict is a disagreement between or within groups in an organisation. The groups may be workers, workers' unions or management. Organisational conflict is common in the workplace because people always have divergent views on various issues, interests, ideologies, goals, and aspirations (Deutsch, 1990). Some negative consequences of conflict can undermine an organisation's efforts. However, handled correctly, conflict can benefit individuals and organisations by producing stronger, more resilient working relationship, improving creative output and generating innovative solutions (Omoluabi, 2001).

Conflict resolution is a relational approach to handling conflicts. It is a process in which interpersonal communication is used to get the parties to a conflict to reach a reconciliation and satisfactory point of agreement (Omoluabi, 2001). The strategies of a person in performing conflict resolution can be viewed by two dimensions: (1) assertiveness, the extent to which the individual attempts to satisfy his own concerns, and (2) cooperativeness, the extent to which the individual attempts to satisfy the other person's concerns. These two basic dimensions of behavior can be used to define the five conflict resolution strategies, namely: (1) Competing is assertive and uncooperative, an individual pursues his or her own concerns at the other person's expense. Competing is often portrayed as forcing, confrontation, win-lose, dominating (Rahim and Bonoma, 1979). Competing might mean "standing up for your rights", defending a position which you believe is correct, or simply trying to win. (2) Accommodating, is unassertive and cooperative—the opposite of competing. When accommodating, an individual neglects his/her own concerns to satisfy the concerns of the other person; there is an element of self-sacrifice in this mode. This accommodation conflict management strategy attempts to satisfy the other party's concerns, while neglecting one's own concern in conflict situations; (3) Avoiding, is unassertive and uncooperative— neglects both parties concerns, conflict is still not resolved and the two parties disagree about many issues. Avoiding might take the form of diplomatically sidestepping an issue, postponing an issue until a better time, or simply withdrawing from a threatening situation. (4) Collaborating, is both assertive and cooperative—the opposite of avoiding. Collaborating is often described as a problem solving strategy, synergistic, or integrating (Rahim and Bonoma, 1979). Collaborating, involves an attempt to work with the other person to find some solution that fully satisfies the concerns of both persons. It means digging into an issue to identify the underlying concerns of the two individuals and to find an alternative that meets both sets of concerns. Collaborating between two persons might take the form

of exploring the disagreement to learn from each other's insights, attempting to resolve some condition that would otherwise have them competing for resources, or confronting and trying to find a creative solution for an interpersonal problem. (5) Compromising, is intermediate in both assertiveness and cooperativeness. Compromising, attempts to attain moderate but not total satisfaction of parties' concerns, not only giving up something but also holding out for something (Blake and Mouton, 1964); the objective is to find some expedient, mutually acceptable solution that partially satisfies both parties. It falls on a middle ground between competing and accommodating. Compromising gives up more than competing, but less than accommodating. It involves searching for integrative, win-win resolutions of conflict that fully satisfy the concerns of the two parties in disagreement by expanding the level of joint outcomes.

In the context of Indonesian society, indigenous conflict resolution strategy is justice and harmony (Suprapto, 2013), that is why this study focuses on CCRS used by a nursing supervisor at the hospital in performing her duties as perceived by nurses. CCRS is a strategy that allows for communication both conflicting parties to reach an agreement that is acceptable together. This shows CCRS ranks high on both assertiveness and cooperativeness, supporting a win-win orientation. It may lead to positive work behavior and attitudes of the parties in conflict. The results of collaboration are positive because both sides win, communication is satisfying, relationships are strengthened, and negotiated solutions are frequently more cost-effective in the long run. As said Montoya-Weiss *et al*. (2001) that the advantage of using this style is make all parties happy with the final decision. On the other hand, due to letting all parties to be satisfying the final decision, it may use longer time and put in more effort than other styles (Huan & Yazdanifard, 2012).

Collaboration, the most preferred style of conflict, requires both assertiveness and cooperation. It is when both parties agree to a positive settlement to the conflict and attend fully to the other's concerns while not sacrificing or suppressing their own. The conflict is not resolved until each side is reasonably satisfied and can support the solution. Collaboration is the ideal conflict style because it recognizes the inevitability of human conflict. It confronts conflict, and then uses conflict to produce constructive outcomes. This means that the one's SWB will increased if the supervisor using the CCRS. Pearlstein (2012), confirms that those who have a high quality of life is more like the situation where they found higher cooperation, less work conflict situations, and more productive than individuals who have a low quality of life.

Emosional Maturity and SWB

According to Menninger (1999), emotional maturity (EM) includes the ability to deal constructively with reality. EM is a process in which the personality is continuously striving for greater sense of emotional health, both intra-physically and intrapersonally. EM can be understood in terms of ability of self control which in turn is a result of thinking and learning (Pastey & Aminbhavi, 2006). Chamberlain (1960) said that an 'emotionally matured' person is one whose emotional life is well controlled. Hurlock (1973) says that EM has three criteria. First, which controls emotions that need to be socially accepted by social environment. Second, is the self-understanding of individuals who have the emotional maturity, able to learn to know the amount of control needed to satisfy her needs. Third, is the use of critical mental

functions. Individuals who are emotionally mature able to critically assess the situation before giving emotional response, then these individuals know the right way to react to the situation.

The Sigh & Bhargava (in Mortazavi, *et. al*., 2012) when preparing Emotional Maturity Scale (EMS), said there are five factors to consider to declare a person that has the emotional maturity or immaturity of thinking about emotions. These five factors are a) Emotional unstability represents syndrome of lack of capacity to dispose off problems, irritability, needs constant help for ones day to day work, vulnerability, stubbornness and temper tantrums; b) Emotional regression represents such syndromes as feelings of inferiority, restlessness, hostility, aggressiveness and self centeredness; c) Social maladjustment shows person lacks social adaptability; d) Personality disintegration where person suffers from inferiorities and hence reacts to environment through aggressiveness, destruction and has distorted sense of reality; and e) Lack of independence shows persons parasitic dependence on others, lack of objective interests in people and think of him as an unreliable person.

By using EMS, Singh, Kaur & Dureja (2012) investigated the Emotional maturity differences among university students. From these studies it can be concluded that a mature person views life experience as learning experiences and, when they are positive, he enjoys and revels in life. When they are negative, he accepts personal responsibility and is confident and can learn from them to improve his life. When things do not go well, he looks for an opportunity to succeed. The immature person curses the rain while a mature person sells umbrellas. When things do not go as anticipated, the immature person stamps his feet, holds his breath and bemoans his fate. The mature person considers using another approach or going another direction and moves on with life. Rathee and Salh (2010) found that International players are significantly better in emotional maturity as compared to state players. When frustrated, an immature person looks for someone to blame. The mature person looks for solution. Immature people attack people; mature people attack problems. The mature person uses his anger as an energy source and, when frustrated, redoubles his efforts to find solutions to his problems.

From the above discussion it can be easily understood that the individual who has the emotional maturity will have a SWB as well. Individuals who have EM will have good self-control as well, able to express his emotions properly or in accordance with the circumstances they face, better able to adapt so as to receive a variety of people and situations and provide appropriate reaction to the demands faced (Hurlock, 2002). Therefore, in the face of environmental individuals who have emotional maturity will be more comfortable, more confident, have more positive feelings than negative feelings, and the judge allow him more success than individuals who received less mature emotionally. These characteristics are consistent with those defined by Diener *et. al.* (2009) on SWB that SWB is defined as a person's cognitive and afective evaluations of his or her life. These evaluations include emotional reactions to events as well as cognitive judgements of satisfaction and fulfillment. Thus, SWB is a broad concept that includes experiencing pleasant emotion, low levels of negative mood, and high life satisfaction.

Method

The subjects are 82 nurses, consist of 78 women and 4 men, with the characteristics of the subjects are nurses who have a minimum of one year work at the hospital, and have employment status as permanent employees. Research data collection method was using scales method, namely (1) the scale of SWB, this scale is based on the preparation of Pavot (1991), Watson (1988) and Kahneman. & Krueger (2006), which has three components items, namely the aspect of feeling positive, lack of negative feeling, and life satisfaction, (2) EM scale, this scale is based on the scale developed by Singh & Bhargav (1988), and the scale of CCRS supervisors, excerpted from Rahim & Magner (1995)

The data obtained from the nurses who are expected to respond to 12 items SWB scale, 12 items EM scale, and 12 items CCRS scale. All of the scales using 6-point Likert scale, which ranks from fully disagree (1) to fully agree (6). The scale of this study is valid and reliable. The corrected item total correlation coefficients for SWB scale ranged from 0,204 to 0,844, the EM scale ranged from 0.258 to 0.514, and for CCRS scale ranged from 0.271 to 0.778. While reliability coefficient of alpha, SWB scale is 0844, EM scale is 0.609, and the CCRS scale is 0.897. Data analysis techniques used in this study is Multiple Regression Analysis. This analysis is used to examine the effect of EM and CCRS to SWB.

Results and Discussion

The Control variables: age, and sex were treated as covariates to reduce error variance (Aiken & West, 1991). Age, and sex were treated as control variables because previous researchers have proved that they exert some influence on SWB (Nagata *et.al*., 1999; Bălţătescu, 2014). The independent variables were the CCRS and EM, while the dependent variable was SWB. Hierarchical multiple regression analysis was used to analyze the data in order to examine the prediction of SWB from the CCRS and EM.

Table 1
Means, S.D. and Zero-order correlations of all variables in the study (N = 82)

	Sex	Age	EM	CCRS	SWB
Sex	---				
Age	.088	---			
EM	.051	-.043	---		
CCRS	.016	.038	.564**	---	
SWB	-.033	-.041	.523**	.686**	---
Mean	1.95	31.5	53.84	48.09	46.22
S.D	.217	5.970	8.155	8.120	7.148

Note: S.D.= Standard Deviation, SWB= Subjective Well-Being, EM= Emotional Maturity, CCRS= Colaborative Conflict Resolution Strategy; **. Correlation is significant at the 0.01 level (1-tailed).; *. Correlation is significant at the 0.05 level (1-tailed).

Means, standard deviations, and intercorrelations for each scale are presented in Table 1. The result on Table 1 reveal that all the control variables had non-significant correlation with SWB. This result could be attributed to the fact that sex and age can

not be used as a predictor in determining a person's SWB. This is consistent with the research of Hansen & Slagsvold (2012) which was not able to find a correlation between age with SWB, and research of Sposito, *et. al.* (2010) that was not able to find differences in SWB in different sex. A significant positive correlation between SWB and CCRS (r_{yx1}) = .686; p < .01), and EM (r_{yx2}) = .523; p < .01),

Table 2.
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686[a]	.471	.464	5.231
2	**.706[b]**	**.498**	.485	5.128

a. Predictors: (Constant), CCRS
b. Predictors: (Constant), CCRS, EM

By using statistical analysis of multiple regression shown in Table 2 and Table 3 can be concluded that if SWB is predicted only by CCRS, then the coefficient of multiple regression R = .686 (p< .01); whereas if SWB is predicted by the CCRS, and EM on nurse, multiple regression coefficient R = .706 (p< .01). The CCRS contribution to SWB is 39.4%, while the EM is 10.4%.

Table 3
Coefficients of Unstandardized & Standardized Each Model

		Unstandardized Coeff.		Standardized Coeff.		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	17.168	3.490		4.919	.000
	CCRS	.604	.072	.686	8.441	.000
2	(Constant)	12.541	4.095		3.062	.003
	CCRS	.505	.085	**.574**	5.947	.000
	EM	.174	.085	**.199**	2.057	.043

a. Dependent Variable: SWB

The results indicate that the nurses who perceive her/his supervisor use the CCRS in resolving conflicts in the work environment is greater than the effect of EM on SWB. An important theoretical implication of the findings from this study regarding the efficacy of conflict resolution strategies and EM in predicting SWB is that Organisational/Industrial Psychologists should include conflict resolution strategies and EM in a design model to enhance the SWB of nurses in the hospitals.

Conclusion

In conclusion, this study has demonstrated that CCRS can predict SWB alone, but it would be more accurate if EM is taken into account as a wariable to predict EM SWB the nurses. This study is not without limitation, one of the limitation is the self-report measures used in the data collection. Future studies could, therefore, complement these measurements with other methods such as interviews and focus group discussion techniques. Both in this study the proportion of male nurses and women

are not equal in number, so that in future research is expected to consider the proportion of the difference.

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Urbanization, Poverty, and Subjective Well-Being: Empirical Evidence from Thailand

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Abstract
This paper uses multivariate analyses to investigate whether urban settings have effects on four well-being measures, namely life satisfaction, happiness level, mental score, and illness in the previous month. The results show that after controlling for individual socioeconomic factors, urban settings still have negative effects on life satisfaction while urban settings have no statistically significant effects on happiness level, mental score, and the likelihood of being ill. In addition, the paper suggests that being poor has statistically significant negative effects on all of the four measures of well-being, with stronger effects of poverty in rural settings. The paper also suggests that individual factors may serve as moderators of urban/rural poverty differences as some of the effects of urban settings disappear after controlling for individual socioeconomic backgrounds.

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Introduction

In recent decades, urbanization has grown rapidly. According to the World Urbanization Prospects: The 2009 Revision, the world population living in urban areas surpassed the population living in urban areas for the first time in 2009 (United Nations, 2010). Worldwide, there were approximately 3.42 and 3.41 billion people, respectively, living in urban and rural areas. This higher urbanization rate is a continuing trend. On average, 53 percent of those living in developed countries live in urban areas, while for developing countries the figure is 50 percent. The number of "megacities" will increase from 21 in 2009 to 29 in 2025. Seventeen out of the 21 megacities in 2009 were in Asia, and the largest were also in Asia, namely, Tokyo, Delhi, and Mumbai.

Urbanization in Thailand is relatively low, at 31 percent, compared to the neighboring countries such as Indonesia (53 percent) and Malaysia (71 percent). Urban residents in Bangkok face problems of high pollution, traffic congestion, sanitation, utility access, and illicit drugs. According to Suthiwart-narueput (2011), from 1999 to 2009 urbanization in Thailand has been relatively slow, proceeding at a rate of only 0.8 percent, compared to 8 percent in Indonesia and 7 percent in Malaysia. This is because the costs of urbanization in Thailand are relatively high due to the negative externalities resulting from a high concentration of population.

There is already a consensus among economists and policymakers that urbanization generates negative externalities, such as pollution, crime, and congestion. It is, however, not yet conclusive whether, on balance, urbanization adversely affects physical and mental health since urbanization also provides positive externalities, for example, access to better medical care, developed infrastructure, and more sophisticated facilities,[1] which should therefore promote health and enhance happiness among urbanites. In this paper, the impacts of urbanization will be investigated and empirically tested not only in terms of mental and physical health, but also in terms of life-satisfaction and happiness.

[1] According to Suthiwart-narueput (2011), Thai urban residents had on average twice the income of rural residents. Urban residents are 100 percent more likely to own a private car and 50 percent more likely to own an air-conditioner, a microwave, and a computer.

Factors Related to Happiness

Researchers in various fields have attempted to understand the "intrinsic value of happiness" and "the sources of happiness." Some studies have attempted to discover an association among different socioeconomic or demographic factors with happiness. Others have used happiness as a measure to evaluate the net effects of a particular economic policy that has both costs and benefits to the overall society (Frey & Stutzer, 2003). Recently, research on happiness has been linked to sociology and economics on a larger scale, especially with regard to the determinants of happiness. In general, the research on the determinants of happiness can be divided into macroeconomic and microeconomic studies.

In macroeconomic studies, researchers attempt to determine the effects of socioeconomic indicators (e.g., average income, employment rate, and pollution) on happiness. Even though the average income and consumption figures of the world population have increased, various indicators suggest that happiness among the world population has not significantly changed. Some studies have even found that people's unhappiness has increased. Some found that an increase in happiness came from factors other than those determining economic growth.

Explanations for the lack of a rise in happiness to accompany economic growth include, for example, the fact that relative to values of those living in less developed countries, the values of people living in developed countries are not attached so much to nature and the environment and are more money oriented, resulting in a lower life satisfaction. However, residents in developed countries tend to have better health and greater longevity. In addition, people who live in wealthier countries receive more and higher quality social welfare, which offsets the effects of environmental destruction on happiness. In general, economic studies find that happiness comes from living in a good environment and a good society, where people are considerate and kind. Other studies, for example, Esterlin (1974) and Leigh and Wolfers (2006), use macroeconomic indicators to investigate the relationship among happiness, human development, and economic level.

Other studies use microeconomic data to explain the relationship between particular variables and happiness at the individual level. These findings on wealth and income often contradict those from macroeconomic studies. For example,, income seems to have a positive effect on happiness. Presumably, poorer people have fewer opportunities to consume goods that create happiness and usually have limited access to social welfare. In addition, micro-level data reveal that the level of happiness decreases when the person is unemployed, receiving less income, and living in an urban area (Gerdtham & Johannesson, 1997; Easterlin ,2001). In addition, happiness is greater for married persons, people who have higher education, and people who have better health (Frey & Stutzer, 2003; Frey & Stutzer, 2004; Gerdtham & Johannesson, 1997). Other studies find that the relationship between age and happiness is U-Shaped, where the lowest happiness level is associated with middle age.

This paper focuses on micro-level analyses and, using individual socioeconomic factors and social context, attempts to investigate the impact of social context in terms of livelihood on urban-rural differentials in happiness and other measures of subjective well-being. Data used in the analysis come from a national-representative psychological survey of Thai people. This paper

investigates how people living in urban areas differ from those living in rural areas in terms of mental and physical well-being. In addition, it attempts to answer the question whether the difference in these mental and physical well-being measures result from positive and negative externality effects of urbanization other than differences in socioeconomic factors of individuals residing in the two areas. Various measures of particular attributes on well-being are also tested to investigate positive and negative externalities of urbanization on mental and physical well-being.

Subjective Well-Being and Measures of Happiness

Subjective well-being has been measured using various indicators. These include happiness scores and degrees of overall life satisfaction. Stutzer and Frey (2006) explain that subjective well-being is a scientific term used to measure an individual's happiness or life satisfaction, which is the evaluation of his or her experienced positive and negative affects. Single or multiple questions are used to obtain indicators of an individual's happiness or life satisfaction. The score, indicated by him- or herself, represents a cognitive assessment of one's overall quality of life (Weenhoven, 1993). Frey and Stutzer (2002) offer their interpretation of subjective well-being as "an attitude consisting of the two basic aspects of cognition and affect. 'Affect' is the label attached to moods and emotions. Affect reflects people's instant evaluation of the events that occur in their lives. The cognitive component refers to the rational or intellectual aspects of subjective well-being. It is usually assessed with measures of satisfaction." Measures of subjective well-being can serve as proxies for "utility" since "people evaluate their level of subjective well-being with regard to circumstances and comparisons to other persons, past experience, and expectation of the future" (Frey & Stutzer, 2002). According to Frey and Stutzer's review, a "subjective approach to utility offers a fruitful complementary path to study the world. Firstly, subjective well-being is a much broader concept than decision utility; it includes experienced utility as well as procedural utility, and is for many people an ultimate goal. Secondly, the concept of subjective happiness allows us to capture human well-being directly" (2002).

There have been discussions on the comparability of subjective well-being across individuals in the literature on the determinants of happiness. Ferrer-i-Carbonell and Frijters (2004) offer an extensive review of the main assumptions that have been used in the interpretation of life satisfaction scores. There are three main assumptions: 1. General satisfaction can be used as a proxy for welfare if emotional expressions and choice behavior are truly related to the underlying metaphysical concept of welfare and that feeling of general satisfaction is a positive monotonic transformation of an underlying metaphysical concept called welfare. 2. General satisfaction is interpersonally ordinally comparable. This implies that individuals share a common opinion of what happiness is. This assumption relies on supporting evidence from two psychological findings: a) Individuals are somewhat able to recognize and predict the satisfaction level of others[2] and b) Individuals in the same language community have a common understanding of how to translate internal feelings into a number scale.[3] 3. General satisfaction is interpersonally

[2] In interviews in which respondents were shown pictures or videos of other individuals, respondents were somewhat accurate in identifying whether the individual shown to them was happy, sad, jealous, etc. (Sandvik et al., 1998; Diener & Lucas, 1999).This also held when individuals were asked to predict the evaluations of individuals from other cultural communities

[3] Respondents have been found to translate verbal labels, such as "very good" and "very bad" into roughly the same numerical values (Van Praag, 1991).The empirical analysis of GS under the ordinal comparability assumption makes use of latent variable models, such as ordered probit and logit.

cardinally comparable.[4]
Moreover, Ferrer-i-Carbonell and Frijters (2004) find that assuming ordinality or cardinality of happiness scores makes little difference in their estimations of happiness determination while allowing for fixed-effects does change results substantially. They suggest that more research should be carried out into the determinants of the personality traits making up these effects of time-invariant factors. Easterlin (2001) also offers an explanation as to why happiness or life satisfaction scores can be compared across individuals.[5] In addition, Frey and Stutzer (2000) offer a lot of indirect evidence that cardinalism and interpersonal comparability are much less of a problem practically and that the measure of subjective well-being has high consistency, reliability, and validity.[6]

Urban/Rural Social Context of Well-Being
This paper focuses on the community effects on well-being with regard to an urban-rural differential. Frey and Stutzer (2000) propose that the three main determinants of happiness are: 1. personality and demographic factors, 2. micro- and macroeconomic factors, and 3. institutional conditions in an economy and society. Diener et al. (1999) report from their review that a happy person is likely to be "young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, and married person with high self-esteem and modest aspirations. Nevertheless, Heliwell and Putnam (2004) conclude from their review that subjective well being is best predicted by the breadth and depth of individual" social connection. Specifically, "people who have close friends and confidants, friendly neighbors and supportive coworkers are less likely to experience sadness, loneliness, low self-esteem and problems with eating and sleeping."
Urban settings are more stressful given their high rates of crime, competitiveness, substandard housing, more sanitation problems, higher congestion, and higher pollution while people in rural settings receive less income and are able to utilize fewer infrastructure developments and materialistic conveniences. Given this common knowledge of possible negative and positive externalities of urban settings, one can expect to observe a differential in the well-being of people living in urban and rural areas due to contextual settings. Shields et al. (2007) find that neighborhood measures of social support and interaction and the absence of socioeconomic deprivation are positively and significantly correlated with life satisfaction.
A number of studies also suggest that poverty has negative consequences for well-being and quality of life. The poor are more likely than others to be exposed to unemployment, crime,

[4] This assumption usually amounts to assuming that the difference between a satisfaction answer of, say, an 8 and a 9, is the same as the difference between a 4 and a 5 (NG, 1996;1997).When GS is assumed to be a cardinal measure of welfare, the empirical analysis is often realized by means of OLS or similar methods.
[5] In his view, "although each individual is free to define happiness in his or her own terms, in practice the kinds of things chiefly cited as shaping happiness are for most people much the same–probably because most people everywhere spend most of their lives doing the same types of things. So if one is concerned with comparing the subjective well-being of sizable groups of people, such as social classes, this similarity in feelings about the sources of happiness gives credence to such comparison."
[6] Some empirical evidence would be, for example, that happy people are more often smiling during social interactions (Fernandez-Dols & Ruiz-Bed, 1995). Happy people are rated as happy by friends and family members (Sandvik et al., 1993), as well as by spouses (Costa & McCrae, 1988). Furthermore, according to Frey and Stutzer (2000), there is evidence that the measure of subjective well-being has a high degree of stability over time (Headey & Wearing, 1989) and is not systematically biased with regard to social desirability (Konow & Earley, 1999).

victimization, stressful life events, and illness. They are also likely to live with chronic strains (such as job dissatisfaction and frustrated aspirations) that may lead to lower self-esteem and a lower sense of control over life (Amato & Zuo, 1992). Because the poor usually lack economic resources to maintain social activities, they are found to have less contact with friends and family and less community involvement (Amato & Zuo, 1992). Reviews of the association between socioeconomic status and psychological well-being reveal an association between low socioeconomic status and high rates of depression, mental illness, and lower psychological well-being (Dohrenwend & Dohrenwend (1974); Haring, Stock, & Okun (1984)).

In terms of the effects of poverty on well-being, Amato and Zou (1992) propose that even though a negative association between poverty and psychological well being has been consistently estimated, the effects of poverty can be different in different settings. Amato and Zou (1992) propose that subjective well-being of the urban poor and the rural poor can be different due to four main considerations:

1. Urban poverty is more detrimental to psychological well-being than rural poverty. The urban poor often cluster in congested neighborhoods with substandard housing, high crime rates, excessive noise levels, and inadequate services. In addition, social networks maybe more supportive in rural areas compared to urban areas. Rural networks are denser, more kin-based, and more bound up with religious institutions.
2. Rural poverty is more debilitating than urban poverty because the attitudes toward the poor are different in urban and rural communities. According to Amato and Zou's review, the stigma of poverty is greater in rural areas than large cities. The rural poor who live where poverty is seen as shameful may develop a sense of failure and adequacy. In addition, rural poor individuals are usually isolated from other poor individuals due to their being diffused over a large geographical area. The rural poor are therefore less likely to build a sense of common fate and positive self-image.
3. The observed differential in the well-being of the urban poor and the rural poor may not be due to characteristics of urban-rural settings themselves, but due rather to differences in the two populations in terms of ethnicity, age, family status, and other demographic characteristics.
4. Rural and urban poverty are not related to psychological well-being overall. According to this position, race and family structure may serve as moderators of urban/rural poverty differences.

This paper aims to test

1) urban-rural differentials in various measures of well-being in Thailand
2) urban-rural difference in various attributes to well-being
3) the effects of social context on various well-being measures controlling for sociodemographic factors at individual levels
4) the differences in the well-being of the urban poor and the rural poor.

Data

Data were obtained from the Development and Testing of Thai Mental Health Indicator (TMHI) Version 2007 by Apichai et al. (2007). Intended to develop a new Thai Mental Health Indicator,

the Development and Testing was divided into two stages. The first stage involved validity study of the interview questions. In the second stage, a survey was carried out using a multi-stage random sampling of the Thai population. Using the Systematic Random Sampling Method, the survey obtained information from only one individual per household who was aged 15 to 60 years and who had resided in the designated area for at least one year. As a result, 3,184 representative samples of Thai individuals were selected and divided according to region, area of residence (urban/rural), and economic status (level 1, 2, or 3). The samples came from 15 provinces in five regions. Various mental health indicators in the TMHI were extensively studied with a focus on verifying that the shorter and longer versions of the questions were compatible.

The results from the validity and reliability tests of the questions gave a full version of 55 questions and a short version of 15 questions. Both versions contained four domains (mental state, mental capacity, mental quality, and supporting factors). The long version contained 15 sub-domains, where information on various aspects of mental health was obtained. Respondents were asked to describe what most accurately reflected their response to the statement in the question.[7] Using various validity tests and score comparisons, both long and short versions of the TMHI were assessed and found to be reliable instruments for assessing the mental health of the Thai population. Data on sociodemographic, socioeconomic, and physical health backgrounds of respondents were collected using a limited set of questions. Respondents were asked whether they felt satisfied with their lives on the answer scale of four. In addition, respondents were asked to report their happiness level (1-10). This paper examines life satisfaction and happiness level (1-10), as measures of subjective well-being, as well as mental health scores and whether the person had "illness in the past month," as measures of mental and physical well-being. The cutoff for mental score of the Thai population that is "below-average" mental health (namely, a score of 157 out of 220) is obtained from Apichai et al. (2007). Although "living in an urban area" can be defined using various definitions, this paper uses "living in an urban area" to mean living in a municipal area. This is due to data limitation since the TMHI equates "living in an urban area" to "living in a municipal area" as indicated by official administrative authority. The survey methodology used to identify urban-rural settings here is similar to that used by the National Statistical Office of Thailand in other surveys. Furthermore, the same definition of urban areas was used in the shorter version of the THMI, which, for consistency, was incorporated in the Thai National Socioeconomic Surveys later on. The administrative authority that divides areas into municipal areas and non-municipal areas is valid in our analytical context to study urban-rural differences because the budgets for infrastructure and other local arrangements come from different sources and are used differently in municipal versus non-municipal areas.

Data to identify whether an individual is "poor" are obtained from the Office of National Economic and Social Development Board (NESDB), the central planning agency that develops

[7] Each answer included four choices (Never = You have never been in the situation, never felt the symptoms, never had the feelings, or completely disagree with the statement; Rarely = You have rarely been in the situation, rarely felt the symptoms, rarely had the feelings, or agree with the statement a little; Frequently = You have frequently been in the situation, frequently felt the symptoms, frequently had the feelings, or agree with the statement a lot; Always = You have always been in the situations, always felt the symptoms, always had the feelings, or completely agree with the statement).

and monitors national development plans in Thailand. According to the NESDB, the poverty lines in 2007 in urban and rural areas are monthly incomes of 1,705 and 1,333 baht, respectively. This paper uses urban-rural definitions based on administrative classification by which the data are collected. Municipal areas are defined as "urban" while non-municipal areas are defined as "rural." This type of classification reflects potential differences in urban-rural settings that are consequences of different socioeconomic status through different community arrangements. This classification is also consistent with the classification used for calculating poverty lines by the NESDB.

Methodology and Empirical Specifications

The primary aim here is to provide some descriptive analysis of differences in various measures of well-being of people living in urban and rural areas. A t-test of the equality of the means is used to test the significance of urban-rural differential in five measures of well-being; 1) the proportion of people who were satisfied with life, 2) the average mental score, 3) the proportion of people with below-average mental score, 4) the average happiness level, and 5) the proportion of people who had experienced illness in the past month.

A t-test is also used to test for contextual differences in social and individual attributes related to differences in urban-rural settings. To test whether interpersonal resources, social interaction, and support are different in urban and rural areas, three measures are used to test for urban-rural differential, namely, whether 1) you have friends or others in your community to help you when needed, 2) you feel secure and safe living in this community, and 3) when you need help, some agency (e.g. organization, club, association, temple) in your community will give you some help. To test for urban-rural differential in the inadequacy of services in our hypothesis, we are able to test for only the adequacy of health services due to data limitation. Two measures are tested in this regard: 1) whether there is a health facility near your house that you can utilize and 2) whether health facility near your house can give you services when needed. To test for differences in terms of the sense of failure, inadequacy, and feeling of isolation, fives measures are used, namely, whether 1) you have a good relationship with your neighbors, 2) you feel disappointed in yourself, 3) you think you have the social status that you expected, 4) you are proud of yourself, and 5) you feel you are valuable to your family.

Secondly, to investigate whether the differential in urban-rural well-being is due to difference in the two populations rather than the difference in urban-rural settings, we quantify the impacts of urbanization on mental and physical well-being using a series of econometric models. Given that subjective well-being is a valid measure for mental well-being and that subjective well-being is cardinally measurable and interpersonally comparable, we can model well-being using a baseline econometric model:

$$W_i = \alpha + \beta X_i + \gamma_1 Urban_i + \varepsilon_i$$

Where Wi is life satisfaction, happiness level, mental score, and illness in the past month, Xi is a set of known sociodemographic and individual-level socioeconomic characteristics of the individual i. The observed characteristics included in our estimations are age, gender, marital status, religion, region of residence, education, and income. A dummy variable "urban," is used

to capture the effects of institutional and social constraints of urbanization on the outcomes. ε_{it} is the error term that contains measurement errors, as well as unobserved characteristics. We assume mistakes in people's answers are random and thus do not bias the estimation results. Life satisfaction and illness in the past month are estimated using probit models to obtain marginal effects of the determinants while happiness level and mental health score are estimated using OLS. The scores from the answer to 55 questions are translated into a "mental score" using the procedure recommended by Mongkol et al. (2007).

In addition, the problem of endogeneity can be present if the determinant of life satisfaction, happiness, mental, and physical health are simultaneously identified with independent variables in the model. In our case, this obvious variable is income. One can argue that the level of income determines the level of physical and mental well-being while income is also affected by physical and mental well-being. If we were to have simultaneity in our model, the results from simple probit and OLS estimations would not be valid. Thus, another estimation is added to incorporate instrumenting income in the model. The properties for good instrumental variables (IV) in this case are that these instruments should relate well to income and should not affect the subjective well-being directly. We use the average income of individuals in different areas and occupations as our exclusion restriction. The samples come from 30 areas and 9 occupations.
Lastly, due to the four main positions proposed by Amato and Zou (1992), the effects of poverty on well-being can differ between urban and rural areas. We test for the urban/rural differential effects of poverty by adding a dummy variable indication whether an individual's income falls below the poverty line and an urban-poverty interaction term into the baseline model, to allow for the effects of poverty to depend on urban/rural setting:

$$W_i = \alpha + \beta_1 X_i + \gamma_1 Urban_i + \gamma_2 Poor_i + \gamma_3 Urban_i \bullet Poor_i + \varepsilon_i$$

where γ1, γ2, and γ3 can be used to indicate differential effects of urban-poverty different settings on four groups of residents, namely, the rural non-poor, the rural poor, the urban non-poor, and the urban poor, where the rural non-poor is the reference group. In our case, γ1 indicates difference in the effects on well-being between the urban non-poor and the rural non-poor. γ2 indicates difference in the effects on well-being between the rural poor and the rural non- poor.

Six empirical models are estimated for each measure of well-being. The first specification is a baseline model where well-being measures are estimated using a simple regression on an "urban" dummy variable. The second specification adds in individual sociodemographic factor to investigate whether the effects of urban setting on well-being remain after controlling for these individual factors. A statistically significant effect of the urban dummy in the second specification implies that a contextual difference in urban/rural settings, such as inter-personal resources and social network, matters in the determination of well-being. The third specification includes income as another explanatory variable to control for economic and social status of the individual at both individual and community levels. The fourth specification estimates well-being treating income as an endogenous variable. The fifth specification estimates well-being measures using below-poverty income (poor) instead of income to capture the effects of poverty on well-being. The sixth specification adds the urban-poor dummy interaction to test for the urban/rural differential effects of poverty

Results

Table 1 shows summary statistics of the data from the THMI. Of 3,182 total observations aged 15-60 years old, 52.1 percent are females. About 59 percent of the observations have primary education where the numbers of observations with diploma and tertiary education levels add up to only 13.6 percent. The proportions of observations in 15-30, 31-40, 41-50, 51-60 age groups are approximately a quarter each. Seventy-one-point-three percent are married and live together with their spouses while 17.2 percent are single, and 95.4 percent of the observations are Buddhists; Muslims and Christians are the other two religious minority groups. Observations are taken from all five regions of Thailand, with Northeasterners accounting for the highest proportion of the total sample, and 26.2 percent of the observations are from urban areas. These descriptive statistics accurately resemble the profile of the Thai population aged 15-60 years.

Table 2 shows the urban-rural differentials of well-being measures of interest, namely, the proportion of people satisfied with life, the average mental score, the proportion of people with below-average mental score, the average happiness level, and the proportion of people who had experienced illness in the past month. T-tests are used to identify the significance of the differentials. The data show that about 3 out of 4 Thais are satisfied with life. The people in urban areas are statistically significantly less satisfied with life than those in rural areas. The average mental score of urban residents is also significantly lower than that of rural residents (167.3 vs. 169.7). Moreover, the proportion of people with a below average mental score in urban areas is significantly higher than that in rural areas (25.6 vs. 21.9 percent). The average happiness level of the Thai population is about 6.1-6.2 (out of 0-10 scale). However, urban and rural residents do not have a statistically significant difference in terms of happiness score. In terms of physical well-being, which is measured by the incidence of illness in the past month, urban residents are proved to be more prone to illness than those in rural areas (31.3 vs. 26.1 percent). Overall, the data suggest that urban residents have less physical and mental well-being than rural residents, but are equally happy compared to rural residents.

Table 2 also tests the differences of the various well-being measures cited above among poor residents in rural and urban areas. Compared to non-poor in each rural-urban setting, the data show that poor people are less satisfied with life, have a lower average mental score, comprise a higher number of people with below-average mental score, have a lower happiness level, and comprise a higher proportion of people who had experienced illness in the past month. However, there seems to be no significant difference in these well-being measures between the urban poor and the rural poor.

Given the differences in urban-rural settings discussed above, social and individual attributes to mental well-being are expected to be different between urban and rural areas. Table 3 shows urban-rural differentials using t-tests in 1) interpersonal resources, social interaction, and support,[8] 2) the inadequacy of services,[9] and 3) the sense of failure, inadequacy, and feeling of

[8] Three measures are 1) whether you have friends or others in your community to help you when needed, 2) you feel secure and safe in living in this community, and 3) when you need help, some agency (e.g. organization, club, association, temple) in your community will give you some help.

isolation.[10]. The results show that interpersonal resources, social interaction, and support are statistically significantly lower in urban settings than in rural settings. For example, only 54.2 percent of urban residents feel that they have friends or others to help when needed (compared to 63.7 percent in rural areas). In terms of adequacy of services, contrary to our expectation, the results show that health services are less available and less accessible in urban areas than in rural areas. This may be due to service congestion, which may cause inferior service quality in urban areas. For measures of the sense of failure, inadequacy, and feeling of isolation, the results are mixed. Compared to rural residents, urban residents tend to have significantly less relationship with neighbors and feel that they do not live according to the social status that they expected, but feel the same as rural residents in terms of being disappointed in themselves, proud of themselves, and valuable to their families. Noted that only 60- 65 percent of Thais feel they occupy a social status that they expected.

Table 3 also tests the urban-rural differentials of the above attributes among the poor. The data show that the poor have better interpersonal resources, social interaction, and support than the non-poor. Interestingly, the poor find that health facilities are more available and more accessible than the non-poor. The data also suggest that compared to the non-poor, the poor are less likely to have a good relationship with neighbors, feel more disappointed in themselves, are less likely to live in a social status that they expected, feel less proud of themselves, and (for the rural poor) feel less valuable to their family. However, the t-tests of significant differences between the urban poor and the rural poor show that the urban poor and the rural poor are not significantly different in all of the attributes tested.

Tables 4-7 show results of the multivariate estimations of, respectively, life satisfaction, happiness level, mental score, and illness in the past month. Six empirical models are estimated for each measure of well-being. The first specification is a baseline model in which well-being measures are estimated using a simple regression on an “urban” dummy variable. The second specification adds in individual sociodemographic factors. The third specification includes income as another explanatory variable to control for economic and social status of the individual at both individual and community levels. The fourth specification estimates well-being, treating income as an endogenous variable. The fifth specification estimates well-being measures using below-poverty income (poor) instead of mere income to capture the effects of poverty on well-being. The sixth specification adds in urban-poor interaction to the fifth specification to test for the urban/rural differential effects of poverty on well-being.

Urban-Rural Differential in Life Satisfaction

Using probit models, Table 4 shows estimations of whether the individual is satisfied with life.

[9] Two measures are 1) whether there is a health facility near your house that you can utilize and 2) whether a health facility near your house can give you services when needed.
[10] Fives measures are whether 1) you have good relationship with your neighbors, 2) you feel disappointed in yourself, 3) you think you live in a social status that you expected, 4) you are proud of yourself, and 5) you feel you are valuable to your family.

The coefficients shown are the estimated marginal effects. In all specifications, urban residents are shown to be less likely to be satisfied with life than rural residents. Controlling for individual socioeconomic factors in the second model does not significantly change the estimated urban coefficient, suggesting that social urban-rural settings have some significant effects on life satisfaction. In the third model, income has a statistically significant effect on life satisfaction, but when we control for endogeneity of income in model 4 the effects of income disappear. The result from model 4 shows that urban residents are 16 percent less likely to be satisfied with life than are rural residents. Results from model 5 and 6 show that the poor have statistically lower life satisfaction than the non-poor. Moreover, we finds in model 6 that the urban non-poor are less likely to be satisfied with life than the rural non-poor by about 4.8 percent and the rural-poor are less likely to be satisfied with life than the rural non-poor by about 7.3 percent.

Other control variables that that have statistically significant effects on life satisfactions are age, marital status, and region. The 31-40-year-old samples tend to be the least satisfied with life whereas life satisfaction increases after age 40. Similarly, life satisfaction increases with education level; people with only primary school education have the same life satisfaction as those who have lower-secondary education, but life satisfaction increases with education level from the higher secondary level. People in Bangkok and vicinity are the least satisfied with life compared to people in other regions, and Northerners are the most satisfied with their lives. In terms of marital status, we find that people who are married and live together with their spouses are more satisfied with life than are others. Results from our estimations show no difference in terms of life satisfaction between males and females and among people with different religious beliefs.

Urban-Rural Differential in Happiness

Table 5 shows that urban and rural residents do not have statistically different happiness levels. Income tends to have a positive effect on happiness level even after controlling for endogeneity of income. Being poor reduces happiness level by about 0.4 levels. Results from the last specification suggest that when we add in the urban-poor dummy to the estimation, the effect of being poor disappears. All four groups, the urban poor, the rural poor, the urban non-poor, and the rural non-poor appear to be the same in terms of their happiness level.

Other variables that have statistically significant effects on happiness level are age, marital status, education, region, and religion. Contrary to results from the life satisfaction estimation, people aged 31-40 years have the highest level of happiness while people aged 21-30 tend to have the lowest happiness level. People who are married and live together have no statistically different level of happiness from those who are single or married and do not live with their spouse. However, being divorced or widowed has negative effects on happiness level. The effects of education on happiness level are similar to those from life satisfaction estimations that show that more highly educated people seem to be happier than those with only primary or lower-secondary education. Also similar to results from life satisfaction estimations, residents of Bangkok and vicinity are estimated to have a lower happiness level than those in other regions. Males and females on average have similar level of happiness, and Christians tend to have lower happiness levels than Buddhists and Muslims.

Urban-Rural Differential in Mental Score

Table 6 shows results from the estimations of mental score. Here the effects of "urban" are present in the first specification and the second specification where other socioeconomic variables are controlled for. However, when income is controlled the effect of the urban dummy seems to disappear. In the fourth specification, where the endogeneity of income is taken care of, the effects of income and urban setting both disappear. The results also suggest that the rural poor have statistically significantly lower mental score than the rural non-poor. On the other hand, the urban non-poor and the rural non-poor are not statistically different in terms of theirs mental scores.

Other factors that have statistically significant effects on mental scores are gender, marital status, education, and region. Males tend to have about 2.1 mental scores higher than females. Similar to results found in life satisfaction estimation, people who are married and live together have higher mental scores than those with other marital status. People with tertiary education have about 6.0 mental scores higher than those with primary education. Bangkok residents have the lowest mental score compared to residents of other regions. Again, people from the North on average have the highest mental scores. Age and religion have no effects on mental score in our estimations.

Urban-Rural Differential in Illness

Table 7 shows results from the estimations of having illness in the past month. From the baseline model, we observe statistically significant effects of urban setting on illness, but when other socioeconomic factors are controlled for, the effects of urban setting disappear in all other specifications, suggesting no significant effects of urban setting on illness. In the third specification, where income is added to the estimation, income tends to lower the likelihood of being ill even after controlling for the endogeneity of income in the fourth specification. Similar to results found in life satisfaction estimations, being-poor matters in the likelihood of illness and the significant effects tend to be present in rural settings where the rural poor are more approximately 12.2 percent more likely to be ill than the rural non-poor..

Other variables that have statistically significant effects on illness are gender, age, marital status, education, and region. In our sample, females are about 10 percent more likely to be ill than males, and the likelihood of being ill increases with age. We find also that people who are married but do not live with their spouses are more likely to be ill compared to people with other marital status. Similarly, widowers tend to have a high chance of being ill–31.1 percent higher than singles. The effects of education on being ill are as expected: people with higher education have a lower chance of being ill. Bangkok residents have the highest chance of being ill compared to those in other regions.

Conclusion and Discussions

This paper aims to investigate whether urban settings have effects on well-being measures. Four

main well-being measures are used in this paper, life satisfaction, happiness level, mental score, and illness in the previous month. Results show that urban residents have lower life satisfaction, lower average mental score, comprise a higher proportion of people who have a below-average mental score, and comprise a higher proportion of people who experienced illness in the previous month. However, we find that urban residents are equally happy compared to rural residents. As various theories suggest that urban-rural differentials in individual and social attributes may affect the well-being measures, the paper also tests whether these various attributes differ between urban and rural settings. The results suggest that urban residents seem to be inferior in terms of interpersonal resources, social interaction, and supports. Contrary to the general belief that urban areas are likely to offer adequate service, we find that health services are less available and less accessible to urban residents, which may be due to congestion. We also find that urban residents have less relationship with neighbors and are less likely to feel that they live at a status that they expected. When comparing well-being measures and various individual and social attributes, we find that the urban poor and the rural poor are of no significant difference in all measures.

Various multivariate analyses are carried out to estimate the urban-rural differentials in the four well-being measures. We find that after controlling for individual socioeconomic factors, urban settings still affect life satisfaction. In this regard, urban residents are less likely to be satisfied with life compared to rural residents. We find that urban settings have no statistically significant effects on happiness level, mental score, and the likelihood of being ill. In addition, we find that individual factors matter in the estimation of well-being since the effects of urban settings disappear after controlling for individual socioeconomic background in the estimation of mental scores.

Income was found to have significant effects on happiness and the likelihood of being ill but does not have significant effects on life satisfaction and mental score. Moreover, the effects of income on well-being measures can be misleading if the estimation ignores endogeneity of income as the effects of income often disappear after controlling for the endogeneity. This paper also tests the effects of being poor (being below the poverty line) on well-being. The findings suggest that being poor has statistically significant effects on all of the four measures of well-being.

Even though being poor has significant negative effects on well-being measures, the effects of being poor seem to be higher in rural settings than in urban settings in Thailand. This result contradicts the hypothesis that urban poverty is more detrimental to psychological well-being than rural poverty and that rural poverty is more debilitating than urban poverty because the attitudes toward the poor are different in urban and rural communities. This finding, on the other hand, conforms with the hypothesis that the observed differential in the well-being of the urban poor and the rural poor may not be due to characteristics of urban-rural settings themselves, but due to differences in the two populations in terms of ethnicity, age, family status, and other demographic characteristics. Or these characteristics may serve as moderators of urban/rural poverty differences in the case of different population backgrounds such as those in developing countries like Thailand.

Table1: Observations Classified by Socioeconomic Factors

Socioeconomic Factors	Number of Observations	Percent
Gender (n = 3,182)		
Female	1,659	52.14
Male	1,523	47.86
Education Level (n=3,180)		
Primary Level	1,881	59.15
Lower-Secondary Level	455	14.31
Higher-Secondary Level	413	12.99
Diploma Level	186	5.85
Tertiary Level	245	7.7
Age (n=3,184)		
15-20 Years Old	172	5.4
21-30 Years Old	422	13.25
31-40 Years Old	779	24.47
41-50 Years Old	954	29.96
51-60 Years Old	857	26.92
Marital Status (n=3,181)		
Single	547	17.2
Married and live together	2,267	71.27
Married but do not live together	82	2.58
Divorced	111	3.49
Widowed	174	5.47
Religion (n=3,109)		
Buddhist	2,966	95.4
Muslim	123	3.96
Christian	20	0.64
Region (n=3,184)		
Bangkok and Vicinity	413	12.97
Central	735	23.08
North	582	18.28
Northeast	1,023	32.13
South	431	13.54
Rural–Urban Area (n=3184)		
Rural	2,351	73.84
Urban	833	26.16

Table 2: Urban-Rural Differences in Well-Being Measures

Well-Being Attributes	All Samples			Poor		
	Rural	Urban	Difference P-Value	Rural	Urban	Difference P-Value
Proportion of People Satisfied with Life	78.8	73.0	0.0005*	73.1	68.2	0.4028
Average Mental Score	169.7	167.3	0.0006*	166.1	163.8	0.3446
Proportion of People with Below-Average Mental Scores	21.9	25.6	0.0325*	31.1	35.2	0.4934
Average Happiness Level (0-10)	6.2	6.1	0.2387	5.9	5.5	0.1075
Proportion of People Who Had Experienced Illness in the Previous Month	26.1	31.3	0.0040*	34.9	40.9	0.3345

*statistically significant at 95 % confidence level

Table 3 Urban-Rural Differences in Attributes of Mental Well-Being

Attribute	Percent of All Samples			Percent of Poor Sample		
	Rural (N=2,290)	Urban (N=808)	Difference P-Value	Rural (N=193)	Urban (N=88)	Difference P-Value
You have friends or others in your community to help you when needed.	63.7	54.2	0.0000*	61.7	50	0.0667
You feel secure and safe in living in this community	85.6	75.3	0.0000*	86.5	78.4	0.0858
When you need help, some agency (e.g. organization, club, association, temple) in your community will give you some help.	93.8	91	0.0056*	89.6	85.2	0.2886
There is health facility near your house that you can utilize.	83.4	72.2	0.0000*	86	80.7	0.2559
A health facility near your house can give you services when needed.	79.5	68.3	0.0000*	80.3	71.6	0.1048
You have a good relationship with your neighbors.	93.2	89.9	0.0019*	89.1	88.6	0.9051
You feel disappointed in yourself.	7.8	9.7	0.1002	10.9	15.9	0.238
You think you live at a social status that you expected.	65.1	60.1	0.0098*	53.4	52.9	0.9391
You are proud of yourself	90.8	89.3	0.2112	88.5	87.5	0.8027
You feel you are valuable to your family.	88.1	87.8	0.7982	80.8	88.6	0.1046

*statistically significant at 95 % confidence level

Table 4: Life Satisfaction (Probit and Two-Step Probit: Marginal Effects)

	(1)	(2)	(3)	(4)	(5)	(6)
Urban	-0.0585***	-0.0416**	-0.0502***	-0.162***	-0.0458**	-0.0477**
	[0.0175]	[0.0183]	[0.0187]	[0.0613]	[0.0187]	[0.0198]
Income	-	-	0.001***	0.000	-	-
	-	-	[0.0001]	[0.0001]	-	-
Male	-	0.021	0.013	0.070	0.0175	0.017
	-	[0.0155]	[0.0157]	[0.0555]	[0.0157]	[0.0157]
Poor	-	-	-	-	**-0.0675****	**-0.0730****
	-	-	-	-	[0.0297]	[0.0356]
Urban Poor	-	-	-	-	-	0.015
	-	-	-	-	-	[0.0525]
Age (Reference 15-20 Years Old)						
21-30 Years Old	-	-0.182***	-0.177***	-0.512***	-0.187***	-0.187***
	-	[0.0554]	[0.0575]	[0.162]	[0.0585]	[0.0585]
31-40 Years Old	-	-0.132***	-0.136**	-0.371**	-0.133**	-0.133**
	-	[0.0507]	[0.0531]	[0.163]	[0.0534]	[0.0534]
41-50 Years Old	-	-0.205***	-0.208***	-0.579***	-0.205***	-0.204***
	-	[0.0514]	[0.0535]	[0.165]	[0.0538]	[0.0538]
51-60 Years Old	-	-0.216***	-0.219***	-0.613***	-0.213***	-0.212***
	-	[0.0538]	[0.0561]	[0.168]	[0.0562]	[0.0563]
Marital Status (Reference: Single)						
Married and live together	-	0.0711***	0.0566**	0.256***	0.0661**	0.0664**
	-	[0.0255]	[0.0258]	[0.0888]	[0.0260]	[0.0261]
Married but do not live together	-	-0.016	-0.013	0.021	-0.00601	-0.006
	-	[0.0506]	[0.0521]	[0.177]	[0.0513]	[0.0513]
Divorced	-	0.038	0.023	0.119	0.03	0.030
	-	[0.0402]	[0.0424]	[0.159]	[0.0416]	[0.0416]
Widowed	-	0.053	0.049	0.199	0.0496	0.050
	-	[0.0339]	[0.0344]	[0.137]	[0.0345]	[0.0345]
Education Level (Reference: Primary Level)						
Lower-Secondary Level	-	-0.013	-0.023	-0.024	-0.0111	-0.011
	-	[0.0237]	[0.0247]	[0.0853]	[0.0241]	[0.0241]
Higher-Secondary Level	-	0.0885***	0.0731***	0.353***	0.0890***	0.0893***
	-	[0.0207]	[0.0223]	[0.0993]	[0.0210]	[0.0210]
Diploma Level	-	0.104***	0.0785***	0.440***	0.0991***	0.0995***
	-	[0.0251]	[0.0287]	[0.141]	[0.0257]	[0.0257]
Tertiary Level	-	0.112***	0.0658**	0.502***	0.114***	0.115***
	-	[0.0221]	[0.0300]	[0.166]	[0.0223]	[0.0223]
Region (Reference: Bangkok and Vicinity)						
Central	-	0.122***	0.125***	0.453***	0.120***	0.120***
	-	[0.0202]	[0.0205]	[0.0913]	[0.0208]	[0.0208]

North	-	0.147***	0.157***	0.565***	0.148***	0.148***
	-	[0.0194]	[0.0192]	[0.105]	[0.0198]	[0.0198]
Northeast	-	0.0860***	0.0962***	0.282***	0.0849***	0.0848***
	-	[0.0224]	[0.0229]	[0.0930]	[0.0231]	[0.0231]
South	-	0.122***	0.115***	0.463***	0.117***	0.117***
	-	[0.0207]	[0.0215]	[0.102]	[0.0215]	[0.0215]
Religious (Reference: Buddhist)						
Muslim	-	-0.017	0.014	0.012	0.0044	0.004
	-	[0.0402]	[0.0395]	[0.143]	[0.0405]	[0.0405]
Christian	-	-0.169	-0.164	-0.452	-0.159	-0.159
	-	[0.112]	[0.119]	[0.316]	[0.118]	[0.118]
Constant	-	-	-	0.624***	-	-
	-	-	-	[0.167]	-	-
Observations	3,182	3,099	3,017	3,002	3017	3,017

Standard errors in brackets
*** p<0.01, ** p<0.05, p<0.1

Table 5: Happiness Level (Ordinary Least Square and Two-Stage Least Square)

	(1)	(2)	(3)	(4)	(5)	(6)
Urban	-0.090	-0.028	-0.017	-0.023	0.0023	0.050
	[0.0761]	[0.0786]	[0.0792]	[0.0794]	[0.0796]	[0.0837]
Income	-	-	0.001***	0.001***	-	-
	-	-	[0.0001]	[0.0001]	-	-
Male	-	-0.049	-0.081	-0.097	-0.0585	-0.056
	-	[0.0684]	[0.0690]	[0.0703]	[0.0690]	[0.0690]
Poor	-	-	-	-	-0.365***	-0.226
	-	-	-	-	[0.121]	[0.143]
Urban Poor	-	-	-	-	-	-0.461*
	-	-	-	-	-	[0.253]
Age (Reference 15-20 Years Old)						
21-30 Years Old	-	-0.469***	-0.436**	-0.436**	-0.502***	-0.512***
	-	[0.181]	[0.189]	[0.189]	[0.191]	[0.191]
31-40 Years Old	-	-0.672***	-0.709***	-0.733***	-0.724***	-0.736***
	-	[0.180]	[0.188]	[0.190]	[0.190]	[0.190]
41-50 Years Old	-	-0.661***	-0.700***	-0.722***	-0.702***	-0.713***
	-	[0.183]	[0.190]	[0.194]	[0.192]	[0.192]
51-60 Years Old	-	-0.605***	-0.659***	-0.682***	-0.649***	-0.664***
	-	[0.188]	[0.195]	[0.199]	[0.197]	[0.197]
Marital Status (Reference: Single)						
Married and live together	-	-	0.098	0.043	0.013	0.091
	-	-	[0.106]	[0.108]	[0.115]	[0.108]
Married but do not live together	-	-	-0.186	-0.190	-0.222	-0.148
	-	-	[0.227]	[0.233]	[0.235]	[0.233]
Divorced	-	-	-0.472**	-0.494**	-0.522**	-0.446**
	-	-	[0.203]	[0.205]	[0.208]	[0.205]
Widowed	-	-	-0.290	-0.311*	-0.321*	-0.302*
	-	-	[0.180]	[0.180]	[0.181]	[0.180]
Education Level (Reference: Primary Level)						
Lower-Secondary Level	-	-	0.139	0.039	0.018	0.0975
	-	-	[0.105]	[0.107]	[0.111]	[0.106]
Higher-Secondary Level	-	-	0.374***	0.245**	0.213*	0.336***
	-	-	[0.108]	[0.110]	[0.120]	[0.109]
Diploma Level	-	-	0.446***	0.224	0.162	0.383**
	-	-	[0.147]	[0.152]	[0.170]	[0.149]
Tertiary Level	-	-	0.783***	0.460***	0.346*	0.763***
	-	-	[0.132]	[0.147]	[0.204]	[0.134]
Region (Reference: Bangkok and Vicinity)						
Central	-	-	0.674***	0.720***	0.735***	0.694***
	-	-	[0.116]	[0.119]	[0.120]	[0.119]
North	-	-	0.839***	0.942***	0.981***	0.874***

	-	-	[0.126]	[0.128]	[0.135]	[0.128]
Northeast	-	-	0.446***	0.526***	0.556***	0.474***
	-	-	[0.115]	[0.118]	[0.124]	[0.118]
South	-	-	0.902***	0.906***	0.899***	0.920***
	-	-	[0.130]	[0.132]	[0.132]	[0.132]
Religious (Reference: Buddhist)						
Muslim	-	-	-	-0.164	-0.072	-0.054
	-	-	-	[0.175]	[0.181]	[0.183]
Christian	-	-	-	-0.973**	-0.912**	-0.925**
	-	-	-	[0.414]	[0.433]	[0.434]
Constant	6.155***	5.985***	5.885***	5.877***	6.041***	6.042***
	[0.0389]	[0.189]	[0.199]	[0.200]	[0.204]	[0.204]
Observation	3,182	3,099	3,017	3,002	3017	3,017
R-Square	0.000	0.051	0.058	0.057	0.052	0.053

Standard errors in brackets
*** p<0.01, ** p<0.05, p<0.1

Table 6: Mental Score (Ordinary Least Square and Two-Stage Least Square)

	(1)	(2)	(3)	(4)	(5)	(6)
Urban	-2.376***	-1.430**	-1.207*	-1.157	-1.039	-0.988
	[0.688]	[0.714]	[0.720]	[0.723]	[0.719]	[0.756]
Income	-	-	0.000142***	0.000	-	-
	-	-	[0.001]	[0.000120]	-	-
Male	-	2.100***	2.024***	2.138***	2.114***	2.118***
	-	[0.618]	[0.623]	[0.636]	[0.620]	[0.621]
Poor	-	-	-	-	-4.247***	-4.103***
	-	-	-	-	[1.098]	[1.283]
Urban Poor	-	-	-	-	-	-0.504
	-	-	-	-	-	[2.328]
Age (Reference 15-20 Years Old)						
21-30 Years Old	-	-2.545	-2.024	-1.917	-2.960*	-2.971*
	-	[1.642]	[1.706]	[1.714]	[1.725]	[1.726]
31-40 Years Old	-	-1.883	-1.806	-1.382	-2.461	-2.473
	-	[1.634]	[1.701]	[1.737]	[1.716]	[1.717]
41-50 Years Old	-	-0.199	-0.317	0.160	-0.913	-0.927
	-	[1.661]	[1.728]	[1.775]	[1.741]	[1.742]
51-60 Years Old	-	-1.068	-1.354	-0.898	-1.769	-1.787
	-	[1.707]	[1.773]	[1.817]	[1.778]	[1.781]
Marital Status (Reference: Single)						
Married and live together	-	2.495**	2.279**	2.601**	2.322**	2.316**
	-	[0.970]	[0.988]	[1.048]	[0.982]	[0.982]
Married but do not live together	-	-0.164	-0.834	-0.526	-0.798	-0.800
	-	[2.063]	[2.084]	[2.114]	[2.080]	[2.080]
Divorced	-	-1.274	-1.457	-1.250	-1.297	-1.295
	-	[1.825]	[1.838]	[1.866]	[1.834]	[1.834]
Widowed	-	-0.355	-0.345	-0.288	-0.403	-0.401
	-	[1.635]	[1.637]	[1.650]	[1.635]	[1.636]
Education Level (Reference: Primary Level)						
Lower-Secondary Level	-	-0.042	-0.131	0.152	0.129	0.119
	-	[0.953]	[0.969]	[1.011]	[0.961]	[0.963]
Higher-Secondary Level	-	3.884***	3.116***	3.602***	3.512***	3.502***
	-	[0.972]	[0.996]	[1.089]	[0.977]	[0.979]
Diploma Level	-	2.305*	1.181	2.029	1.907	1.892
	-	[1.344]	[1.384]	[1.567]	[1.347]	[1.349]
Tertiary Level	-	6.424***	4.625***	6.188***	6.054***	6.044***
	-	[1.175]	[1.320]	[1.876]	[1.189]	[1.190]
Region (Reference: Bangkok and Vicinity)						
Central	-	-	7.722***	8.280***	8.062***	8.180***
	-	-	[1.077]	[1.095]	[1.114]	[1.091]

North	-	-	9.189***	10.00***	9.504***	9.783***
	-	-	[1.154]	[1.178]	[1.254]	[1.166]
Northeast	-	-	7.705***	8.513***	8.087***	8.408***
	-	-	[1.068]	[1.094]	[1.160]	[1.086]
South	-	-	8.897***	8.981***	9.055***	9.042***
	-	-	[1.187]	[1.204]	[1.210]	[1.203]
Religious (Reference: Buddhist)						
Muslim	-	-	1.094	1.736	1.449	1.561
	-	-	[1.605]	[1.677]	[1.700]	[1.672]
Christian	-	-	-1.894	-1.649	-1.511	-1.625
	-	-	[3.600]	[3.766]	[3.779]	[3.761]
Constant	-	169.7***	159.5***	158.5***	158.7***	160.2***
	-	[0.350]	[1.715]	[1.797]	[1.807]	[1.836]
Observations	2,945	2,864	2,795	2,782	2795	2,795
R-squared	0.004	0.054	0.057	0.054	0.059	0.059

Standard errors in brackets
*** p<0.01, ** p<0.05, p<0.1

Table 7: Had Illness in the Previous Month (Probit and Two-Step Probit: Marginal Effects)

	(1)	(2)	(3)	(4)	(5)	(6)
Urban	0.0519***	0.017	0.018	0.064	0.0126	0.009
	[0.0184]	[0.0193]	[0.0196]	[0.0609]	[0.0195]	[0.0205]
Income	-	-	-0.0001***	-0.0001***	-	-
	-	-	[0.0001]	[0.0001]	-	-
Male	-	-0.102***	-0.100***	-0.306***	-0.102***	-0.102***
	-	[0.0164]	[0.0166]	[0.0545]	[0.0166]	[0.0166]
Poor	-	-	-	-	0.135***	0.122***
	-	-	-	-	[0.0338]	[0.0397]
Urban Poor	-	-	-	-	-	0.037
	-	-	-	-	-	[0.0643]
Age (Reference 15-20 Years Old)						
21-30 Years Old	-	0.053	0.076	0.205	0.104	0.105
	-	[0.0573]	[0.0638]	[0.184]	[0.0660]	[0.0661]
31-40 Years Old	-	0.129**	0.155**	0.454**	0.174***	0.175***
	-	[0.0572]	[0.0632]	[0.181]	[0.0643]	[0.0643]
41-50 Years Old	-	0.265***	0.296***	0.860***	0.315***	0.316***
	-	[0.0578]	[0.0629]	[0.182]	[0.0633]	[0.0633]
51-60 Years Old	-	0.386***	0.415***	1.181***	0.429***	0.430***
	-	[0.0586]	[0.0632]	[0.184]	[0.0632]	[0.0632]
Marital Status (Reference: Single)						
Married and live together	-	0.006	0.030	0.139	0.0331	0.034
	-	[0.0272]	[0.0274]	[0.0937]	[0.0274]	[0.0274]
Married but do not live together	-	0.069	0.113*	0.366**	0.120*	0.120*
	-	[0.0608]	[0.0659]	[0.180]	[0.0664]	[0.0664]
Divorced	-	-0.015	0.001	0.052	-0.000394	0.000
	-	[0.0477]	[0.0500]	[0.160]	[0.0499]	[0.0499]
Widowed	-	0.0780*	0.0990**	0.311**	0.106**	0.106**
		[0.0471]	[0.0487]	[0.135]	[0.0492]	[0.0492]
Education Level (Reference: Primary Level)						
Lower-Secondary Level	-	0.028	0.043	0.157*	0.0374	0.038
	-	[0.0264]	[0.0276]	[0.0854]	[0.0272]	[0.0273]
Higher-Secondary Level	-	-0.0712***	-0.0571**	-0.134	-0.0675***	-0.0669***
	-	[0.0244]	[0.0260]	[0.0979]	[0.0250]	[0.0250]
Diploma Level	-	-0.044	-0.031	-0.010	-0.0478	-0.047
	-	[0.0338]	[0.0363]	[0.136]	[0.0340]	[0.0341]
Tertiary Level	-	-0.0927***	-0.046	0.012	-0.0809***	-0.0803***
	-	[0.0271]	[0.0345]	[0.162]	[0.0283]	[0.0284]
Region (Reference: Bangkok and Vicinity)						
Central	-	-0.0437*	-0.0498*	-0.182**	-0.0480*	-0.0488*
	-	[0.0260]	[0.0264]	[0.0899]	[0.0263]	[0.0264]
North	-	-0.109***	-0.119***	-0.474***	-0.115***	-0.116***

	-	[0.0250]	[0.0250]	[0.104]	[0.0249]	[0.0249]
Northeast	-	-0.121***	-0.129***	-0.474***	-0.129***	-0.129***
	-	[0.0246]	[0.0252]	[0.0946]	[0.0250]	[0.0250]
South	-	-0.0771***	-0.0791***	-0.261***	-0.0815***	-0.0821***
	-	[0.0270]	[0.0274]	[0.101]	[0.0272]	[0.0272]
Religious (Reference: Buddhist)						
Muslim	-	0.0882*	0.0854*	0.217	0.0910*	0.0913*
	-	[0.0463]	[0.0486]	[0.137]	[0.0489]	[0.0489]
Christian	-	0.156	0.170	0.488	0.168	0.166
	-	[0.113]	[0.121]	[0.312]	[0.121]	[0.121]
Constant	-	-	-	-0.907***	-	-
	-	-	-	[0.182]	-	-
Observations	3,180	3,097	3,016	3,001	3016	3,016

Standard errors in brackets
*** p<0.01, ** p<0.05, p<0.1

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Happiness from Giving: Quantitative Investigation of Thai Buddhists

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Abstract
According to Buddhism, giving without condition leads to a higher level of happiness. Even though there are a number of studies examining factors that determine happiness, none quantitatively examine happiness from the perspective of a "giving" relationship. Using a household dataset from Thailand, where Buddhism is the main religion, this paper suggests that religious and non-religious giving leads to a higher happiness level than not giving at all. Moreover, for non-religious giving, it is found that charitable giving in terms of money and goods gives a donor more happiness than does volunteer work, but that both types of giving enhance one's happiness. Religious giving (offering food and dedicating other offerings to Buddhist monks) is also found to increase happiness, increases more for respondents who regularly give for religious purposes. In particular, regularly giving to monks leads to the highest happiness level, perhaps since Buddhism permeates Thai society and dedicating offerings to monks is believed to provide great merit. In addition, when making offerings to monks, donors usually do it randomly, at a temple, which suggests that making merit at a temple also leads to higher level of happiness.

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1. Introduction

These days, besides focusing on economic growth, society has resulted in more emphasis on the happiness of a society as a path to economic sustainability. For this reason, various studies aim to explain the relationships among factors contributing to happiness. These factors include level of income, education, unemployment status, marital status, health condition, and urbanization (such as Gerdtham and Johannesson (1997), Easterlin (2001), Frey and Stutzer (2003), Frey and Stutzer (2004), and Elster (1998)). However, even though happiness resides inside a person's mind and is influenced by different values and cultures in different societies

Happiness is referred to as a state of mind or feeling that can be classified into levels from satisfaction to pleasure. In religious and philosophical approaches, happiness is referred to as a feeling of well-being and prosperity, rather than merely a state of mind or feeling. According to Buddhist principles, happiness is categorized into physical happiness and mental happiness. Physical happiness is defined as happiness derived from the five senses–visual, auditory, olfactory, gustatory, and tactile–which are called the Five Sensual Desires (*Kamma-Khun-Ha*) or bodily pleasant feeling. Another category of happiness in Buddhism, mental happiness, is defined as happiness derived from mental pleasure, delightfulness, and satisfaction.

Happiness can be measured using two approaches: 1) subjective well-being, and 2) objective well-being. In general, it is theoretically accepted to measure subjective well-being by interviewing people as to their level of overall happiness. The interview questions are about overall satisfaction with life, for example, "What is your level of overall life satisfaction?" Interviewees are required to give a score of 1-10. Subjective well-being concerns the valuation of what individuals have rather than the desire to have something, which might in turn cause unhappiness or suffering. In order to gauge their happiness level, respondents are urged to assess their overall quality of life, taking into account their past experiences as well as their expectations for the future. This question aims to have respondents reflect on their overall life satisfaction. Measuring objective well-being, on the other hand, focuses on measuring factors considered to contribute to happiness, for example, health, education, housing, safety, etc. These factors are weighted for each variable or index, which varies according to the research methods used in different countries.

The objective well-being approach assumes that all people have basic needs and rights, ranging from adequate food and water to physical health and education. Using this approach, well-being can be assessed through analysis of objective (observable) indicators of the extent to which these needs/rights are satisfied. The examples of such indicators generally include income, wealth, and proportion of children in education, education attainment, life expectancy, crime rate, pollution, and water quality. Objective well-being measures are well established in the literature. However, this approach is paternalistic: it assumes that certain things are good or bad for well-being.

In Buddhism, one way to promote happiness is by "giving". Making altruism and giving, the so-called *Dana* of life, is part and parcel of pursuing happiness. *Dana* is a Pali word that can be translated as giving, generosity, charity, and liberality. It occupies an important part in the Buddha's teaching, which is often formulated under three headings–*dana*, *sila*, *bhavana* (giving, morality, meditation or mental cultivation).

Giving is not seen purely as the exchange of material possessions, however. In Buddhist terms, giving includes non-tangibles such as education, confidence, and wisdom. It is believed that "giving" is basic social behavior and is also regarded as a manner of helping one another. Givers give things for the purpose of providing benefits to other people, and helping others takes different forms as goods or services are transferred from a person or a group of people to another person or group of people without any conditions. This type of giving is based on altruism.

In the case of Thailand, there are a couple of reasons why giving and happiness are worth studying. First, major progress in the developing story of the importance of happiness is reflected by the emphasis on "A Happy Society with Equality, Fairness, and Resilience" included in Thailand's 11th National Economic and Social Development Plan (2012-2016), which in turn has led to an increased interest in the study of happiness in the country. Second, Thailand is recognized as a prominent Buddhist country with its culture profoundly influenced by Buddhism, making it a unique society in terms of moral principles. The teachings of Buddha are principally focused on giving, which has contributed to the strong link between Thai social values and generosity. If some members of the society encounter dilemmas or sufferings, the majority of Thai people tend to provide assistance as best they can to make sure that nobody is left abandoned. According to the World Giving Index (2011), which uses data gathered from people age 15 and older in rural and urban areas in 153 countries, Thailand ranks ninth in terms of giving? In particular, for the sub-index of charitable giving, Thailand ranks first in the world. This fact raises an interesting question of how being altruistic by giving to others affects the happiness of Thai people.

This paper therefore uses an individual sample to investigate the impacts on happiness and well-being from giving. Using a household dataset in Thailand as a case study, this paper aims to investigate both religious and non-religious giving's effects on happiness in terms of the subjective well-being of Thai people.

Section 2 presents concept and literature reviews as to whether giving makes people happy. Section 3 examines the dataset from Thailand that is used in this study. Section 4 quantifies impacts of both religious giving and non-religious giving among Thai people, Section 5 concludes.

2. Happiness from Giving: A Survey of the Literature

Various studies on giving and philanthropy have been conducted in a number of diverse fields. Andreoni (1990) studied motivations for giving and found that giving can be motivated by two factors–pure altruism and impure altruism. Pure altruism is giving for the benefits of other people. Donors' satisfaction increases when the donations are seen to be sufficient to meet the needs of intended recipients. On the other hand, impure altruism is giving with awareness of the benefits to donors themselves as well as to recipients.

Indeed, social scientists and economists have identified a host of ways in which charitable behavior can benefit the giver, for example, economically via tax breaks (Becker, 1974; Glazer and Konrad, 1996; Griskevicius, et al., 2007). In addition, a number of researchers have studied the effects of religious giving on physical health, mental health, and well-being (Andreoni, 1989, 1990; Dunn, et al., 2008)

Dialogue on whether giving behavior increases well-being and happiness dates back to ancient Greece. Aristotle argued that the goal of life was to achieve *eudaemonia*, which is closely tied to modern conceptions of happiness. Contemporary research (for example, Harbough, et al., 2007) includes studies that measure neural activity as an indication of pleasureableness. Harbough did so examining participants who decided how to split a one-hundred-dollar sum between themselves and a local food bank. Results showed that donations of the entire one-hundred-dollar sum to the food bank led to activation in the ventral striatum. This result suggests that giving in the form of charitable donations is rewarding to givers.

In another study, Dunn, et al. (2008) asked representative Americans to rate their general happiness and provide monthly estimates of personal and pro-social spending. Participants were asked to estimate how much they spent in a typical month on 1) bills/expenses, 2) gifts for themselves, 3) gifts for others, and 4) donations to charity. Result show that participants reported greater general happiness for items 3) gifts for others and items 4) donation to charity. Even controlling for income, higher pro-social spending was found to be associated with happiness. The most recent study (Aknin, et al., 2013) demonstrates that the emotional benefits of spending money on others (pro-social spending) are unleashed when givers are aware of their positive impact. In their study, giving more money to charity led to higher levels of happiness only when participants are explained how these funds are used for benefit a recipient.

Besides gauging the effects of giving money on donors themselves, a number of research papers investigate the impacts of non-monetary spending on happiness. Analyzing the issue on a national level, Meier and Stutzer (2008), using German Socioeconomic Household Panel Data, demonstrate that volunteering increases life satisfaction. They found that higher levels of volunteer work were associated with higher levels of overall life satisfaction.

Another study, by Field, et al. (1998), asked a volunteer group of retired senior citizens to give help to take care of infants and found that the seniors experienced less anxiety and depression, as well as improved health, from providing such help. This result is supported by Lyubomirsky, et al. (2004), which shows that simply asking students to commit random acts of kind giving can significantly increase happiness levels for several weeks compared to students in the control group.

A study from Fergusen, et al. (2012) examines the impacts of donating blood in terms of experiencing a “warm glow” (“I donate blood because it makes me feel good”). Compared to non-blood donors, blood donors were found to be motivated in general by the “warm glow” it makes them feel.

With regard to religious giving, it has long been argued just how religious giving is distinguished from non-religious giving. Chang (2005) found that religious giving is closely related to after-life consumption. People who give for religious purpose hope to have a good after-life. In contrast, non-religious giving is not related to after-life consumption. In addition, research results also noted the relationship between age and giving; older people were more likely to give for religious purposes than were younger individuals.

Attending religious activities allows people to connect with a social network, which in turn yields positive impacts on physical and mental health (Lehrer, 2004). Moreover, from studying the relationship between religiosity and happiness, it is found that

religiosity and happiness have a positive relationship. For instances, there is a study on the relationship between religiosity and self-rated indices of physical health, subjective health status, and happiness. After controlling individual variables such as age and gender, it was found that respondents who were more religious were less likely to report health problems than were those who were less religious or who did not attend religious activities (Gokce, et. al., 2004).

Furthermore, happiness has been found to be related to the frequency of attending religious activities and complying with the teachings of one's religion. Accordingly, happiness is associated with social beliefs, such as the belief in good and evil (Ferriss, 2002). Religiosity thus has effects on life satisfaction. To some people, religion serves as a safety net, protecting them from bad luck and suffering. It is found that Christians who attend church regularly are more likely to handle problems in their lives, for example, divorce or unemployment, better than those who are not strict adherents to their religion.

Merely, attending religious activities seems to have beneficial impacts on physical health and personal happiness (Witter et al., 1985). Researchers have been curious about why attending religious activities/going to church could reduce the probability of encountering health problems and lead to healthiness, and many reasons have been put forth. First, religious activities provide opportunities for social gathering, which allows people to talk and exchange their interests. Second, religious activities serve as a platform for exchanging information on social and life aspects during which individuals can learn and gain knowledge from others. Third, participating in religious activities encourages people to be aware of their own personal significance. By attending such activities, people tend to feel good about their life and become happier.

3. Data

Since this paper aims of testing the Buddhism's thoughts in which giving should bring to higher level of happiness. Secondary data were used in this study from the 2011 Survey on Conditions of Society and Culture in Thailand, which is a national survey conducted by the National Statistical Office with the cooperation of the Ministry of Public Health and covering a sample group of 27,766 Thai people aged 15 and over.

Subjective well-being was measured, as shown in Table 1, by having respondents estimate their level of happiness by giving themselves a happiness score of 0-10, from absolutely unhappy to absolutely happy. By tabulation, male respondents, accounted for 39.15 percent of the sample group, are were found to be slightly happier than female respondents (60.85 percent of total respondents). Respondents aged 15-24 (8.88 percent) scored themselves the happiest (8.01 out of 10), whereas older respondents indicated a lower level of happiness (7.07).

Considering how marital status might affect happiness, the survey suggests that single respondents had the highest level of happiness, with an average score of 7.82, followed by married couples living together (7.60). In contrast, those widowed, divorced, or separated (16.97 percent) reported the lowest level of happiness (6.96).

As for education, respondents with no education (5.33 percent) had the lowest level of happiness. Respondents with more than a bachelor's degree (9.9%)

tended to have the highest level of happiness.

Lastly, in terms of occupation, those who were still students had the highest educational level (8.27) followed by government officials and state enterprise employees (8.07), entrepreneurs (7.64), and private company employees (7.59). The unskilled, self-employed, or construction workers had the lowest average happiness score (6.98)

Figure 1 compares levels of happiness between respondents who were involved with religious giving, which are classified into 1) offering food to Buddhist monks, and 2) offerings dedicated to Buddhist monks. Respondents were asked how often they participated in religious giving activities–"often," "sometimes," or "never." Monks who receive food and other requisites from devotees also have a duty to fulfill. The monks should realize that those who are offering them food are not their relatives. Buddhists believe that they do not owe the monks anything. They are not offering food so that the monks can enjoy life and have a good time. Rather they are offering with the wish that would lead toward their happiness and prosperity.

Figure 2, on the other hand, compares levels of happiness between respondents who were involved with non-religious giving, which are classified into 1) donating money and goods to public, and 2) volunteer and social work. Respondents were also asked how often they participated in these religious giving activities.

By tabulation, a respondent who frequently gave or dedicated offerings seems to be happier than those who never gave anything. Compared to other types of giving, offerings to Buddhist monks tended to generate the highest level of happiness (with an average happiness score of 8.17 out of 10). Regardless of the types of giving, the average levels of happiness of those who occasionally gave are slightly different. Nevertheless, respondents who occasionally offered food to monks tended to have a slightly lower level of happiness than did those who did it regularly.

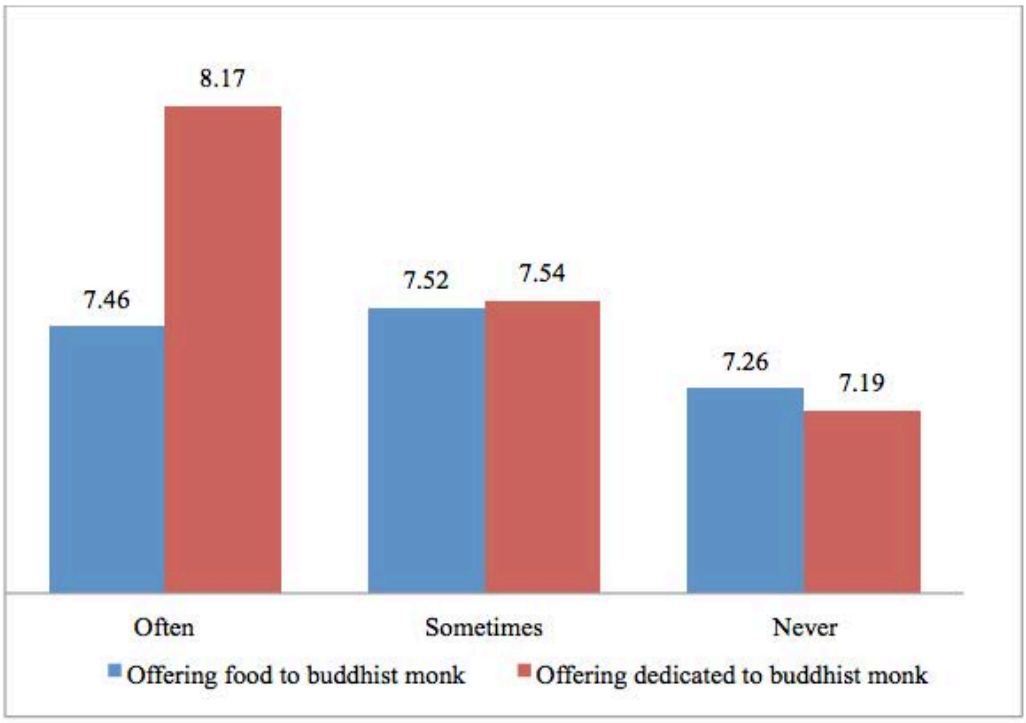
For non-religious giving, frequently or occasionally donating money and goods seemed to promote a higher level of happiness than did volunteering. Nevertheless, it is impossible, at this stage, to come to a definite conclusion since other factors affecting happiness level have to be taken into consideration as the tabulation does not take into account other control factors such as the socio-characteristics of each person (age, gender, education level, career, etc.).

Table 1: Percentage Dispersion and Average Happiness Level Classified by Economic and Social Factors

Variables	Percent of Total Sample	Average Happiness Level	Standard Deviation	Number of Respondents
Economic and social factors				
Male	39.15	7.59	1.70	10,871
Female	60.85	7.49	1.70	16,895
Age factor				
15 - 24 years	8.88	8.01	1.58	2,465
25 - 39 years	25.48	7.79	1.59	7,075
40 - 49 years	23.30	7.61	1.64	6,470
50 - 59 years	20.00	7.39	1.71	5,554
60 and over	22.34	7.07	1.81	6,202
Marital-status factor				
Single	15.86	7.82	1.67	4,403
Married	67.17	7.60	1.65	18,650
Widowed/divorced/separated	16.97	6.96	1.79	4,713
Educational factor				
No education	5.33	6.95	1.78	1,480
Primary school	55.09	7.29	1.73	15,295
Secondary school	12.58	7.75	1.66	3,493
High school/vocational certificate	12.29	7.90	1.54	3,412
Diploma/high v3ocational certificate	3.66	8.03	1.54	1,016
Bachelor's degree	9.90	8.16	1.42	2,749
Higher than Bachelor's degree	1.16	8.13	1.32	321
Occupational factor				
Student	4.15	8.27	1.51	1,152
Government official/state enterprise employee	8.17	8.07	1.49	2,269
Private company employee	14.57	7.59	1.61	4,046
Entrepreneur	24.45	7.64	1.63	6,788
Farmer	20.82	7.47	1.67	5,781
Unskilled/self-employed/ construction worker	3.75	6.93	1.75	1,041
Housewife/unemployed	21.08	7.22	1.83	5,853
Other occupations	3.01	7.03	1.86	836
Total		7.53	1.70	27,766

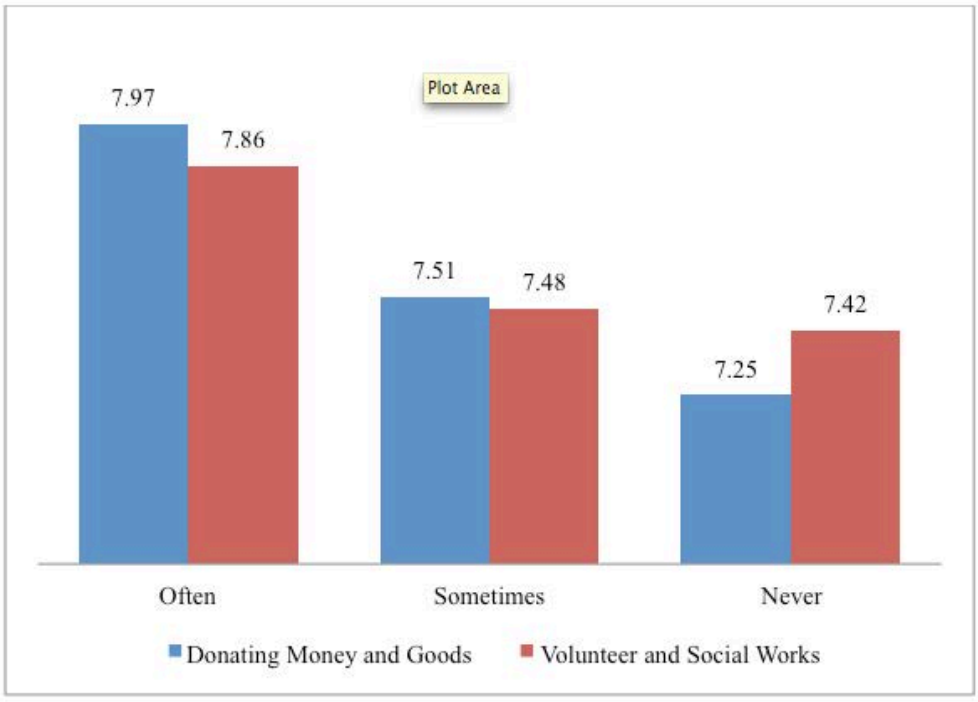
Source: Author's Calculation.

Figure 1: Level of Happiness according to Religious Giving



Source: Author's Calculation.

Figure 2: Level of Happiness according to Non-Religious Giving



Source: Author's Calculation.

4. Econometrics Estimation and Results

This paper adopts the econometric model to quantitatively investigate the effects of giving factors on happiness level, as gauged on a 0-10 scale. Independent variables include gender, age, marital status, educational attainment, religion, and occupation. Giving is classified into religious giving, which includes presenting food and other offerings to monks (for Thai Buddhists), and non-religious giving (charitable giving), including donating money or goods and participating in volunteer work. Frequency of giving is also incorporated in the model.

The model estimation in this study is based on 1) the Ordinary Least Square Estimation and followed by 2) the Ordered Probit Model, and 3) the Ordered Logit Model as the dependent variable, in this case a ranking from 0-10. Ordered probit is a generalization of the popular probit analysis to the case of more than two outcomes of an ordinal dependent variable. A similar method also has a counterpart in ordered logit. Both models are appropriately used here for assessing the happiness level. Estimating the frequency of giving (both religious and non-religious giving) should avoid the endogeneity problem (between giving and happiness) here in the estimated regression since frequency of giving is based on people's observed behaviors in the past, which should affect their happines level today.

In Table 2, the first Models 1-3 (generated by estimating OLS, ordered probit, and ordered logit, respectively) present the estimated results by including only socioeconomic control variables such as gender, age, age^2, religion, occupation, and education level with dummy non-religious giving factors, including giving money or goods to others and the frequency of doing so. Models 4-6 add the factors of participating in volunteer and social works as well as the frequency of such acts. Models 7-9 analyze impacts in the case of people who participate in both types of non-religious activities.

The analysis gained from using econometric models suggests that the effect of age on happiness level is statistically significant and negatively related to happiness level. An increase in age of 1 year causes happiness to decrease by 0.011-0.018 on the 10-level scale. Gender has no statistical significance on happiness level. As for marital status, results show that its effect on happiness level is statistically significant. Married respondents tend to have the highest happiness level, followed by single respondents and widowed, divorced, and married-but-separated respondents, respectively. The happiness level of married respondents is 0.09-0.158 higher than that of single respondents and 0.23-0.43 higher than that of widowed, divorced, and married-but-separated respondents.

For education level, results show that a higher education level leads to a higher happiness level. For example, respondents with a bachelor's degree and higher have a higher happiness level than those who with no education.

The effect of occupation on happiness level is also statistical significant. Students have the highest level of happiness, and respondents who have regular work, except for those who are unskilled, self-employed, and work in construction and other such

occupations, score themselves happier than do housewives and unemployed individuals,.

But apart from the above factors, we have missed one of the most important socioeconomic control variables here, which is income level, since it was not reported in this survey.

As for the "giving" factor, results indicate that there is a statistically significant positive relationship between giving and happiness. The happiness level derived from charitable giving in terms of money is 0.12–0.21 higher (on the scale of 10) than that of respondents who never give to charity. Furthermore, regular charitable giving is found to increase happiness level even more (0.31-0.53). In a similar way, respondents who participate in volunteer work are found to be happier than those who never do. And, as with charitable giving, the level of happiness is likely to increase when doing volunteer work regularly. In comparison, the happiness level derived from charitable giving in terms of money is found to be slightly higher than that from volunteer work. Nevertheless, regular participation in volunteer work is found to yield higher a happiness level than regular charitable giving. Table 2 also presents a comparison between happiness levels of respondents who give both money to charity and participate in volunteer work. From this analysis, it is suggested that respondents who both give money to charity and do volunteer work are happier than those who do either activity alone.

Analysis of religious giving–presenting food and other offerings to monks–in Table 3 suggests that a Thai Buddhist who offers food to monks seems to be happier than those who never do so, by around 0.083-0.172 points on the scale of 10. More frequent food offerings seems to even promote an even higher level of happiness. Making other offerings to monks increases one's happiness level by 0.159-0.276 points, which is more than does merely offering food to monks. Respondents who regularly make offerings to monks are happier than those who do not do so only infrequently. Compared to other types of giving, religious giving by making non-food offerings to monks seems to promote the highest happiness level. This is probably because Thai society has a close relationship with Buddhism, and that making offerings to monks is believed to provide great merit. In addition, the higher happiness score for making offerings other than food might result from the fact that donors usually make such offerings at a temple, which suggests that making merit at a temple increases the level of happiness.

Even though, as noted in a number of studies cited above, giving seems to promote happiness, a number of other studies find an opposite relationship. For example, happy people may give more than unhappy people (Isen and Leven, 1972; Anderman, 1972; Harris and Huang, 1973; and Kazdin and Bryan, 1971). Those studies find that positive moods have been shown to facilitate helpful behavior to the society.

Nevertheless, Anik, et al. (2009) explain a circular relationship between giving and happiness: happier people tend to give more, and giving indeed increases happiness.

Table 2: Estimation of Non-Religious Giving on Happiness Level

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	OLS	Ordered Probit	Ordered Logit	OLS	Ordered Probit	Ordered Logit	OLS	Ordered Probit	Ordered Logit
Socioeconomic Control Variables									
Age	-0.018	-0.012	-0.019	-0.016	-0.011	-0.018	-0.016	-0.011	-0.017
	*(0.003)***	*(0.002)***	*(0.004)***	*(0.003)***	*(0.002)***	*(0.004)***	(0.003)***	(0.002)***	(0.004)***
Age^2	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	*(0.001)***	*(0.001)***	*(0.001)***	*(0.001)**	*(0.001)***	*(0.001)**	*(0.001)**	*(0.001)***	*(0.001)**
Male	0.025	0.019	0.036	-0.004	0.002	0.007	0.022	0.017	0.032
	(0.021)	*(0.013)*	*(0.022)*	*(0.021)*	*(0.013)*	*(0.022)*	*-0.021*	*-0.013*	*-0.022*
Married	0.148	0.088	0.146	0.153	0.09	0.149	0.158	0.093	0.156
	*(0.032)***	*(0.020)***	*(0.035)***	*(0.032)***	*(0.020)***	*(0.035)***	*(0.032)***	*(0.020)***	*(0.035)***
Widowed/Divorced/Separated	-0.222	-0.139	-0.257	-0.222	-0.139	-0.258	-0.221	-0.138	-0.256
	*(0.040)***	*(0.025)***	*(0.044)***	*(0.041)***	*(0.025)***	*(0.044)***	*(0.041)***	*(0.025)***	*(0.044)***
Primary	0.195	0.12	0.224	0.211	0.129	0.234	0.199	0.122	0.222
	*(0.045)***	*(0.028)***	*(0.049)***	*(0.045)***	*(0.028)***	*(0.049)***	*(0.045)***	*(0.028)***	*(0.049)***
Secondary	0.383	0.241	0.445	0.421	0.263	0.477	0.406	0.254	0.466
	*(0.054)***	*(0.034)***	*(0.059)***	*(0.054)***	*(0.034)***	*(0.059)***	*(0.054)***	*(0.034)***	*(0.059)***
High School/Vocational Certificate	0.543	0.337	0.595	0.593	0.367	0.64	0.567	0.352	0.617
	*(0.054)***	*(0.034)***	*(0.059)***	*(0.054)***	*(0.034)***	*(0.059)***	*(0.054)***	*(0.034)***	*(0.059)***
Diploma/High Vocational Certificate	0.704	0.446	0.805	0.769	0.485	0.866	0.73	0.462	0.832
	*(0.069)***	*(0.044)***	*(0.075)***	*(0.069)***	*(0.043)***	*(0.075)***	*(0.069)***	*(0.044)***	*(0.075)***
Bachelor's Degree	0.822	0.517	0.898	0.915	0.573	0.99	0.872	0.548	0.952
	*(0.058)***	*(0.037)***	*(0.063)***	*(0.058)***	*(0.036)***	*(0.063)***	*(0.058)***	*(0.037)***	*(0.063)***
Higher than Bachelor's Degree	0.814	0.502	0.872	0.912	0.562	0.966	0.883	0.545	0.942
	*(0.104)***	*(0.066)***	*(0.111)***	*(0.104)***	*(0.066)***	*(0.111)***	(0.105)***	(0.066)***	(0.111)***
Student	0.51	0.333	0.573	0.509	0.329	0.567	0.51	0.33	0.567
	*(0.064)***	*(0.041)***	*(0.070)***	*(0.064)***	*(0.041)***	*(0.07)***	*(0.064)***	*(0.041)***	*(0.070)***
Government/State enterprise Employee	0.144	0.088	0.139	0.122	0.072	0.114	0.162	0.099	0.158
	*(0.047)***	*(0.030)***	*(0.051)***	*(0.048)**	*(0.030)**	*(0.052)**	*(0.048)***	*(0.030)***	*(0.051)***

Table 2 (Continued)

Private Company Employee	**0.012**	**-0.007**	**-0.026**	**0.026**	**0.003**	**-0.011**	**0.014**	**-0.005**	**-0.023**
	(0.037)	*(0.023)*	*(0.040)*	*(0.037)*	*(0.023)*	*(0.040)*	*-0.037*	*-0.023*	*-0.04*
Entrepreneur	0.151	0.085	0.141	0.18	0.103	0.169	0.156	0.089	0.145
	*(0.031)***	*(0.019)***	*(0.034)***	*(0.031)***	*(0.019)***	*(0.034)***	*(0.031)***	*(0.019)***	*(0.034)***
Farmer	0.09	0.049	0.074	0.052	0.023	0.028	0.08	0.041	0.061
	*(0.032)***	*(0.020)***	*(0.036)***	*(0.033)*	*(0.021)*	*(0.036)*	*(0.033)***	*(0.021)**	*-0.036*
Unskilled Self-Employed Worker	-0.342	-0.22	-0.411	-0.397	-0.256	-0.468	-0.36	-0.232	-0.427
	*(0.056)***	*(0.035)***	*(0.062)***	*(0.057)***	*(0.035)***	*(0.062)***	*(0.057)***	*(0.035)***	*(0.062)***
Other Occupations	-0.237	-0.149	-0.266	-0.212	-0.133	-0.238	-0.223	-0.138	-0.246
	*(0.060)***	*(0.038)***	*(0.066)***	*(0.061)***	*(0.038)***	*(0.066)***	*(0.061)***	*(0.038)***	*(0.066)***
Non-Religious Control Variables									
Donating Money and Goods	0.208	0.119	0.206	-	-	-	0.293	0.17	0.285
	*(0.024)***	*(0.015)***	*(0.027)***	-	-	-	*(0.031)***	*(0.019)***	*(0.033)***
Frequently Donating Money and Goods	0.460	0.309	0.533	-	-	-	-	-	-
	*(0.027)***	*(0.017)***	*(0.030)***	-	-	-	-	-	-
Volunteering to Social Work	-	-	-	0.045	0.031	0.05	0.198	0.129	0.208
	-	-	-	*(0.022)**	*(0.014)**	*(0.024)**	*(0.048)***	*(0.030)***	*(0.054)***
Frequently Volunteering to Social Work	-	-	-	0.407	0.269	0.465	-	-	-
	-	-	-	*(0.027)***	*(0.017)***	*(0.030)***	-	-	-
Donating Money and Goods and Volunteering to Social Works	-	-	-	-	-	-	0.376	0.232	0.392
	-	-	-	-	-	-	*(0.029)***	*(0.018)***	*(0.031)***
Constant	7.649	-	-	7.665	-	-	7.503	-	-
	*(0.135)***	-	-	*(0.135)***	-	-	*(0.136)***	-	-
R-Squared/Pseudo R-Square	0.088	0.025	0.026	0.083	0.023	0.024	0.079	0.022	0.022
Number of Observation	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766	27,766

Notes: 1) Numbers in parenthesis are Standard Error, 2) * p<0.1, ** p<0.05, *** p<0.0, 3) Reference group is Female, Single, No Education, Housewife/Unemployed

Table 3: Estimation of Religious Giving on Happiness Level

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(OLS)	(Ordered Probit)	(Ordered Logit)	(OLS)	(Ordered Probit)	(Ordered Logit)	(OLS)	(Ordered Probit)	(Ordered Logit)
Economic and social factors									
Age	-0.012	-0.008	-0.013	-0.014	-0.009	-0.014	-0.015	-0.01	-0.016
	(0.004)***	(0.002)***	(0.004)***	(0.004)***	(0.002)***	(0.004)***	(0.004)***	(0.002)***	(0.004)***
Age^2	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.010	0.01	0.021	0.032	0.022	0.04	0.025	0.019	0.034
	(0.021)	(0.013)	(0.023)	(0.022)	(0.013)	(0.023)*	(0.021)	(0.013)	(0.023)
Married	0.173	0.102	0.168	0.168	0.099	0.168	0.162	0.096	0.161
	(0.033)***	(0.021)***	(0.036)***	(0.033)***	(0.021)***	(0.036)***	(0.033)***	(0.021)***	(0.036)***
Widowed/Divorced/Separated	-0.229	-0.141	-0.261	-0.231	-0.142	-0.26	-0.236	-0.146	-0.267
	(0.042)***	(0.026)***	(0.046)***	(0.042)***	(0.026)***	(0.046)***	(0.042)***	(0.026)***	(0.046)***
Primary	0.270	0.164	0.304	0.252	0.154	0.287	0.249	0.152	0.286
	(0.048)***	(0.030)***	(0.053)***	(0.048)***	(0.030)***	(0.053)***	(0.048)***	(0.030)***	(0.053)***
Secondary	0.468	0.288	0.529	0.451	0.278	0.514	0.436	0.27	0.501
	(0.057)***	(0.036)***	(0.062)***	(0.058)***	(0.036)***	(0.062)***	(0.057)***	(0.036)***	(0.062)***
High School/Vocational Certificate	0.648	0.396	0.703	0.628	0.386	0.686	0.609	0.375	0.669
	(0.058)***	(0.036)***	(0.062)***	(0.058)***	(0.036)***	(0.062)***	(0.058)***	(0.036)***	(0.062)***
Diploma/High Vocational Certificate	0.829	0.517	0.933	0.808	0.505	0.915	0.786	0.492	0.894
	(0.073)***	(0.045)***	(0.078)***	(0.073)***	(0.045)***	(0.078)***	(0.073)***	(0.046)***	(0.078)***
Bachelor's Degree	0.972	0.603	1.053	0.951	0.591	1.034	0.927	0.578	1.013
	(0.061)***	(0.038)***	(0.066)***	(0.061)***	(0.038)***	(0.066)***	(0.061)***	(0.038)***	(0.066)***
Higher than Bachelor's Degree	0.976	0.597	1.039	0.958	0.587	1.023	0.933	0.573	1.002
	(0.108)***	(0.067)***	(0.113)***	(0.108)***	(0.068)***	(0.113)***	(0.107)***	(0.068)***	(0.113)***
Student	0.573	0.368	0.624	0.562	0.363	0.619	0.558	0.36	0.613
	(0.068)***	(0.042)***	(0.073)***	(0.068)***	(0.043)***	(0.073)***	(0.067)***	(0.043)***	(0.073)***

Table 3 (Continued)

Government/ State Enterprise Employee	0.229	0.142	0.231	0.233	0.145	0.238	0.221	0.138	0.224
	(0.049)***	(0.031)***	(0.052)***	(0.049)***	(0.031)***	(0.052)***	(0.049)***	(0.031)***	(0.052)***
Private Company Employee	0.006	-0.010	-0.032	0.012	-0.006	-0.025	0.002	-0.012	-0.034
	(0.039)	(0.024)	(0.042)	(0.039)	(0.024)	(0.042)	(0.039)	(0.024)	(0.042)
Entrepreneur	0.177	0.099	0.164	0.169	0.096	0.157	0.166	0.094	0.156
	(0.032)***	(0.020)***	(0.035)***	(0.032)***	(0.020)***	(0.035)***	(0.032)***	(0.020)***	(0.035)***
Farmer	0.106	0.058	0.086	0.099	0.055	0.079	0.111	0.061	0.091
	(0.034)***	(0.021)***	(0.037)**	(0.034)***	(0.021)**	(0.037)**	(0.034)***	(0.021)***	(0.037)**
Unskilled Self-Employed Worker	-0.346	-0.223	-0.414	-0.344	-0.221	-0.413	-0.327	-0.212	-0.395
	(0.058)***	(0.036)***	(0.063)***	(0.058)***	(0.036)***	(0.063)***	(0.058)***	(0.036)***	(0.063)***
Other Occupations	-0.256	-0.159	-0.282	-0.251	-0.156	-0.277	-0.252	-0.157	-0.281
	(0.063)***	(0.039)***	(0.068)***	(0.063)***	(0.039)***	(0.068)***	(0.063)***	(0.039)***	(0.068)***
Giving factors (Religious giving)									
	-	-	-	0.172	0.083	0.118	-	-	-
	-	-	-	(0.051)***	(0.032)**	(0.057)**	-	-	-
Frequent x Offering foods to monks	-	-	-	0.179	0.118	0.204	-	-	-
	-	-	-	(0.031)***	(0.019)***	(0.034)***	-	-	-
Offering Dedicates to Monks	-	-	-	-	-	-	0.276	0.159	0.268
	-	-	-	-	-	-	(0.031)***	(0.019)***	(0.034)***
Frequent x Offering Dedicates to Monks	-	-	-	-	-	-	0.792	0.493	0.753
	-	-	-	-	-	-	(0.214)***	(0.136)***	(0.230)***
Constant	7.369	-	-	7.249	-	-	7.229	-	-
	(0.106)***	-	-	(0.113)***	-	-	(0.107)***	-	-
R-Squared	0.071	0.019	0.020	0.072	0.020	0.021	0.074	0.020	0.021
Number of samples	26,019	26,019	26,019	26,019	26,019	26,019	26,019	26,019	26,019

Notes: 1) Numbers in parenthesis are Standard Error, 2) * p<0.1, ** p<0.05, *** p<0.0, 3) Reference group is female, single, No Education, Housewife/Unemployed, 4) Estimation only for Thai Buddhist

5. Conclusion and Policy Recommendations

In conclusion, results here show a positive relationship for both religious giving and non-religious giving and the happiness level of Thai people, most of whom are Buddhist. Using a Thai household dataset, this paper investigates the relationship between giving and happiness. The results suggest that both religious and non-religious giving generate greater happiness than not giving at all. Moreover, for non-religious giving, it is found that charitable giving in terms of money and goods provides a donor greater happiness than does volunteer work, but doing both enhances happiness even more.

Religious giving that involves offering food and making other, non-food offerings to Buddhist monks is found to increase happiness. And this happiness level is increased even more for respondents who regularly give for religious purposes. In particular, regularly making offerings to monks leads to the greatest happiness. This is probably because of Thai society has a close relationship with Buddhism, and making offerings to monks is believed to provide great merit. This suggests that making merit at a temple generates even more happiness. In addition, after performing religious giving, Thai Buddhists know they should share the merits gained with all beings. This is very beneficial, as sharing of merits is in itself a good deed. The mind thus enjoys a wholesome state associated with loving kindness and compassion as we share the merits of our good deeds.

With a positive relationship between both religious giving and non-religious giving to happiness level among Thai people, in term of public policy, it is advisable that the government introduce policy measures that encourage giving and participating in volunteer work to strengthen social networks, enhance the sense of altruism, and develop mindset that is appropriate with Thai society. For this purpose, Buddhism has been playing an important role in emphasizing the importance of giving. According to Buddhism, giving practically helps enhance the quality of human resources since it provides donors with more happiness and satisfaction, and thus lessens selfishness. In summary, when members of Thai society are altruistic and supportive of each other, Thailand will become a happy society and will continue to be a pleasant place to live as happiness can be enhanced, shared, and benefit society as a whole.

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Effect of Gay Affirmative Counseling Group on Internalized Homophobia of Gay Men

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Abstract

"Internalized Homophobia (IH)", as considerable amount of previous researches had proven, is correlated with many essential health factors and the key hindrance to the well-being of gay men. Nevertheless, empirical research on internalized homophobia reduction and counseling for gay men remains inadequate. This study aimed to examine the effectiveness of gay-affirmative counseling group on IH of Thai gay men. The pretest-posttest control group experimental design was employed. Participants were 32 Thai gay men (mean age = 26.84, *SD* = 4.96), recruited from a specific gay web board and community-based organization and randomly assigned into experimental group and control group. Both groups received 6 sessions of gay-affirmative counseling groups conducted by the first author. Instruments were the gay-affirmative counseling group and the IH questionnaire. Findings revealed that internalized homophobia scores of the gay men in the experimental group was significantly lower ($p < .01$) at posttest when compared to those at the pretest, and internalized homophobia scores of the gay men in the experimental group was significantly lower than those in the control group ($p < .05$) after the group counseling participation. The intervention and implication regarding counseling practice with gay men will be discussed.

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Introduction

Living in our society is challenging and difficult for gay men, since societal, familial and institutional attitudes toward gay men tend to be negative (Decha-ananwong, 2012; Lebolt, 1999; Sirijaroonchai, 2012). Common for gay men, they were teased, bullied, discriminated and stigmatized (Herek, Gillis, & Cogan, 2009; Lebolt, 1999; Zea, Reisen, & Poppen, 1999) to the extent that they had adopted negative feelings and attitude toward themselves and their homosexuality or "Internalized Homophobia" which was defined as the constellation of negative attitudes that gay men possess toward homosexuality in general and toward homosexual features in themselves (Mayfield, 2001).

Internalized homophobia was correlated with many essential health factors for gay men, both psychological and behavioral, e.g. depression , less self-disclosure (Frost & Meyer, 2009; Herek, Cogan, Gillis, & Glunt, 1997), low self-esteem (Herek et al., 1997), wellness (Dew, Myers, & Wightman, 2005), sexual comfort, compulsive sexual behavior, unsafe sex (Ross, Rosser, & Neumaier, 2008). Furthermore, Rosser, Bockting, Ross, Miner and Coleman (2008) pointed out that internalized homophobia rather than degree of homosexuality significantly associated with major depression, dysthymia, likelihood of being in therapy, overall sexual health, psychosexual maturation, comfort with sexual orientation, outness, peer socialization and negative health outcome. As implied in this research, being a homosexual or gay man is not a cause of these health-related problems, instead the internalized homophobia is. Therefore, it is not an overstatement to conclude that internalized homophobia is a key hindrance to the well-being of gay men.

Reducing gay men's internalized homophobia is of utmost importance in term of psychological and counseling services for gay men and by doing so the mental and physical health of gay men could be elevated tremendously. Somehow, not all of the counseling and psychotherapy services were supportive of the positive view of clients' homosexuality or gay-friendly (Langdridge , 2007; Milton & Coyle, 1999). Some counselors held the attitude that being gay is a choice and can be converted (Lebolt, 1999; Milton & Coyle, 1999) which stigmatized rather than de-stigmatized the gay clients. According to Rosser et al. (2008), providers should promote sexual health and avoid interventions that reinforce internalized homophobia.

A counseling approach that was proposed to counteract the internalized homophobia and affirm positive gay identity was "Gay-affirmative Therapy" which was defined by Davies (1996) as the practice that affirms a lesbian, gay, or bisexual identity as an equally positive human experience and expression to heterosexual identity (Crisp & McCave, 2007).

Nevertheless, empirical research on IH reduction and counseling for gay men remains inadequate, especially in Thailand. There has never been any research or study that focuses on the counseling of any kind on gay clients in Thailand. The closest attempts up until now were the qualitative studies focused on different aspects of gay men's experiences, e.g. experience of receiving mental health services (Ojanen, 2010), coming out process (Chaivudhi, 2011), not disclosing sexual identity to the family (Sirijaroonchai, 2012) and self-acceptance (Decha-ananwong, 2012). This study is an attempt to answer the aforementioned concerns about gay men as an onset of the better evident-based psychological service of gay men through the examination of the gay-affirmative counseling group on Thai gay men.

Purpose of the study and hypotheses

This study examined the effect of the gay-affirmative counseling group on the

internalized homophobia of Thai gay men. The hypotheses of this study were 1) the internalized homophobia of the gay men in the experimental group is significantly lower at posttest when compared to those at the pretest, and 2) the internalized homophobia of the gay men in the experimental group was significantly lower than those in the control group after the group counseling participation.

Method

The pretest-posttest control group experimental design was employed in this study. The dependent and independent t-test were used to analyze the decrease of internalized homophobia in the experimental group. The participants were randomly assigned into experimental group and control group. To prevent the effect of confounding variables, the pretest internalized homophobia score of the experimental and control group were tested. Independent t-test showed that there were no significant difference between the groups (p = .668) as shown in Table 3. The experimental group consecutively received 6 sessions of gay-affirmative counseling group which were developed and conducted by the researcher. The control group received no treatment due to participants' inconvenience, the compensation as a mental health guideline for gay men was given to the participants.

Participants

The purposive sample was 32 Thai gay men recruited via gate keepers from a specific gay web board and community-based organization. Sample's mean age was 26.84 (*SD* = 4.96), and ranged between 19-40 years. The majority of the participants had the bachelor's degree (78.12%). All the participants were Thai and currently lived in Bangkok. The sample was 43.75% company's employee, 15.62% government officer, 15.62% university student, 12.50% self-employed, and 12.50% unemployed. 53.12% of the sample had never come out to parents, 9.38% came out to one or both of the parents less than a years ago, 6.25% between 1-2 years, 3.12 between 2-5 years and 28.13% more than 5 years.

Measurement

The internalized homophobia scale used in this research was developed and based on the *Nungesser Homosexual Attitude Inventory Revised* (Shidlo, 1994), the *Internalized Homophobia Scale* (Wagner et al., 1994), and the *Internalized Homonegativity Inventory for Gay Men (*Mayfield, 2001), the 3 measures that have good reliability, validity support and ability to detect low and moderate levels of internalized homophobia in gay men (Szymanski, Kashubeck-West, & Meyer, 2008). The quality of each measure is as follows.

The *Nungesser Homosexual Attitude Inventory Revised* (NHAI-R) was adjusted from the Nungesser Homosexual Attitude Inventory (Nungesser, 1983) by Shidlo (1994). NHAI-R was used to assess internalized homophobia in gay men, consisted of 36 items which can be divided into 3 subscales: attitudes toward one's own homosexuality (self), attitudes toward homosexuality in general and toward other gay people (other), and reaction toward others' knowing about one's homosexuality (disclosure). Each item is rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency reliability of the full scale was between .90 and .92 (Dube, 2000; Gold, Marx, & Lexington, 2007; Szymanski et al., 2008) and for each subscale was .88, .67, and .93 respectively (Dube, 2000). The concurrent validity of NHAI-R was supported by positive correlations with HIV-related homonegativity (r = .68) and psychological distress (r = .43) and a negative

correlation with self-esteem (r = -.56)

The *Internalized Homophobia Scale* (IHS) was developed by Wagner et al., 1994). It consisted of 20 items, which 9 items were borrowed from the original NHAI (Nungesser, 1983) and 11 items were developed by the HIV Center for Clinical and Behavioral Studies at New York State Psychiatric Institute. Each item is rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency reliability of the scale was between .87 and .92 (Harris, Cook, & Kashubeck-West, 2008; Szymanski et al., 2008). The test-retest reliability was .62 (Wagner, 1998). The concurrent validity of NHAI-R was supported by positive correlations with Demoralization (r = .49), psychological distress (r = .37), and Depression (r = .36) (Wagner, Brondodlo, & Rabkin, 1996)

The *Internalized Homonegativity Inventory* (IHNI) was developed by Mayfield (2001) to assess internalized homophobia in gay men. It consisted of 26 items with 3 subscales: personal homonegativity, gay affirmation, and morality of homosexuality. Each item is rated on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The internal consistency reliability of the full scale was .91, and for each subscale was .89, .82, and .70 respectively (Mayfield, 2001). The IHNI has good convergent validity with the original NHAI (r = .85) and the concurrent validity of IHNI was supported by a negative correlation with gay identity development (r = -.68)

The internalized homophobia scale was developed and translated from English into Thai by the researcher based on the items from the aforementioned 3 internalized homophobia scales and the comments from the developers as being shown in Table 1 to assess negative feelings and attitudes of gay men toward one's own homosexuality and homosexuality in general. It consisted of 32 items. Each item is rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The quality of the internalized homophobia scale was tested the quality with 100 Thai gay men with mean age of 22.21 (SD = 4.65), and ranged between 15-40 years. The items with good item discrimination (t > 2.0) and corrected item-total correlation (r > .20) were selected. The internal consistency reliability of the scale was .94.

Gay-affirmative counseling group

Clark (1987) outlined the core of the gay-affirmative counseling as the therapy that helps gay lesbian and bisexual (LGB) clients to become aware of how oppression has affected them; desensitizing the shame and guilt surrounding homosexual thoughts, behaviors, and feelings. Davies (1996) also suggest that the therapist should explicitly show respect for the client's sexual orientation, personal integrity, lifestyle, attitudes, and beliefs (Pachankis & Goldfried, 2004). Clark further elaborated that the gay-affirmative therapy should consist of discussing the way LGB clients have been oppressed because of their homosexuality, helping the clients let go of any shame and guilt they feel, and allow them to show anger at the effects homophobia and heterosexism has had on them. In order to provide gay-affirmative therapy, counselors should be free of heterosexist bias and homophobic prejudice (Ritter & Terndrup, 2002) and develop the knowledge and understanding of issues specific to gay men (Harrison, 2000; Pachankis & Goldfried, 2004).

Sikorski (2011) concluded that the gay affirmative therapy in group setting can offer many benefits that individual sessions cannot, and can be especially successful for working with LGB clients. The group setting offers the opportunities for gay men to socialize and gain a sense of community, which lessen a sense of isolation and allow the social identification. Therefore, the gay-affirmative group can be a safe place for

gay men to utilize the therapy to cope with vital issues in their lives, e.g. coming out, learn to accept themselves, and gain a positive view of their homosexuality.
The gay-affirmative counseling group used in this study consists of 6 consecutive sessions within 2 days, with various elements. The group was developed and tried out with two pilot groups. Session: 1) Self-introduction: forming a group norm and explore participant's attitudes toward homosexual terms, 2) Personal homosexual origin: explore participant's experience of making sense of his homosexuality and become , 3) Oppressed and stigmatized self: how participant perceives of different situation and deal with it, 4) Balancing the coming out: how one related the view of one's homosexuality with previous coming out experience, 5) Meaning in life: finding meaning as a gay man living in a heterosexist society, 6) Future's direction: how to deal and combat with a risk of oppression and homophobia in the future.

Result

Hypothesis 1: the internalized homophobia of the gay men in the experimental group is significantly lower at posttest when compared to those at the pretest.
The first hypothesis was supported by the t-test as shown in Table 2. The pretest mean score of internalized homophobia of experimental group was 61.31 (*SD* = 18.00), whereas the posttest mean score of internalized homophobia was 51.43 (*SD* = 15.76). For the experimental group, the dependent t-test showed that the posttest internalized homophobia score was significantly lower than the pretest internalized homophobia score of the experimental group ($p = .002$). On the other hand, for the control group, the dependent t-test showed no significance between the posttest internalized homophobia score and the pretest internalized homophobia ($p = .301$).
Hypothesis 2: the internalized homophobia of the gay men in the experimental group was significantly lower than those in the control group after the group counseling participation. The second hypothesis was supported by the t-test as shown in Table 3. The posttest mean score of internalized homophobia of experimental group was 51.43 (*SD* = 15.76), whereas the posttest mean score of internalized homophobia of control group was 66.62 (*SD* = 17.79). The independent t-test showed that the posttest internalized homophobia score of the experimental group was significantly lower than the posttest internalized homophobia score of the control group ($p = .016$).
Figure 1 summarized the findings which are 1) the IH of the gay men in the experimental group was significantly lower ($p < .01$) at posttest when compared to those at the pretest, and 2) the IH of the gay men in the experimental group was significantly lower than those in the control group ($p < .05$) after the group counseling participation.

Discussion

This study investigated the effect of the gay-affirmative therapy by assessment of internalized homophobia in Thai gay men and the revealed that the gay-affirmative counseling group could reduce the internalized homophobia of gay men. These findings was consistent with previous studies that showed the positive experience of the clients after joining the gay-affirmative counseling (Lebolt, 1999; Nel, Rich, & Joubert, 2007; Pixton, 2003).
As Clark (1987) outlined, helping gay clients to explore how oppression and homophobia has affected them is the start of the therapeutic process that can expand clients' awareness of internalized homophobia. As Lebolt (1999) reported that one of the qualities of the gay-affirmative therapy that LGB clients viewed as helpful was

that the therapist increased the client's awareness of, both internal and external, homophobia and heterosexism. The participants could explore their attitudes and receive the positive feedback from both the counselor and the group. This could normalize and affirm their gender identity.

In gay-affirmative therapy, the counselor's task was to be the affirmative agent that instilled the sense of affirmation in the group. To achieve that, there are two major approaches to the therapeutic process. The first approach was to encourage gay men to develop gay-affirmative values and attitude toward their homosexuality (Hereks & Garnets, 2007; Hicks, 2000; Kirby, 2008) along with the second approach which was to neutralize, normalize and de-pathologize participants' negative attitudes toward their homosexuality (Mayfield, 2001).

One factor that showed counselor's competency in working with gay participants was the comfortability with participants' sexuality (Lebolt, 2001). Not only the appearance, but also the comfortability and ability to respond and help on participants' diverse issues (Crisp & McCave; Garnets, Hancock, Cochran, Goodchilds, & Peplau, 1991; Tasker & McCann, 1999), from maintaining the masculine look, concern about other's view of their sexuality, social and romantic relationship, coming out planning and so on. This assured participants that the counselor was free of heterosexist bias and homophobic prejudice (Ritter & Terndrup, 2002) and had the knowledge and understanding of issues specific to gay men (Harrison, 2000; Pachankis & Goldfried, 2004).

When the participants gained a sense of safety in the group, they disclosed and exchanged more of their personal experiences about homosexuality and sexual milestones which, again, were affirmed. This help to desensitize the shame and guilt surrounding homosexual thoughts, behaviors, and feelings. As participants took turn in exploring and exchanging their experiences, they could realize the diversity within gay society which can help them accept their uniqueness and idiosyncrasy (Lebolt, 1999)

Though diversity played some roles within the group, the universality of participants was also of importance. Likeness, not difference, can connect and relate people to one another. Due to isolation and risk, gay men were exposed to in the past, there had not been many opportunities for them to connect and identify with gay community. The gay-affirmative group offered them the opportunities, helped them related to gay people and confirmed their gay identity (Decha-ananwong, 2012; Nel et al., 2007).

Since more than half of the participants in this study did not disclose their homosexuality to their parents, it can be indicated that most of them had a negative view of their homosexuality. According to a qualitative study of Sirijaroonchai (2012), the key informants who had never disclosed their homosexuality to their parents view their homosexuality as negative. This highlighted the importance of the coming out issue in the gay-affirmative counseling process and its relation to gay men's view of themselves.

Limitation

Due to difficulty of gaining the participants, the age range of the participants was wide (19-40), so that enough number of participants could be reached, which can be difficult to the address the effect that age might have on the result. Somehow, the mix of age had benefited the participants in this study by letting the participants share their experiences, they could all learn from one another's story. This resulted in the participants whose stories benefited others gained self-esteem (Kirby, 2008; Lebolt, 1999) while other participants could also learn from the experiences being shared and

received social support from the group (Dietz, & Dettlaff, 1997).

All the participants in this study were purposively recruited from a specific gay web board and community-based organization and all of them were currently live in Bangkok, so they might not be representatives of Thai gay men population. In the future, there should be more avenues to gain and recruit gay participants.

Counseling Implication

This study confirmed that gay-affirmative therapy is beneficial for gay men's mental health and well-being and also the gay-affirmative counseling group can significantly reduce the internalized homophobia of gay men. Therefore, the gay- affirmative approach as discussed can be applied to the counseling work for gay clients' benefit. The neutral and affirmative stance of a counselor is vital to the therapeutic relationship in gay-affirmative therapy (Ritter & Terndrup, 2002). In order to enhance and deepen a counseling process, the counselor need to interrogate his/her own attitudes and reaction toward gay clients' issues, so that the aforementioned gay-affirmative aspects could be properly applied to the process. Importantly, neutralization and normalization of homophobia perspective of gay clients is crucial throughout the process of gay-affirmative therapy.

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Table 1 Items of the internalized homophobia scale and its source(s)

No.	Item	Source(s)
1	Whenever I think a lot about being gay, I feel depressed.	NHAI-R ,IHS, IHNI
2	I am glad to be gay.	NHAI-R,IHS
3	Whenever I think about being gay, I feel critical about myself	NHAI-R
4	When I am sexually attracted to another gay man, I feel uncomfortable.	NHAI-R
5	I am proud to be a part of the gay community.	NHAI-R
6	I wish I were heterosexual.	NHAI-R,IHS
7	I have been in counseling because I wanted to stop having sexual feelings for other man.	NHAI-R
8	There have been times when I've felt so rotten about being gay that I wanted to be dead.	NHAI-R
9	Marriage between gay people should be legalized.	NHAI-R
10	Homosexuality is a natural expression of sexuality in humans.	NHAI-R,IHS
11	Homosexuality is a sexual perversion.	NHAI-R
12	Life as a homosexual is not as fulfilling as life as a heterosexual.	NHAI-R ,IHS, IHNI
13	I wouldn't mind if my boss knew that I am gay.	NHAI-R
14	When I am sexually attracted to another gay man, I do not mind if someone else knows how I feel.	NHAI-R
15	I would not mind if my neighbors knew that I am gay.	NHAI-R
16	It is important for me to conceal the fact that I am gay from most people.	NHAI-R
17	If men knew of my homosexuality, I am afraid they would begin to avoid me.	NHAI-R
18	If it were made public that I am gay, I would be extremely unhappy.	NHAI-R
19	I would not give up being gay even if I could.	IHS
20	Homosexuality is deviant.	IHS
21	If I were heterosexual, I would probably be happier.	IHS
22	I have no regrets about being gay.	IHS
23	I believe being gay is an important part of me.	IHNI
24	I believe it is OK for men to be attracted to other men in an emotional way, but it's not OK for them to have sex with each other.	IHNI
25	I feel ashamed of my homosexuality.	IHNI
26	I see my homosexuality as a gift.	IHNI
27	When people around me talk about homosexuality, I got nervous.	IHNI
28	I believe it is morally wrong for men to be attracted to each other.	IHNI
29	I believe it is unfair that I am attracted to men instead of women.	IHNI
30	I am disturbed when people can tell I'm gay.	IHNI
31	I am comfortable with my homosexuality.	First Author's
32	Being gay does not make me feel inferior.	First Author's

Table 2 Dependent t-test of the internalized homophobia scores

		Pretest				Posttest					
	n	*M*	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*	*t*	*p*
Experimental group	16	61.31	18.00	39	108	51.43	15.76	34	83	3.849**	.002
Control group	16	64.06	17.89	41	112	66.62	17.79	47	114	1.071	.301

** $p < .01$

Table 3 Independent t-test of the internalized homophobia scores

	Experimental group				Control group					
	M	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*	*t*	*p*
Pretest	61.31	18.00	39	108	64.06	17.89	41	112	-.433	.668
Posttest	51.43	15.76	34	83	66.62	17.79	47	114	-2.55*	.016

* $p < .05$

Figure 1 Summarization of the result

Experience of Psychological Help Seeking through Online Psychological Services among Adolescents: A Consensual Qualitative Research

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Abstract
This study, aimed to examine experiences of Thai adolescents who have sought online psychological support. Key informants were nine adolescents aged 18-25 who fulfill selection criteria and were willing to be interviewed. A consensual qualitative research method was used for data analysis. Finding revealed six main themes of online help seeking experiences of these adolescents. These were: (1) Awareness of warning signs of daily life interferences and suffering mind, (2) Dealing with the interferences and way to handle them , (3) Seeking "other support or oasis" by considering individual who could support them during the challenging times, (4) The decision to use internet help seeking and facilitating factors, (5) Experience in exchanging with skilled psychological support providers feeling of being understood and obtaining alternative resolutions to their challenges, and (6) Limits of online psychological help-seeking. Finding obtained should help enrich online psychological services in enhancing the service utilization and reaching out to adolescents who would benefit from the services. Additionally, the findings should provide a guideline for the enhancement of online psychological services.

Keywords: psychological help-seeking, internet-based services, consensus qualitative research

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Introduction

Seeking professional psychological services is an effective way of coping among persons with life difficulties and psychological concerns. Particularly, adolescents who are experiencing life transition have to learn these help-seeking skills. According to King and colleagues (2006), internet-based psychological help seeking has become more popular among adolescents. The researcher reported issues contributing to psychological help seeking from professionals through the internet on websites “Kids Help Line” (KHL) (www. kidshelp.com.au) about receiving benefits from service among adolescents who had used psychological services via the internet that found five domains relevant to adolescents’ motivates and experiences .The main benefits of online counseling were reported in relation to the privacy and providing an emotionally safe environment to seeking psychological help from professionals through the internet on websites “Kids Help Line” (KHL) (www. kidshelp.com.au) about receiving benefits from service among adolescents who had used psychological services via the internet (King , Bambling, Lloyd, Gomurra, Smith, Reid & Wegner, 2006) In addition, Gray, Klein, Noyce, Sesselberg, and Cantrill (2005) regarded internet as the most accessible and economical media which attracts users’ interests. The study has shown the internet service combines positive features of traditional lay and professional, personal and impersonal sources. Although it is unlikely to totally replace the role of trusted peers and adults, the internet has found an important place among adolescents’ repertory of health information sources and tend to rely on the internet as the first source of helping.

Likewise, Gross (2004) found a significant increase of internet usage in the group of teenagers who need to find solutions for their problems. Moreover, a factor that prohibit help seeking behavior was relating to having to disclose identity to the help providers. Doing so, made people decided to seek help from helping sources that did not require them to disclosure their identities (Wills & DePaulo, 1991). Therefore, internet is a good alternative that provides comfortability for the help seeker who is in need of professional psychological services. Nicholas, Oliver, Lee, and O'Brien (2004) had introduced helping services via the internet called "Reach Out!" (Au.reachout.com) found that adolescents had access to the service when they had emotional pressures and there were no significant differences between the two genders in terms of service seeking from "Reach Out!".This research shows that almost half the participations has been to the "Reach Out!" website following the presentation, and approximately two-thirds reported that they would use "Reach Out!" to seek help if they were going through a tough time.

Although it has been noted that there is high incidents of internet-based psychological help seeking among adolescents, we found that few efforts to clarify seeking help experiences during a crisis or after experiencing psychological distress among adolescents. Therefore, this paper aimed to present experience of psychological help seeking from psychology professional services via the internet among Thai adolescents.

Methodology

This study employed a consensual qualitative research (CQR) design as detailed below:

Key Informants. Nine Thai adolescents (2 Males, 7 Females) who have experienced psychological help seeking from psychology professional services via the Internet participated in this study. Their mean age was 21.50 (SD = 2.06, *R*=18 – 25) years old. All volunteer to participate in the study.

***Procedure and Data Analysis*. :** After getting an approval by the Committee for Human Research, Chulalongkorn University, the researcher contacted the gatekeepers and utilized social network to recruit the qualified key informants and made appointments with the key informants. The first meetings with the informants were to inform them about the detail of the study and their rights to participate in the study. Those who were willing to participate in the study were asked to sign a consent form. The key informants were invited and interviewed once or twice which took approximately 1-2 hours. A verbatim transcription of the interview audio records were analyzed using a consensual qualitative research method (CQR: Hill, Knox, Thompson, Williams, Hess, & Ladany, 2005). Trustworthiness of the analysis - validity of the findings, interpretation, and summary from supportive data were achieved through an external audit conducted by 2 experts on qualitative research, as well as member checking.

Results

Findings revealed six main themes of experience of psychological help seeking as the following.

1. **Awareness of Warning Signs.** Key informants reported this experience as an alarm which indicates that they were obsessed with the problems. At the same time, they had the "flashing thoughts" about the problems, and cannot stop themselves from thinking repeatedly. The theme also includes “anxiety,” “unhappiness,” “stress,” and eventually “despair.”

1.1 Obsessed with thoughts. Almost of key informants have the idea that differentiate obsession with thinking to solve problems, how problems happen to them or impact of problems in future.

> *"It is not clear …the steam like yes or maybe not when I thought it's yes but I rethink again . I can not find concluded in the middle what really I want (ID3) ."*

1.2 Anxiety. Key informants reported anxiety about their problems and cannot handle or do anything to fix the problems or make themselves feel better.

> *"It's like I started thinking too much, tied up**…..** I started jittery feeling and It's like no I can not stand this anymore I needed someone to talk. (ID1) "*

1***.3 Unhappiness, stress and despair***. Most of key informants reported some changes that occurred during that time of service seeking and how this had an impact on their minds in terms of the sense of frustration.

> *"Yes, It's like I cannot get rid of this feeling from my life and I have to live with this pain forever. No way out from this mess … I cannot do anything. (ID3) "*

2. **Dealing with the Interferences**. Key informants reported coping with their own emotions that prevented them from getting back to their normal life. This coping did not resolve the issues, but merely reflected the first response that the informants

needed to do in order to alleviate the emotional disturbance which greatly affected their lives.

2.1 Dealing with problems by themselves. Most of key informants have mentioned to deal with problems by considered and reviewed cause and try to deal with the emotions that interfere their daily lives so they reclaim normal back to their own lives. They has been decided to not disclosure problems with others.

"About the problem I will try to find out good ways perhaps I can find one… I read short messages or something like that to me feel strong, cheerful and no pessimistic thinking... yes, I do not give yourself lonely, hang out with my friends, listened to the music. Most of I read a lot of short, simple messages.(laughs) (ID2) "

2.2 Maintaining a balance of mind . Key informants discussed how to deal with their emotions about problems to better emotion or back to normal felling by decided to tell their problems to other for release tight feeling inside but not reached to deal direct with problems.

"It's had to be love story (laughs) …Yes (name of interviewer), I thought alone it would be much more reality. I like to drain my felling to other but not person that I fought with it will making more trouble. I need to share what I thought with my friends "what he/she thing about this" something like that. (ID1) "

3. **Seeking Other Support or "Oasis"**. Key informants decide the individual to who would be comes their supporter and to reveal the problems to from their characteristics or attributes of each person. The Informants need support from that individual or some other sources to help them from the emotions that caused them frustration and influenced their behavior.

3.1 Seeking help from a Close persons. Key informants reported deciding to disclose their problems to people that are closeest to them such as friends, roommates , romantic partners and family members. 8 in 9 of key informants mentioned to talking with "friend" were first person who decide to talk with. A person who closest are person who key informants spent times together, do the same activities together, know each other very well, feeling comfortable to talk with about their narrative feeling and trust each other

"Sometime I shouldn't say anything but some deep issues I can trust her .It isn't mean she can help me but he understand my feeling and keep it as a secret.(ID1) "

3.2 Perceiving that she/he might be helpful. Key informants decided to disclose their desire for help seeking to other person who not close to them. Key informants considered by kind of their problems that are facing and appropriate with issues. Person who chosen by key informants was expected to give some answers that can help them.

"I'm not specific or any criteria who that I talking I just feel like I can get a good advices or suggestions from her/him. (ID6) "

4. **Seeking Help via Internet**. This theme includes key informants' decision making and facilitating factors for their internet use preference. Key informants not only needed to deal seriously with their emotions, but also needed to have a better understanding of the problems and of themselves. This eventually led to their online help-seeking behavior.

4.1 Feeling deadlock when dealing with problems. Key informants has committed to deal with problems by rethinking about their situation and trying to balance their mind. Still, they perceive that they are not effective in their problems

solving even when they seek help from closest persons, such as telling friends or family members, taking advices. However, this does not help them out of the problems.

"like… make me rethink at the same point … that's point my friend talk about and what actually it should be for me. (ID3) "

4.2 Perceiving that the issues are hard to tell other. Key informants reported their feeling discomfort and embarrass about issues. Issues that difficult disclosure and concerned about their image so these things make them decided not to seek help.

"Some problems ummm … I can't let's my family know that what I think about one of our family even how bad she is because it's a inside problems... should not tell anyone and maybe it's just only my thinking. By the way Maybe it's better not to tell anyone.(ID4) "

4.3 Feeling comfortable to seeking help. Key informants reported about chatting with professional psychological services via Internet found that make them feel comfortable to disclosure their own personal issues without concerned about their image. These make them feel brave and free to share personal issues more than usually.

"What I was thinking is that should I talk to someone or I should not tell anyone …this was very hard for me. Then I think if I did not tell anything to anyone it would be worse more and still headache like this.

4.4 Getting rid of trouble. Key informants knew how severe problems that threaten them or recognized that they have bothered them so long. So they needed to deal with their problems seriously to relieve their emotions and thought by seeking help from professionals psychological services.

"Because I have many thing to do such study and if I can't manage myself about my issues that make me hard to study. Moreover if I still thinking too much I can't concentrate to read books, don't want to meet other and mental health even worse so I need to chat with professional via the internet. (ID8) "

4.5 Effective solution. Key informants reported expectations of their minds when decided to seek help from professional psychological services via the internet as a alternative channel to access the service. They reported about hope psychologists can help them with a view of professional to find out efficiently answers to solve their problems.

"Would does he/she (psychologists) doing … well, I keep it for long time…what should I do? Perhaps to satisfy myself, talk with my friends, spend time with myself and him (boyfriend) to thinking about our situation and I can do decision but sometime I want to ask a question in my minds to psychologist if they were me what would they do? They have learned about this thing I want to use their experience of psychologists judged if he/she were me what will they do, what will they say It seems to be right …Yes, well they must also guide as good so I'm really trust them.(ID2)"

4.6 Trusting in the professional. Trust and confidence of professional psychological services through online services were reported by key informants. There are led to decision to disclose problems to seriously deal with their issues. They assure psychological services can help them to efficiently solve their problems. Image of website and name of the institutions that make some of key informants credibility and confidence in professional psychological services.

"With name of the institution which service is (Name of institution

serving profession psychological via the Internet), it's make me confident with their services and before I used service I knew their security system so I trusted them before I access this services ... yes I trusted them. (ID1) "

4.7 Ensure about confidentiality. Key informants were convinced that psychologists to follow ethical of confidentiality and privacy when they used this services.

"They tell me that I can tell them, I thought it looked good and private because my issue was a little weird, different from other. I think if they can offer privacy it would be ok (ID5) ."

5. **Experience of Psychological Support via Online Services.** Key informants reported feeling relieved and delighted while chatting with professional psychological service providers. They understood themselves better and obtained the solution for their issues.

5.1 Recognition of supporting mind. Perception of key informants given the feeling that occurs when chat with profession that makes comfortable, supported, safe and no anxiety when decided to talking about their issues. During the discussion, several key informants indicated their felt support from professional that not their expect before. This perception has been linked to feeling safe when they decided to disclose personal issues.

"*Safety is the safe feeling I felled, warming. I had drained my feeling inside. I feel free to tell her and don't worry about what I just said. It's difference when I talked to my friend I always worry after that what does my friend thought about me ...maybe I was fool in her thought or bad person. (ID2) "*

5.2 Recognition of the problems resolved. Perceptions related to the problems solving that key informants discussed about abnormal feeling and thought return to normal, reduced despondent and improved mood. This understanding could be view as being indicative to the self-understanding and understanding their issues while chatting with professionals. In addition, they reported as recognition of grievances to relieve suffering some key informants mentioned to useful guiding and information to help them from professional services.

I" could not find this solution I found the way for 4 years ago but never find it. They willing to tell this to me "It is worth it for me like gold" for me.(ID8) "

6. **Limitations of the service**, Some of the factors that affect communication between informants and psychologists during the sessions have been identified as the limitation of online psychological services that use only texts and cause misunderstanding, especially when the psychologists tried to use psychological techniques.

"three psychologists I used to chat with It is unpredictable if I walk in this service actually I want to talk only one psychologists .... but the situation is not so favorable. (ID5) "

Discussion

The results demonstrate positive experience of online help seeking among Thai adolescents. In this section, psychological help seeking process and the adolescent experience are highlighted. According to psychological help seeking process, the participants recognize the problems and the necessity for help seeking especially from experts or helping sources they can access. Factors relevant to the

decision regarding the sources of service sought include the reliability, and the level of confidence of these individuals (Nicholas et al., 2004).

Although the adolescents in the current study have used professional services through the internet, the majority of these informants did not recall considering professional psychological services as the first helping source. Instead, they had attempted seeking help from other sources before. However, the process of seeking help found not different from the third step of the process to seeking help that Gross and McMullen (1983, as cited in Schroeder, Penner, Dovidio, and Piliavin 1995).Outlined as will be discussed below.

First step: Perception of problems

This study found person can become aware in suffering and emotional that make them feel uncomfortable that reflect self- awareness of the realization about problems. The feeling that affect to their behavioral and physical changes such as cannot stop thinking about the problems, encountering, repeatedly ideas, feeling of isolation, as well as experiencing decreased appetite, troubled sleeping or even physical illness. Rickwood, Deane, Wlison, and Ciarrochi (2005) discussed help-seeking behavior was conceptualized as a process whereby the personal becomes increasingly interpersonal.

Second step: Decision to deal with problems.

Informants reported not only deciding how to deals with the problems but also considering the helping sources that can provide benefits to them. Accordingly, key informants made decision to seek help. Due to their concerns that the help seeking would compromise their confidentiality, many sought help from sources they know. Eight in nine key informants decided to disclose the problem to helping sources that they know or have used before with regard to many factors that would be beneficial to themselves or not . Psychological help -seeking behavior has determined that such action will bring pleasure to their mind or how to deal with the problems. These informants would have tried to handle the problem on their own before disclosing the problem to helping sources. During the process they try to review themselves and their problems, ignoring or normalizing by thinking that problems can happen to others too. Ignoring or trying not to think about problems are in the form of a coping type non - productive coping and avoidance (Frydenberg & Lewis, 1993). To face with problems like this seems to be concerned with handling emotional that may affected the person to feel like they did not fully deal with the problems. Non - productive coping and avoidance coping occurred with the most key informants , although they recognized the need for help seeking. This study found that non-productive coping and avoidance can be problematic and do not depends on the person's perception of discomfort about the problem. Somehow, this feeling pushes the informants to seek help when perceiveing that they can-not handle the problem alone.

Third step: Strategies and Tactics

This step in psychological help-seeking process help determine whether the person is successful in seeking help or not. Various factors come to play. These are, for instance, how knowledgeable the persons are about help seeking. If person does not engage in appropriate help seeking, they would not benefit from the help. This also has an effect on their perception of the existence of the problems. Experiences in dealing with the problems in past will come to play a role when person began to review or seek psychological help (Wills & DePaulo, 1991) .

This study demonstrates the limitations or barriers that found after key

informants trying to deal with their issues by themselves and seek help from others. Also they might not tell anyone. Hence, help seeking is deterred by their concerns for concern lack of confidentiality. Professional psychological services through the internet is a way to makes people feel more comfortable seeking help from sources they are not familiar. This helping source has the potential to make help-seeker feels comfortable expressing themselves. To encourage them to do so, sources of help must be available and accessible. Finally, the help-seeker must be willing and able to disclose their inner state to that source (Rickwood et al., 2005).

Conclusion

The result showed that online psychological services are appropriate and effective for the help-seekers who were not ready to meet face-to-face with the psychologists. However, there are some disadvantages. There are; namely, difficulties in verifying clients' identity, lack of behavioral and non-verbal cues, limit to client who lack of skills to use the technology. This finding also supports by the study of Vongtangswad (2010) that during the online session, using only text could cause misunderstanding which might fail to respond to clients' needs. In sum, help seeking behaviors via online services among Thai adolescents is a new form of service in Thailand- still with some advantages and disadvantage issues- that needs further study and development for greater effectiveness. However, further investigation of the experience on psychological help seeking from professional psychological services via the internet should be carried with a cohort study in the future.

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Assessing and Managing User Satisfaction with Cloud Government Service

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Abstract

Currently, Cloud-based service is the trend of E-service. With Cloud-based service, End-user can easily startup, access service through the network anywhere anytime, rapidly scale up and pay only for what consumers need. Besides, government needs to implement technology innovation to lower the information delivery cost of IT. Current model (E-Government) has a significant problem, hard to control the budget deficit when delivering service. It shows that the public sectors need a new model: Cloud government service(C-Government) taking Internet as the primary way doing communication and service delivery. Then earn the benefit from delivering a newest service with lowest capital expense. However the crucial to success is depending on the user perceived satisfaction of the C-government.

Since directly predict user's decision is thought un-feasible. This research purpose is to build a surrogate system for measuring user satisfaction of C-government. Namely, develop a scale for an application that succeeds in creating a service which is compatible with citizens' needs, desires and expectations. Through strictly iterative processes, the survey developed, items were adopted as End-User Computing Satisfaction scale generated based on extensive literature review and expert interviews. Then after filtering with reliability and validity process, a factor analysis was conducted. This paper builds an instrument with dimensions among Content, Ease of Use, Security, Timeliness and Enjoyment. In conclusion, it provides views for both service participants and governmental policy-makers to enhance government services with technical, behavioural and managerial aspects.

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Introduction

Since the indispensable of Information and communications technologies (ICTs), such as network communication, deliver/receive information and network operations, the network technology was developed with a tremendous speed. On the public sector side, Taiwan government has implemented ICTs on E-Government for more than 16years (since 1998)("國家發展委員會-電子化政府計畫," 2009). E-Government have been recognized as a key strategy for improving the effectiveness of public and programs(Pardo, Nam, & Burke, 2012). However, currently E-Government encountered a significant problem, that is, budget deficit was brought about whenever update version or new service issued(Zhang & Chen, 2010). Citizens also have to update their hardware to conform to the requirement of new function that. It indirectly leads to reduce utilization rate. On the other hand, for the new participants, the giant sunk cost will be a big entry barrier. As a result, the problem not only contributes to the low utility rate of resources, but also the low interactions with government and finally yields a C-Government service failure.

To effective manage government's e-service and optimize the use of resources, Taiwan government has starting a five-year E-Government project focusing on Cloud Computing since 2012. The project is budgeting up to 252.22million USD. The purpose of the project is to explore the application of the C-Government service.

The greatest advantage of adopting the C-Government model is cheap and fast.(Zhang & Chen, 2010). Wherein the four of the most well-known advantages of cloud computing is that: (1) Easily access information with convenience and directly use without waiting (2) Access anytime anywhere (3) Capabilities can be as large as one need (4) Consumers pay only for need.(Rader, 2012).

C-Government model incorporates with the concept of cloud computing into original E-government model. C-Government use the Internet as the primary way doing communication and service delivery (Armbrust et al., 2010; Zhang & Chen, 2010). To make sure the C-Government service can succeed conduct measurement of ECUS to be a surrogate for utility in decision making. Knowing what an End-Users actually need, momentum of reuse, complain and expectation can effectively improve the perceive satisfaction. In the meantime, take relative actions to facilitate End users' willingness to reuse and participate to the C-Government.

Literature Review

The need of E-Government

To surpass the more developed areas and become competitive with economic big powers, Eastern countries in developing are aggressively introducing and promoting with E-Government Service policy. (Hsieh, Huang, & Yen, 2013) .

Taking advantages of the electronic processing can separate into two dimensions, internal and external. Internally, Advantages of E-Government are that conduct the electronics process to lower the cost between employees and between supervisor and employee(Hsieh et al., 2013). In detail, build a knowledge management platform for new staffs to get familiar with job content and rapidly catch up with other colleagues. For departments, it offers an approach for users to do information transfer. And it can also set permissions hierarchical tiers for supervisor can manage and sign official document by Internet (Fillis, Johannson, & Wagner, 2004).

Externally, Government offers citizens and business E-services without time limit and space constraint. They contribute to that make people have positive change in attitude(Hsieh et al., 2013). People also have changed their lifestyle, e.g., do career training at home. Through those applications, user save amount of time and most important, they increase the interactions with government (Alawneh, Al-Refai, & Batiha, 2013). In addition, E-government also builds an infrastructures for remote-area and national minority to enhance their education and healthcare to get close with the urban-rural gap and also another way do cultural reserved.(Wolff & Andrews, 2010) Governments provide those e-based proposal are in order to improve the public participation.

Urgency of C-Government

Final Version of NIST(National Institute of Standards and Technology) Cloud Computing Definition is that "cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction(US Department of Commerce, 2011)." In addition, the so-called cloud refers to the data center containing hardware and software.

Cloud-base government can enhance the productivity of both government departments and users , efficient on service being provided, participation of citizens to government, and collaboration between user, government or business(Zhang & Chen, 2010). The forms of cloud computing service is separated into three (1) Software as a service (SaaS), e.g., App. (2) Platform as a service (PaaS), e.g., E-learning (3) Infrastructure as a service (IaaS), e.g., storage(Marston, Li, Bandyopadhyay, Zhang, & Ghalsasi, 2011).

User Satisfaction is a crucial core-factor for user

After a new product and service introduced, the satisfaction will be looked as and early indicator by the first researcher and early followers (Oliver, 1980).Due to the overwhelming information, potential participants don't know how to make decision. The feedback of user becomes a direction to reference. So that it is the reason why service satisfaction becomes one of the most popular methods to do advertisement(Nabizadeh, T. & Gharib, Z., 2012).

A potential user will build an expectation after knowing others satisfaction, and choose whether join the line of users. After experienced, user will have their perceived satisfaction. And this perception of satisfaction and expectations are positively correlated (Van Ryzin, 2004). In other words, satisfaction positively affects expectations, and expectations also positively affect other users' satisfaction. As a result, users build a intention of reuse after experienced (Alawneh, Al-Refai, & Batiha, 2013). Under this virtuous cycle, satisfaction must be a critical determinant to success. Thus this research takes user satisfaction as the target research element.

End-User Computing Satisfaction

EUCS is a evaluate mechanism extended from the UIS. The biggest difference between them is that EUCS adds the factor Ease of Use, the user friendly of system(Doll & Torkzadeh, 1988). Besides, EUCS focused on a specific application. The audiences were people who directly contact with the computer system but not the manager. The implement provides a proper research environment for MIS, but not traditional satisfaction measuring. Overall EUCS might be a significant progress for End-User (Doll & Torkzadeh, 1988)。

EUCS model is comprised of a two layer construction. Among them, Ease of Use and the timeliness are the mainly different factors from the UIS. As aforementioned, Ease of Use is related to the user friendly. In somewhere it's not suitable to a complex and large scale network system, e.g., ERP system(Somers, Nelson, & Karimi, 2003). However in the public oriented software and service, ease of use is somebody in this area (Aggelidis & Chatzoglou, 2012; Alawneh et al., 2013; Doll & Torkzadeh, 1988). Timeliness also has a significant positive impact on the E-government service(Lee, Kim, & Ahn, 2011). In contrast, accuracy often sacrificed to match a better performance of timeliness (Sekhobo & Druschel, 2001). And the other factors in layer two of (Doll & Torkzadeh, 1988) EUCS are Content, Accuracy and Format.

Owing to the condition selection and environmental conformance, EUCS is still thought as an integrated mechanism that is effective and able to successfully predict the information systems(Alawneh et al., 2013; Doll & Torkzadeh, 1988; Hou, 2012; Somers et al., 2003).

Research Structure

Questionnaire

Through strictly and interact of literature review, 41 items within 3 global items being added as a criterion are listed. The criterion includes (1) ABC cloud-government service is good. (2) I am satisfied with ABC cloud-government service. (3) ABC cloud-government service is successful. The three items is arranged in the end of pre-test. Since it can be more clearly and completely represent to the user's real perceived satisfaction after recall the whole details of the system (Pearson & Bailey, 1980) .

After preliminarily confirming the 41 items, the researcher has interviewed with experts in this area and checked the representativeness item by item. At the same time, conduct a small sample survey and take experienced user as audience. With the interviews and survey method, this study finally selected 29 items containing criterions those are believed having representation and the more belonging to the cloud computing area.

Formal questionnaire uses the 29-item within 3 global items as criterion (see Appendix1) sending by online survey website. Through online survey system not only might not affect the quality of result(Boyer, Olson, Calantone, & Jackson, 2002), but also could confirm that the audiences are computer users(Kiesler & Sproull, 1986). Besides, this questionnaire also set a gate to ensure subjects are C-Government experienced.

Data analysis

After the collection, three processes were conduct (1) Each items in correlated item total correlation should higher than 0.5. (2) Reliabilities between criterion and each item cannot lower than 0.4. (3) After eliminating the items did not achieve the threshold, execute the factor analysis by Varimax Rotation and set loading level should higher than 0.45 on the remaining. Finally, take the result to continue the next stages of research.

Table 1
Cronbach's Alpha of total and each factor.

	Content	Ease of Use	Enjoyment	Security	Timeliness	Total
Cronbach's Alpha	0.877	0.891	0.846	0.910	0.864	0.948

Table 2.
Pearson Correlations (*<0.05, **<0.01)

Item	Corrected Item-Total Correlation	Criterion related score	
1	0.647	.552**	
2	0.597	.535**	
3	0.691	.576**	
4	0.676	.562**	
5	0.193	.151*	Deleted
6	0.644	.572**	
7	0.702	.604**	
8	0.749	.679**	
9	0.726	.637**	
10	0.731	.669**	
11	0.692	.603**	
12	0.483	.371**	Deleted
13	0.714	.647**	
14	0.65	.599**	
15	0.692	.687**	
16	-0.222	-.305**	Deleted
17	0.547	.515**	
18	0.67	.555**	
19	0.62	.516**	
20	0.631	.500**	
21	0.56	.442**	
22	0.618	.500**	
23	0.742	.675**	
24	0.704	.660**	
25	0.737	.673**	
26	0.636	.670**	

*p<0.05,**p<0.01

Table 3

Analysis of inter correlation matrix

	CT1	CT2	CT3	CT4	CT5	EoU1	EoU2	EoU3	EoU4	EJ1	EJ2	EJ3	EJ4	SC1	SC2	SC3	SC4	SC5	TL1	TL2	TL3	TL4
CT1	1																					
CT2	.733	1																				
CT3	.650	.633	1																			
CT4	.604	.572	.589	1																		
CT5	.534	.603	.490	.461	1																	
EOU 1	.340	.430	.478	.422	.474	1																
EOU 2	.483	.539	.530	.527	.509	.671	1															
EOU 3	.460	.577	.546	.508	.490	.620	.682	1														
EOU 4	.469	.539	.527	.512	.428	.584	.682	.805	1													
EJ1	.339	.371	.390	.427	.388	.282	.392	.424	.364	1												
EJ2	.320	.430	.433	.448	.438	.462	.492	.500	.495	.548	1											
EJ3	.380	.511	.453	.440	.548	.515	.582	.566	.547	.563	.610	1										
EJ4	.437	.506	.541	.469	.447	.519	.552	.623	.587	.492	.626	.625	1									
SC1	.256	.337	.298	.444*	.314	.457	.415	.391	.459	.274	.404	.390	.369	1								
SC2	.247	.318	.269	.405	.317	.491	.429	.423	.446	.252	.372	.381	.338	.785	1							
SC3	.306	.346	.326	.441	.354	.464	.409	.367	.396	.277	.372	.429	.346	.792	.769	1						
SC4	.212	.298	.268	.376	.322	.420	.421	.353	.404	.214	.305	.348	.299	.762	.734	.661	1					
SC5	.387	.376	.360	.501	.381	.492	.419	.455	.432	.432	.449	.479	.447	.563	.591	.605	.472	1				
TL1	.413	.493	.517	.482	.384	.430	.468	.576	.494	.422	.502	.456	.554	.371	.336	.349	.286	.436	1			
TL2	.433	.551	.522	.501	.471	.558	.547	.634	.615	.392	.533	.544	.608	.464	.446	.429	.409	.497	.661	1		
TL3	.488	.558	.504	.497	.456	.479	.566	.575	.506	.461	.456	.552	.569	.430	.408	.406	.347	.438	.568	.621	1	
TL4	.482	.606	.559	.492	.489	.558	.598	.574	.535	.394	.540	.565*	.580	.424	.431	.424	.409	.473	.599	.615	.623	1

Table 4
Rotated Component Matrix[a]

Component	Security	Content	Ease of Use	Enjoyment	Timeliness
SC1	0.587				
SC2	0.848				
SC3	0.869				
SC4	0.821				
SC5	0.863				
CT1		0.654			
CT2		0.862			
CT3		0.755			
CT4		0.629			
CT5		0.609			
CT6 (DELETE)		0.609	0.465		
EoU1			0.7		
EoU2			0.697		
EoU3			0.701		
EoU4			0.707		
EJ1				0.656	
EJ2				0.673	
EJ3				0.488	
EJ4				0.807	
TL1					0.476
TL2					0.537
TL3					0.614
TL4					0.755

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.

Research Result

Reliability

Reliability means that the measurement of stability under variable of conditions (Lai & Ong, 2010). The method to measure is (1) homogeneity between each item (2) the consistency among contents. Therefore, this study take Cronbach's alpha for measuring the homogeneity, and, simultaneously, eliminate the items having Corrected Item-Total Correlation lower than 0.5. As a result, the instrument has enough reliability.

After factor analysis, Table 1 shows the Cronbach's alphas of each factor. And there are three items with Corrected Item-Total Correlation (Table2) lower than the standard are deleted.

Validity

Content validity

Content validity of satisfaction, there are two definitions for it. First, every aspect of the application are being measured(Bailey & Pearson, 1983). And the second version, items in its domains have enough representativeness (Klenke, 1992);

After researches being reviewed, the items were refined by both pre-test and interactive interview with E-Government experts. Every step is evidence to proof the achieving of the first definition of content validity. Besides, item with no high enough score with Criterion are deleted (Criterion related score < 0.4). Due to the Criterion is an all-aspect examination by number, so that, every item left was verified that they possessed sufficient representativeness in its belonging factor. Through reviewing, interviewing, sending survey and carrying out on statistical system, to conform the both definitions. This research must have strong content validity.

Construct validity

Construct validity to an instrument was defined as that whether the instrument of satisfaction performance can build with crucial attribute as expects (Bailey & Pearson, 1983). The study take inter-measurement correlation matrix approach to do construct validity in terms of convergent and discriminant validities.

Convergent validity was defined as associations between scales of the same group were higher than zero (Aladwani & Palvia, 2002). In sum, the smallest inter-factor correlations (Table 3) are: Content=0.461; Ease of use=0.584; Enjoyment=0.492; Security=0.472; and Timeliness=0.568. Besides, the significant are higher than zero.

To measure discriminant validity is to count the number, violations, that correlation of items to other variable higher than the lowest number of in-factor correlation of a variable(Lai & Ong, 2010). The violations should be lower than 50% of test times of tests. There are 386 tests and only 55 of them violate (Lai & Ong, 2010). That is, lower than 50%, the instrument has enough construct validity.

Factor analysis

At last, carry out a factor analysis with the result of the 26-items questionnaire with Varimax rotation and taking the factors having the eigenvalue higher than 1. Three factors were found: Ease of Use, Enjoyment and Timeliness/Security/Content. Because the classification is not precise enough, the researcher decided to duplicate the Doll & Torkzadeh's(1988) method. They conducted specifying two, three, four, five and six factor. Then found that the best result to explain the item groups.

Through generalize and discuss with the items, five factors are selected (Table 4). They are Content, Ease of Use, Security, Timeliness and Enjoyment. And one of the Content items with multiple loading high than 0.45 is eliminated for distinction between factors even though it must be an excellent measurement of satisfaction.

Table 5

Mean of factors and global score and eigenvalue factors

	Content	Ease of Use	Enjoyment	Secure	Timeliness	Global scale
Eigenvalue	2.174	1.153	0.985	11.01	0.777	
Mean						
All	3.700	3.550	3.571	3.262	3.581	3.570
Female	3.736	3.635	3.654	3.282	3.695	3.660
Male	3.623	3.458	3.481	3.240	3.548	3.473
Collage	3.650	3.502	3.516	3.228	3.552	3.588
Graduate	3.600	3.567	3.573	3.546	3.677	3.584

Discussion

Finding

After analysing through factors, gender and education…etc., (1) the eigenvalue of security is five times to the second (Table 5). (2) Enjoyment has not been mentioned in E-government literatures. (3) The average score to all factors of female are higher than male (Table 5). (4) The average score to all factors of graduate students are higher than college students (Table 5).

Security

Owing to the eigenvalue of security is five times to the second and it has high related to Criterion. Security has been incredibly important to present user. In prior literatures, there has no such situations in government related service that Security is more important than Content and Ease of Use(Alawneh et al., 2013; Hsieh, Huang, & Yen, 2013). Previous research found that security is not even a main factor (Gilbert, Balestrini, & Littleboy, 2004; Carter & Bélanger, 2005). But through (“2013 Cyber Attacks Statistics,” 2013) pointed out that hackers prefer to attack the government organizations. Also present citizens realize that the significance of their data security and personal data privacy. Therefore, before launching a new E-service, it may be the first priority policy to build a reliable, complete and continuous maintenance safeguard. In this research, Security is the most important but the performance users perceived are bad and far lower than the criterion which indicate the whole system performance.

Enjoyment

Enjoyment is a factor rarely mentioned in EUCS literatures. Enjoyment is that people feel interested in fumble for machines and suggest that these people may prefer service themselves options that let them do(Dabholkar, 1996). It matches the features of End-User. That is, they like to interact directly with system and design their required functions. For example, Iaas (Infrastructure as a service) for C-Government is a so-called place for people to design their own usage. And when E-service with customization attribute will make user engage in(Mathwick, Wagner, & Unni, 2010). Similarly, (Holbrook, Chestnut, Oliva, & Greenleaf, 1984)said that having high enjoyment to the computing software will reinforce the intrinsic motivation of people and increase the user satisfaction.

Implication

This study provides the government sectors a primary developing direction for the three stages of ITIL (Information Technology Infrastructure library): Service Design, Service transition, Service operation. First, in the service Design stage, service provider should not only focus on the content but also the security. The second, service transition, they have to strengthen the ease of use and timeliness to achieve the goal that pump up the market. At last stage, service operation may be a stable stage. The services are becoming maturity. Service, usually, mainly focuses on holding the user. Enjoyment can enhance the users' dependency on it. In conclusion, more efficient utilization of resources and services achieve the desired effect.

Conclusion

The ECUS instrument for C-Government has been preliminarily developed. After strictly work, this research offers some directions to later researches. Provide a framework of ECUS to assess G-Government application. Through previous literatures, it is also workable on other extension types of E-Government. This research also discovers a factor, Enjoyment, which appearing for technology and human progress. With research result, we advise that if government organization is launching a new C-Government service, they should take the security and content at the initial designing stage. Next, Ease of Use and Timeliness at the transition stage. At last, focus the enjoyment of the service and also keep eye on other factors at the third stage.

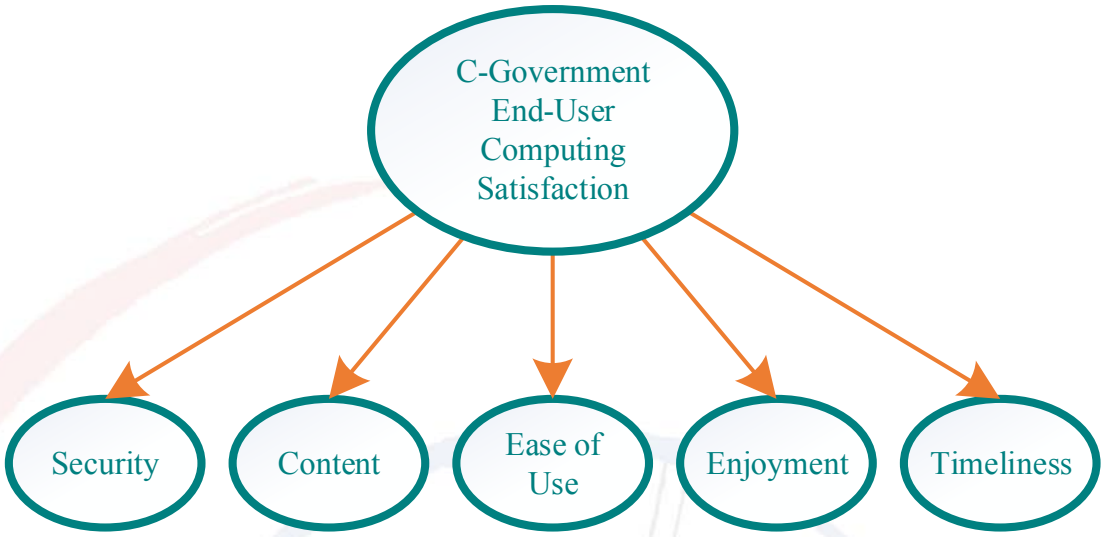
Appendix

Appendix 1

Items of formal questionnaire

1.	ABC cloud-government service provides up-to-date information.
2.	ABC cloud-government service has high accuracy.
3.	The information of ABC cloud-government service is clear.
4.	The output of ABC cloud-government service is reliable.
5.	ABC cloud-government service provides too much information.
6.	ABC cloud-government service provides the precise information I need.
7.	ABC cloud-government service provides comprehensive information.
8.	ABC cloud-government service is easy to use.
9.	ABC cloud-government service is easy to operate.
10.	ABC cloud-government service is user friendly.
11.	ABC cloud-government service is flexible.
12.	It is easy to correct the non-system errors of ABC cloud-government service.
13.	I enjoy in using ABC cloud-government service.
14.	I fell ABC cloud-government service is trouble-free.
15.	ABC cloud-government service is convenient.
16.	ABC cloud-government service needs to be modified or redesigned.
17.	I will increase the use of ABC cloud-government service in the future.
18.	ABC cloud-government service has enough safe-guards to make I feel comfortable in conducting transactions.
19.	ABC cloud-government service ensures the confidentiality of my personal information.
20.	ABC cloud-government service will not misuse my personal information.
21.	ABC cloud-government service shows attentions for privacy of its user.
22.	ABC cloud-government service has enough safe-guards to protect my personal information.
23.	ABC cloud-government service is efficient.
24.	ABC cloud-government service updates the data fast.
25.	It does not take times to interact with ABC cloud-government service
26.	ABC cloud-government service effectively eliminates the time cost from traditional approaches to get the same goal.
27.	ABC cloud-government service is good.
28.	I am satisfied with ABC cloud-government service.
29.	ABC cloud-government service is successful.

Appendix2


C-Government End-User Computing Satisfaction
Security
Content
Ease of Use
Enjoyment
Timeliness

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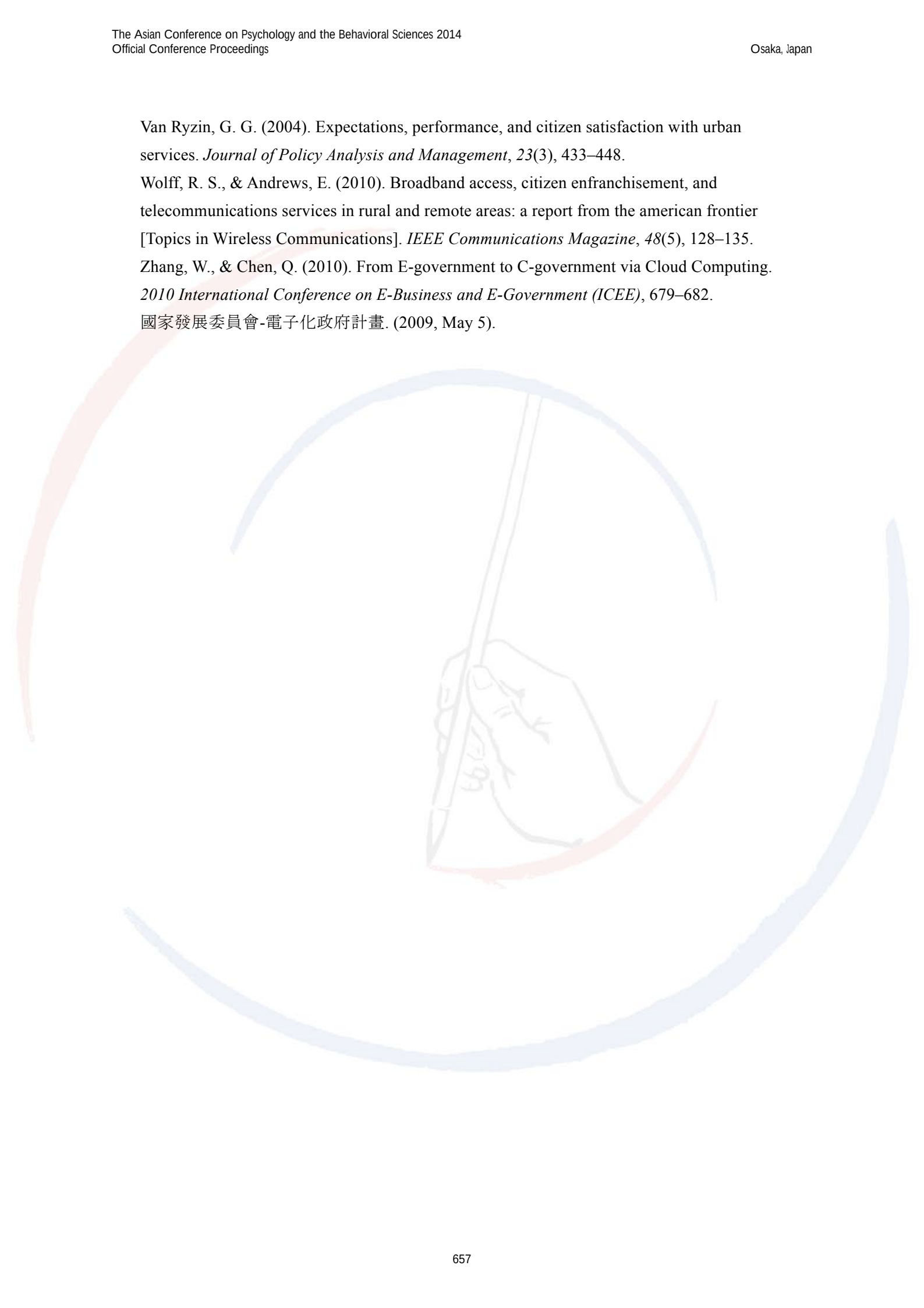

A Study on the Driving Factors of Service Modularization

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Abstract

In recent years, the scale of service industry is increasing rapidly. Considering the growing divergence of customer needs and intensive competition environment, service providers try to use cost-efficient and flexible approaches to fulfill each customer's personalized request. Thus, how to meet an increasing demand for various customized services at reasonable cost becomes an important issue. Modularization has been regarded as an important element of achieving mass customization in products and services. Service modularization represents a feasible approach to solve this issue. However, there is little research focusing on the topic of service modularization. This paper reviews the extant service literature and discusses the driving factors of service modularization. The findings help service firms understand how they can modularize their services.

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I. INTRODUCTION

Over the past few decades of growing significance of service industry, a number of issues have appeared such as growing divergence of customer needs, increasing cost pressure, competition intensity. The customers' demands for personalized services are increasing, even though these requests are constantly changing and not easy to ascertain. The field of basing individual customers' needs and delivering services to them cost-efficiently becomes a popular issue (Ma, Wang, & Xu, 2011).

Service providers use the strategy of mass customization to offer flexible and cost-efficient services to satisfy their customers' individual demands. At the same time, modularity has long been regarded as a crucial element of achieving mass customization in products and services(Bask, Lipponen, Rajahonka, & Tinnilä, 2011).

The benefits of modularity are well discussed in the existent literature. For instance, service modularity is flexible and open for tailoring and at the same time achieves efficiency to offer superior value to customers.(Rahikka, Ulkuniemi, & Pekkarinen, 2011). More, service modularity can accelerate service product innovation of firms, provide more personalized service and help acquire scale economic effects (Ma et al., 2011). Therefore, modularity can be seen as an approach to develop services and manage variability in demand, which is why it deserves further research attention.

II. RESEARCH METHOD AND FINDINGS

There is growing interest in subjects correlated to modularity, which were already been quite recognized in manufacturing industry, such as industrial engineering, software engineering(Böttcher & Klingner, 2011). We review extant literature about the modularity-related themes and find there is no one universal definition of modularity (Gershenson, Prasad, & Zhang, 2003). Even if advantages of modularity have long been recognized, the research of service industry is still insufficient.

The most common definition of modularity is referred as "the degree to which the systems components can be separated and recombined to generate a diversity of configurations with its functionalities" (Schilling, 2000). With the view of modularity, the service components can be regarded as the smallest building block or module (Voss & Hsuan, 2009). Bask, Lipponen, Rajahonka, and Tinnilä (2010) argue that "A modular system as a system built of components, where the structure ("architecture") of the system , functions of components ("elements" or "modules"), and relations (interfaces) of the components can be described so that the system is replicable , the components are replaceable, and the system is manageable."

What factors drive service providers to do service modularization? We follow Voss and Hsuan (2009) and adopt the concept of product architecture to conceptualize service architecture. They argue that service industry can breakdown into characterized service package/component. In this study, we use the term "service package" to represent a module. Each package has functional properties to offer functionalities, such as customer and provider objectives, standardized classification, change of properties, etc.(Böttcher & Klingner, 2011).

One of best solutions to satisfy customers' needs and achieve service providers' goals

in service modularization is to use an integrated planning and control system. To plan, schedule and budget for whole service structure and short-term objectives for service package. Each organizational units and individuals has clear definitions of their own responsibility in the service. When service breakdown structure is established, it helps to track for the cost and performance of individual service package. Thus, problems can be quickly discovered and coordinated.

One of the characteristics of services is that they produced and consumed simultaneously. Meanwhile, the service product can be the service process and many services can be regarded as products. The interface is an important feature of service architecture. The interfaces of services include people, information, and rules governing the information flow (Voss & Hsuan, 2009).

As result of previous theory that we decompose a service process into service packages and every packages is timely relative. Therefore, it needs to estimate the cost of time for each service package. In the process breakdown structure, it means the delivering of previous service package as an output which needed to be checked to ensure phase of current service package were accomplished and qualified to next phase.

To summarize few points of our findings, it is necessary to clarify what you expect to deliver your service to customers first. In addition, it is important to make sure service performance meets all what your customers' needs. Second, concerning about time, cost, labor, equipment and objectives of individual service package to perform and to influence whole service process, it is necessary to control duration of each service package with specific start and finish time in service modularization. Especially, critical service package should not be delay.

III. CONCLUSION

We try to review the existent literature concerning about modularity and to find enablers of modularity in the context of service. Through this study, it helps managers to know the anticipants of service modularization and implement modularity in their service production accordingly. Thus, contribute better customer value and profitability in the competitive market. On the other hand, this study presents a basis for the development of service modularization and points to new possibilities for further research.

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Cognitive Change among Foreign Managers in Japan's IT Sector

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Abstract
There is a large volume of research on foreign worker adjustment, though little has taken on the issue of cognitive change. In particular, Japan, despite being considered a "difficult" culture for foreigners to access, has been lagging as a topic of business study since the end of the Bubble Era two decades ago. Japan however is a major employer of foreign IT workers and increasingly innovates in that industry. This original qualitative study includes nine cases interviewed between Winter 2012 and Spring 2014. These interviews reveal changes that occur in cognitive style and management style preferences. These are presented and discussed base on Nisbett's (2003) holistic and analytic cognitive styles, Berry's (1980) acculturation scheme and Adler and Gundersen's (2007) concept of synergy with implications for foreign workers and their managers in Japan.

Keywords: cognitive style; cross cultural management; Japan; North America; holistic; analytic

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Cognitive Change among Foreign Managers in Japan's IT Sector

Introduction

This study report provides evidence about how North American IT professionals change in the process of working in the environment of Japan. The changes studied here include cognitive, metacognitive, and behavior changes, however mainly the cognitive changes will be examined in this research report. This research project began with intuitions about the subject, namely that North Americans coming to Japan would experience a situation different enough to change their behaviors and thinking that were in place prior to arrival in Japan. These intuitions were formulated as research questions. The research questions were developed into in depth, open form interviews.

Literature review

The literature on foreign managers and acculturation in Japan has languished in the time since the collapse of the Bubble Economy in the early 90s. As economic excitement has shifted to China and other countries, academic interest has also shifted away from Japan. Highlighting this shift of attention, only a handful of academic papers on cognition in Japanese business have appeared in 2000-2014; journal searches on "Japan management cognitive" and similar keywords found only a few each of articles, books, and dissertations.

Nonetheless Japan retains its reputation as a challenging country for acculturation and adjustment in the popular press (Pilling, 2008). As such, Japan and the experiences of foreign workers in it can be a source of insight into cognitive change and acculturation.

This paper is based on original research and investigates changes in cognitive style occur in North American managers working in Japan.

What is cognitive style?

Cognitive style refers to the way a person gathers and evaluates information about their environment (Allinson & Hayes, 1996, 2011). These authors broadly describe two extremes, analytical and intuitive, and gradations between them based on the earlier work of Hammond et al., 1987). Allinson and Hayes however developed the Cognitive Style Index (CSI) specifically for business managers. Numerous studies have been undertaken using the CSI on managers in North American and other countries, however not in Japan. Other writers have criticized this one dimensional (analytical-intuitive) as oversimplifying because these extremes may be mutually reinforcing and in place in managers (Hodgkinson and Sadler-Smith, 2003). This research paper however does not investigate the deep nature of cognitive style. Rather the goal is identify and compare changes in the style of individuals before and after their exposure to the business environment of Japan. Therefore the unitary intuitive-analytical dimension proposed by Allinson and Hayes is taken as a starting point for this work.

The hallmarks of intuitive cognitive style are grasping an overview of a project and understanding its elements in terms of their interrelationships.

The characteristics of analytical cognitive style include grasping components of a project and understanding its elements in terms of categories.

Allinson and Hayes (1996, 2000) have not included Japan in their empirical work on cognitive style, nor have other studies employing the CSI. They do however refer to older works that found inconclusive and apparently contradictory results in seeking to identify differences at the macro (nations or regions) in East versus West cognitive style. Abramson, Lane, Nagai, and Takagi (1993) found Japanese to be more intuitive in style albeit using the Meyers Briggs Type Indicator (MBTI). Abramson et al. found Japanese to be slower decision makers, possibly due to "a more feeling-based cognitive style" (pg. 581) reflected in preferences for group harmony, relationships, and sensing the environment as a whole. Canadians, in their study, preferred "a thinking-based cognitive style" (pg. 581). Further, "the Canadians displayed a cognitive style that reduced the importance of the human element in favor of analytical, impersonal, rational factors." (Abramson et al., Pg 585).

Cognitive differences exist between a notional East and West according to Nisbett, Peng, Choi, and Norenzayan (2001). In their work *West* refers loosely to those cultures that inherited their thinking from Ancient Greece. *East,* meanwhile, refers to those cultures that trace their roots to Ancient China, specifically in East Asia. The differences are based in *tacit epistemologies,* long held understandings subsumed by the people of those cultures. They explain that East Asians conduct less categorizing, lean toward grasping an overall view, employ less formal logic, and prefer a dialectic understanding of issues. These are broadly described as *holistic.* The West, exemplified in their work and in Nisbett (2003) categorizes more, employs formal logic, and is more reductionist. These are described broadly as *analytic.*

While the work of Nisbett and collaborators used complex imagery with Japanese and Canadians, Kitayama, Duffy, Kawamura, and Larsen (2003) found similar differences among Japanese and Americans using a simplified visual task.

Thus three different models, those used by Abramson, et al. (1993), Nisbett et al. (2003), and Kitayama et al. (2003) find similar cognitive style differences among East Asians and North Americans. Psychology studies have identified cognitive style differences between East and West in other fields of research such as and sociology (Yang, 1986). In the fields of business and management science, Hay and Usunier (1993) quote an interviewee pointing out the difficulty of quick change within an organization and inadvertently describing a holistic cognitive style:

> "We [Japanese bank managers] always consider the sequence between the past and the future. Dramatic change is only possible from the outside. But continuity is very important. It is difficult to change things drastically." (Pg 327)

The holistic approach remains widespread and Japanese business organizations are generally described as holistic for example by recent writers such as M. Abe (2010).

It is a reasonable step to conclude that these cognitive style differences, if they are indeed confirmed, exist among business managers. The studies cited above used

students as proxies for whole populations, albeit Abramson et al. took MBA students as a study population. This research paper accordingly accepts the notion that a broad difference exists as described on a general population level. This paper seeks to identify evidence of those proposed cognitive style differences in the management styles of Japanese and North American business managers. Further, this research paper seeks to identify changes in cognition as North American business managers adjust to work in the host country of Japan.

The Japanese management styles presented below match the cognitive style ascribed to East Asia. Rather than assigning credit or guilt to individuals, these common techniques (according to cited literature and direct observations of this author) emphasize group identity and efficacy. As in the examples of frame and components in the cognitive styles literature, the emphasis in Japan is largely on the frame and relationships. Among the North American techniques noted below, the emphasis is, in reverse, placed on the components which is generally to say on staff members, not the group.

Table 1: Cognitive style in management style preferences

Japanese management style	**Analogous or opposite North American management style**	**Comment**
Chourei shiki – regular ritualistic morning gathering	No analogous management technique	Focus on group, not individual; Increases the feeling of group unity; joint presence and joint suffering contribute to group identity (Maricourt, 1994; Nishiyama, 1999).
Kachou at head of island of desks of team	Opposite: Cubicles and offices; geographically distributed teams;	Focus on group, not individual; Front line boss knows the team, their abilities, strengths, weaknesses, and activities in depth (Nishiyama, 1999).
Evening drinking (frequent, late)	Infrequent brief evening drinks; may be open to outsiders.	Focus on group, not individual; Group limited to the organization's members, develops group identity (De Mente, 1994; Nishiyama, 1999).
Feigned drunkenness	No analogous behavior.	Usual strictures of relationships are suspended. Opens a channel for feedback and complaints with no reprisals on the complainer (De Mente, pg 86, 1994).
Seniority based promotion	Opposite: merit based promotion	Focus on group, not individual efficacy; Ensures staff loyalty (Coleman, 1999) and promotion of individuals who embody the goals and culture of the organization (Haghirian, 2010).
Preference for generalists	Preference for specialists	Restricts the value of any one individual; Training includes broad range of

		skills including moral training (Sakai, 2009).
Ideas don't get acted on immediately	Ideas not credited to the author are considered stolen.	Focus on group, not individual; Ideas become part of the group understanding and are not bound to an individual before considered for action (Bhagat, Kedia, Harveston, and Triandis, 2002, p. 214).
No individual credit for idea generation	Ideas not credited to the author are considered stolen.	Focus on group, not individual; Develops pre-eminence of group over individuals (De Mente, 1994)
Nemawashi	Meetings outside the group could be considered underhanded.	Focus on avoiding class; Manager seeks solutions one to one with team, not in group discussion (Nishiyama, 1999; Kameda, 1996).
Total Quality Management (TQM)	Six sigma (fixing the product or process).	Focus on the whole delivered product, not the components of the product; Employees become aware of how they contribute to final overall results (Haghirian, 2010).
Wa – maintaining group harmony	Constructive conflict; performance based hiring and firing.	Focus on group, not individual; Avoid upsetting the group at the expense of the individual or team (Haghirian, 2010).
Slow decision making	Slow is considered a cause of failure	Focus is on group participation; Time is necessary for consensus building (Nishiyama, 1999; Abe, 2010).

The above Japanese management styles, all in wide use in Japan, indicate preference for holistic approaches. North American managers that have moved from analytic approaches to holistic approaches have either undergone a change in cognition, or have accepted a different cognitive style on the surface level. The data collected for this research report will help to identify whether managers have undergone either or both of those steps.

Research Questions

Thus the research questions for this report include:

- Can North American business managers move out of Nisbett's analytic category of cognitive style into holistic?
- Are there identifiably positive or negative outcomes to cognitive change evinced by cognitive style?

Because this research seeks to be relevant to the business world as well as to the research community, it also seeks implications for North American managers working in Japan or other East Asian locations.

Methodology

This research paper collected qualitative data in the form of in-depth interviews with North American (US and Canadian Anglophone) managers working in Japan's IT sector. The individuals were identified through Linked In as well as the American Chamber of Commerce in Japan (ACCJ) directory. Some individuals came from the first or second degree contacts of the author. In all 128 potential contacts were identified and 76 were contacted. Outreach was accomplished through Linked In (63 contacts), verbal requests (3), email (9), and website interfaces (4).

Of these, 19 responded with a willingness to join the study and ten completed the study. One of the ten was removed from the study as his experience in Japan's IT industry had ended about eight years prior.

The interviews included the same questions in largely the same phrasing and order. All but one were recorded with typed notes made simultaneously. Most included follow up sessions to clarify or expand on issues. Some of the recordings have been transcribed.

A table of cases is shown below.

Table 2: Overview of cases

Case	Nationality	Job Title	Years in Japan
12C	USA	VP Business Development	15
12D	USA	Team Leader	20
12E	USA	Supervisor	8
12F	Canada	Engineer	3
12G	USA	Team Leader	13
12H	USA	Owner	32
12J	Canada	Engineer	7
12L	USA	Logistics Manager	22
12M	USA	Owner	23

Age of interviewees ranged from 30-60.

Discussion with Analysis and Findings

Change occurred in ways that indicate cognitive change, that is, shift from analytical to holistic.

Table 3: Change in cognitive style

Case	Before	After	Change to Holistic Thinking
12C	Top down non-consensus dictator leadership	Bottom up consensus building including use of *nemawashi*	Y
12C	Reactive not proactive	We are “very Japanese” in approach to quality of service (proactive re customer experience) – TQM approach	Y

12D	One of the broader team	Ghettoized within the org …later overcame this in diff org where he is part of the harmony	Y
12E	General feeling of satisfaction	Rejected change to his own thinking and management style. Well defined dissatisfaction; Attempted to mentor Japanese staff	N
12F	Tried to make change, get idea across (do code reviews, eat your own dog food);	Appreciation of some benefits of slow speed and patience with long talking through of an issue;	Y
12G	Direct approach	Indirect approach to protect group harmony	Y
12H	Lower level individuals should seek to stand out	Don't rock the boat; look for ways not to rock the boat that you had not imagined before – think from point of view of the management or other counterparty	Y
12J	Individual can impact the group; Individual will be charged by management to pursue a task they propose at short notice; Individual merit;	Individual cannot cause quick change in the org; The large ship can be redirected only in increments; Merit not rewarded; Contributions not recognized	Unclear
12L	Employees live or die based on their merits	Appreciates relationship philosophy of Japan and uses it to bridge with HQ.	Y
12M	Just work and show your merit; be treated w respect	Picks and applies Japanese and North American styles as suitable; **Synergy**: Able to embarrass a potential client yet gain their custom; US appreciation of time to minimize transaction cost – Japan appreciation of seniority so he moves to get to a senior Japan person instead of politely working with lower staff.	Y

Impact on the manager

After detecting a change in cognitive style by identifying adoption or abandonment of a management technique, the next question is to determine the impact of the change. One way to directly detect such impact is to identify positive or negative outcomes for the manager. Data gathered for this study shows that the shift in cognitive style from a typically Western one, analytic, to a typically East Asian one, holistic, results in some cases in clearly different end states.

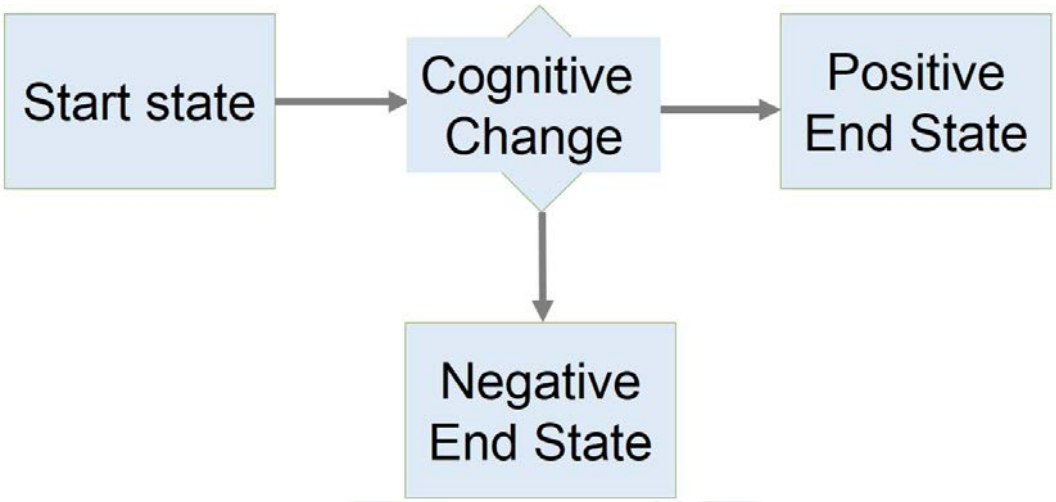
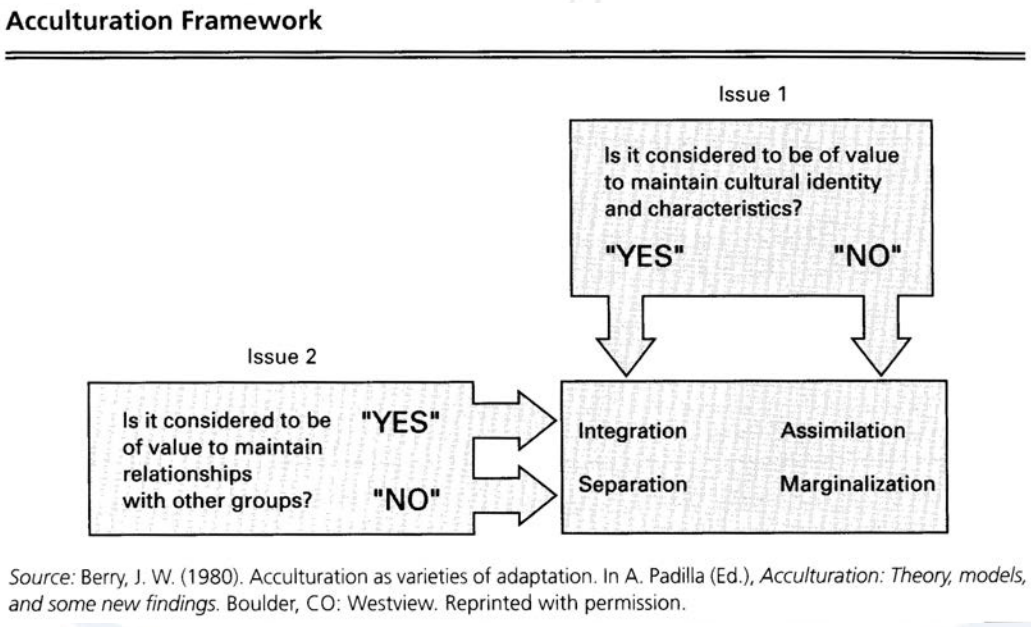


Figure 1

After the change in cognitive style
This research report employs Berry's (1980) framework for acculturation which proposes four states of acculturation: integration, separation, assimilation, and marginalization. These are arrived at based on the relative importance of relationships and cultural identity as modeled in the figure below.



Source: Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models, and some new findings*. Boulder, CO: Westview. Reprinted with permission.

Figure 2

The four possible outcomes described by Berry (1980, 1997) and the synergy outcome from Adler and Gundersen (2007) are mapped in the figure below to positive or negative outcomes.

Separation, marginalization, and assimilation are considered negative in this research report because the individual cannot contribute their ideas and styles to the host culture. In a practical worst case scenario, separation and marginalization situations

could result in the demotion, sidelining, or loss of job of individuals who arrive and stay in these end states. Assimilation too, though it may seem safer, could result in the removal of an expatriated business leader who has "gone native" and cannot effectively represent the wishes of an overseas headquarters.

Berry's integration concept is described as the dominant culture accepting some institutions of the non-dominant group while the non-dominant group accepts the basic values of the dominant group (Berry, 1997).

Adler and Gundersen (2007) describe synergies as involving "…a process in which managers form organizational strategies, structures, and practices based on, but not limited to the cultural patterns of individual organization members and clients." (pg 109). Thus synergy does not insist on acceptance of any one set of norms or standards. Synergy and integration are further differentiated in that synergy requires the rise of new solutions which go beyond the available range of solutions offered by the cultural groups represented.

Integration is seen as positive in this report because the foreign manager can contribute management ideas and techniques to the host culture environment. Similarly, synergy is seen as positive because the foreign manager contributes management ideas albeit in changed forms that particularly suit the immediate environment in creative combination with the local thinking and practices. Figure three shows the end states.

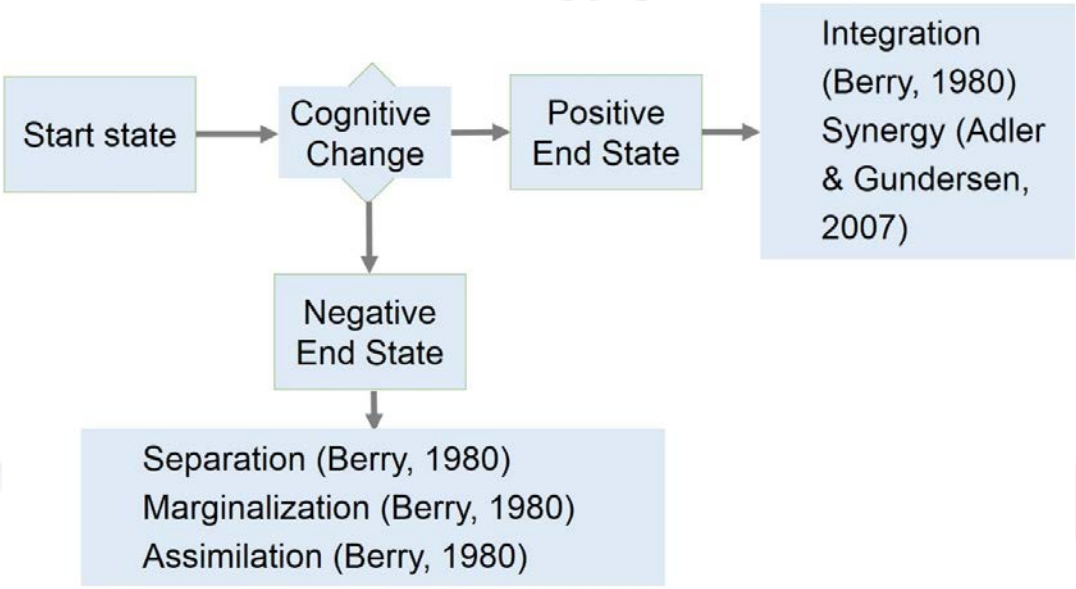


Figure 3

The following table shows the end results for the cases presented.

Table 4: Positive or Negative Outcome

Case	Outcome	End status
12C	Positive	Integration
12D	Negative	Separation
12E	Negative	Marginalization

12F	Positive	Integration
12G	Positive	Integration
12H	Positive	Integration
12J	Unclear	Assimilation Integration
12L	Positive	Integration
12M	Positive	Synergy

The shift in cognitive style from analytic to holistic indicates a change in cognitive style. What remains unclear however in this study is the degree of change. Most of the managers interviewed indicated that they had preferences for both typically North American and Japanese management approaches. Therefore it seems unlikely that one style overrides or erases another in this study population.

Assimilation

This individual has been in Japan only three years prior to the interviews. The passage of time appears to have been too brief for this person to identify their role in the company and the greater context of Tokyo. The individual in case 12J has been able to change his own thinking from "a junior employee should strive to make a mark on the organization" to a more Japanese way, "my ideas are contributed to the group and the group will gain credit and benefit from them". He further describes his image of the Japanese corporation as one in which the organization seems like a great ship, so big that its direction can only be changed by small increments through the indirect efforts of individuals.

12J has therefore surrendered his analytic approach in which personal identity and merit form the cornerstones of success and satisfaction. He has assimilated to the point that he considers himself part of a group that must survive in order to achieve success. It is not clear however that 12J will continue in this assimilated state. His own overarching goal is to become an entrepreneur, a radically different role in which he may integrate or synergize based on his North American background.

The end state, however, need not be a permanent state. The manager may move to another state as evinced by some cases in this study. Like 12E, discussed next, case 12J has not yet clearly settled into one position in the model.

Marginalization

12E had been unable to find satisfaction working within a Japanese company but in the months before these interviews, was able to find a new understanding of the role as an individual in the context of groups. His new understanding may have started 12E on the path to integration, though too little data exists to know and follow up interviews in coming years will be necessary to confirm the outcome. Moreover, 12E's time in Japan, only three years as of summer 2013, may yet be too brief for the sensitive process of determining his state.

The experience of this person was ranged from intimidating to disappointing. On one side, the foreign staff was separated from Japanese staff, "we were in our own small space, we were in the "cave" it was an intimidating space." Physically separated from the mainstream work environment, this individual found himself ultimately

marginalized. Attempting to work with and train Japanese staffers, he found "Japanese engineers were happy to follow what you teach, but do not take it further." His professional and personal network among Japanese was minimal and in the end he "realized that Japanese management and workers want no change". Blocked from integration and with his efforts to reach out rebuffed, this person found himself marginalized and unable to contribute to or learn from the host culture. Did his experience with the Japanese employer change his work style or way of thinking? "No," he responds.

Separation

One case in the study, 12D, worked for several employees with some negative experiences. An early employer accommodated his North American style and thinking in the early 2000s, in a rural region of Japan, Shikoku. Moving to Tokyo he found himself in a Japanese owned multinational where the division head hazed the foreign team through schedule changes and countermanded orders. The result of this experience was that the individual, and his team of foreign workers, were separated from the work process in the rest of the company. Yet they were not marginalized because they developed a coping mechanism of going further up the chain of command to get the necessary support for their work. This situation continued during the entire period of employment with the foreign staff in a sort limbo, not integrated into operations fully, but still retaining some input to the process. Having changed employers between the first and second interviews in this study, 12D finds himself in a new job, comfortably integrated with the Japanese staff of a smaller Japanese organization contributing to projects and products. He has not assimilated fully to the Japanese environment, nor has he developed new synergies with his coworkers. His current status seems to one of integration.

Integration
There are numerous examples of integration among the cases in this study report, these are presented in the following table.

Table 5: Integration examples

Case	Example
12C	Changed to bottom up consensus building including use of *nemawashi* Introduced limit on working after hours; Accepted as fundamental a Japanese view of top quality customer service Replaced after hours drinking with in-office communication; Accepted Lean integration with suppliers.
12F	Integrated benefits of slow speed of decision making and long talking through of issues while maintaining task orientation.
12G	Able to integrate North American and Japan based skills by being a bridge between Tokyo and foreign based HQ.
12H	Integrated showing of value (North American style) as relationship ceased to be the supreme business development issue as it had been in the Bubble Economy era.
12L	Integrated relationship philosophy of Japan while keeping focus on completing tasks; Bridges understanding between foreign HQ and local operations, etc.

The above individuals have shown a shift in cognitive style by integrating North American and Japanese management styles, using both holistic and analytic approaches.

Synergy
Case 12M indicates the strongest synergy creation among the cases presented. While synergy may be present in Cases 12H, 12J, 12L, and others, 12M has certainly been able to create multiple new approaches that are neither completely holistic nor analytic, neither entirely Japanese nor North American. These new approaches are synergies in Adler and Gundersen's (2007) understanding as described previously in this report.

Go straight for the leader
The individual in case 12M studiously avoids working through the hierarchy of a potential client company in normal fashion. Usual behavior in the Japanese business context might be to develop a contact slowly with or without access to the ultimate decision makers. Where a higher level person is part of a meeting, conversation is commonly managed by a junior staffer with little direct input from the higher level manager. 12M however pushes directly to the higher level person and presents a proposal. Synergy here is based on a North American preference for minimizing transaction cost and the Japanese appreciation of senior staff. Once 12M has accessed the senior decision maker, return to the junior staff by the Japanese organization is unlikely. Put neatly into a trap of responding, and thereby increasing their own face as senior staff, or repositioning the junior staffer as the contact point and losing face, many feel compelled to directly deal with 12M.

Embarrass potential client
Strategically he allows potential clients to think he speaks Japanese poorly. Thus he

surprises them with his highly fluent and technical Japanese. They feel embarrassed when it turns out that the person they were speaking about has in fact strong language skills and has been following the conversation. As a result, when he does speak, they listen more closely. This is a face damaging exercise with respect to the potential client whereas it is face-building for 12M. Normal expectations would be for a new relationship to be severely damaged, if not destroyed by such a maneuver. However, this tactic is successful for 12M because it develops respect in the client for his abilities. This tactic is neither in the canon of North American nor Japanese behaviors but has been developed by 12M, synergizing from both business cultures.

Implications

North American IT managers can change their cognitive style and gain benefits through achieving integration or synergy. The population can integrate, at least most of those in the sample. In some cases they seem to have the resilience to move from negative end states to positive ones.

Limitations

This study report is limited chiefly by the small sample size. However the in depth interviews provided a glimpse into a potentially important theme, cognitive change, for future study.

Another limitation is that these managers are not reviewed by their Japanese co-workers whose contribution could balance the perception of their strengths and weaknesses.

Conclusion

The study reveals that a fundamental shift in thinking can occur for North American managers working in Japan. The shift from analytic to holistic cognitive style can lead these managers into positive or negative outcomes. Those that navigate the process to arrive at positive results may be a source of further learning about acculturation, thinking, and the Japan-North American business-scape.

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The Relationship between Islamic Religiosity, Depression and Anxiety among Muslim Cancer Patients

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Abstract

There is a growing body of evidence that religiosity and spirituality can buffer depression and anxiety and support the healing process in cancer patients. However, literature on the role of Islamic religiosity in the healing of Muslim cancer patients are few. This study aimed to examine the relationship between Islamic religiosity with depression and anxiety in Muslim cancer patients. 59 cancer patients were approached in oncology day care and ward at a Malaysian government hospital and in a cancer support group activity. Patients completed the Muslim Religiosity and Personality Inventory which assessed their Islamic religiosity scores through the constructs of Islamic beliefs and Manifestation of Islamic belief. Self-rated depression and anxiety were assessed using validated Beck Depression Inventory and Beck Anxiety Inventory in Malay. Ten of the patients were interviewed about their spiritual experiences and emotions. Questionnaire findings revealed a significant negative correlation between Islamic religiosity with depression and anxiety. Higher manifestation of Islamic belief was associated with lower depression while higher Islamic belief was associated with higher education. Higher Islamic religiosity was associated with older age, married and pensioned patients. Interview findings revealed that being ill brought the patients closer to God and many thanked God for the blessing and time spared for them to repent and do more good actions. All of them used prayers to heal their pain. Patients also reported strong feelings of anger, frustration and sadness after the initial diagnosis which slowly disappeared as they began to accept their illness as a blessing in disguise. It is concluded that there is a need to respond to the meaning and values given to human existence besides responding to physical and mental suffering in cancer patients.

INTRODUCTION

Depression and anxiety are among the most commonly reported psychological symptoms among cancer patients. Studies have found depression and anxiety to be high after patients receive hospital treatment (Lue, Huang and Chen, 2008) and when they are in pain (Petkova, Nikolov, Galabova and Petrova, 2010).

In spite of the psychological symptoms commonly associated with cancer, studies have also shown that cancer and other life-threatening diseases have been found to raise acute existential concerns in many of the patients (Cunningham, 2005). It has also been found to deepen faith which transcends religious and ethnic differences and the internalization of a spiritual response to a life-threatening illness as well as the expression of spirituality may feel more similar to each other than different (Levine et al., 2007).

Studies have also related on the associations between spirituality and religion with psychological symptoms among cancer patients. One such research indicated that religion and spirituality have been found to predict a decline in depressive symptoms, an increase in vitality, improving mental health and lowering cancer-related distress (Yanez, Edmondson, Stanton, Park, Kwan, Ganz & Blank, 2009).

However, a search in the literature saw that many of the studies which explored on the relationship between religiosity and spirituality with mental health found that spirituality played a more significant role than religiosity in relation with lowered tendency of depression and anxiety (Mystakidou, Tsilika, Parpa, Smyrnioti & Vlahos, 2007) and an increase in quality of life (Rippentrop, Altmaier and Burns, 2006).

In the present literature, a high proportion of spirituality-mental health connections studies have been conducted mostly within populations of US Christians of one denomination or another and thus the work is not global. It is also said to have no therapeutic impact of spirituality on mental health, rather it has more of protective effects rather than therapeutic (Levin, 2010). Currently, there are very few studies on the relationship between Islamic religiosity (the religion of the Muslims) with the Muslims` psychological health particularly among cancer patients.

One such research is a qualitative study among three Malaysian Muslim women with advanced breast cancer, whereby the women initially had feelings of self-doubt regarding their relationship with Allah (the Muslims` name for God) but later on the confrontation prompted a turn to spirituality and reminded them to open themselves more deeply to Allah. They view life as a trial in preparation for life in the Hereafter, and hence this becomes their greatest motivator to continue striving and being committed to continuous self-development. (Ahmad, Muhammad and Abdullah, 2010)

Another research on Muslims is among Iranian cancer patients undergoing chemotherapy whereby they were found to have a heightened attitude towards prayers. They gained higher scores in the subscale of attitude towards prayers in which among the items were “My prayers have helped me adjust to the diagnosis of cancer” and “I know God is taking care of me now” (Rezaei, Adib-Hajbaghery, Seyedfatemi & Hoseini, 2008).

These two studies indicated that the Muslim cancer patients had increased their connections with God (Allah) with the knowledge of their contraction with cancer.

DIFFERENCES IN DEFINITIONS OF RELIGIOSITY AND SPIRITUALITY

In the Western psychology literature, the term religiosity connotes a different meaning than spirituality which is in contrast with Islam, which does not differentiate between religiosity and spirituality,

In the Western literature, religiosity is almost always defined as a shared system of organized beliefs and practices which involves a Higher Power, (Mystakidou et al., 2007), and the desire to please that power (Mc Coubrie and Davies, 2006). It also defines the nature of God and guides worship (Meraviglia et al., 1999).

On the other hand, spirituality is defined as people's understanding of their lives in terms of their ultimate meaning and value (Mystakidou et al., 2007). It is an aspect of the self which searches for meaning, attempt to make sense out of life events, and which seeks to reconcile one's experiences with personal beliefs (Boeving, 2000). It may exist without religious beliefs or practices and may also co- exist together (Mc Coubrie & Davies, 2006).

From the Islamic perspective, religion is the broader construct which encompasses a 'way of life'. Religion provides the roadmap to one's ultimate purpose in life, that is, to live continuously in relationship with God, the Creator. Thus, the separation between religion (the roadmap) and spirituality (the purpose the roadmap serves), most likely, is not accepted in the Islamic way of life.

This is because to be spiritual but not religious may make a person spiritual but without religion or a road map to reach God; he or she may be misguided. Similarly, to be religious but not spiritual may make a person religious, but without self-understanding and consciousness, he or she is considered spiritually dead. Therefore in Islam, religion and spirituality are integrated into a unitary way of life (Ahmad et al., 2010).

PURPOSES OF THE STUDY

1. To examine the relationship between religiosity and depression among Muslim cancer patients.
2. To examine the relationship between religiosity and anxiety among Muslim cancer patients.
3. To explore the spiritual experiences of Muslims with cancer.

METHODOLOGY

Participants

Participants were recruited while they were attending oncology daycare and ward in a Malaysian public hospital and a cancer support group. The inclusion criteria were Muslims with diagnosis of cancer. 59 patients participated in the survey and 10 of them participated in the interview. Participants range between 15-65 years old. The study was conducted between July to August 2010.

Procedures

Once ethical approvals were obtained, the researcher approached cancer patients at oncology daycare and ward and explained about the research. Patients who were not able to fill in the questionnaires due to physical incapability or sight problems were assisted by the researcher by reading out the questions to them. Once patients had given their written consent, basic demographic details were collected. Patients were then asked to complete three sets of questionnaires: i) the Beck Depression Inventory (Malay) ii) the Beck Anxiety Inventory (Malay) and iii) The Muslim Religiosity and Personality Inventory (Malay) short version.

Participants were also recruited while they were attending activities at a cancer support group. They were given an explanation about the research and the questionnaires in a self-addressed envelope were given to them to return after they have filled in the questionnaires.

Ten patients agreed to be interviewed and were asked about their spiritual experiences. The main questions asked were “Do you feel there is a difference between your relationship with God after you got cancer?” and “Do you think cancer has changed your spiritual self? If yes, in what way has it changed you?”

Psychological Instruments

i) The Muslim Religiosity and Personality Inventory

The Muslim Religiosity and Personality Inventory (MRPI) is an Islamic religiosity measurement instrument which was developed for Muslims in Malaysia (Krauss et al., 2006). It is comprised of two main religiosity dimensions, namely religious knowledge (Islamic Worldview) and religious practice (Religious Personality).

MRPI is able to assess these two dimensions to determine an overall religiosity score (Islamic religiosity score) which can be used to ascertain whether or not a particular respondent is understanding and practicing Islam in a comprehensive manner.

The Islamic Worldview construct includes individual knowledge and perceptions towards statement on the pillars of Islam whereas the Religious Personality Dimension includes a person’s attitudes and behaviors that emerge from his/her values.

ii) Beck Depression Inventory (Malay)

The Beck Depression Inventory (BDI) (Beck, Steer & Brown, 1996) has been shown to have good psychometric properties in Western and non-Western populations for the past 40 years. It has become one of the most widely accepted instruments for assessing the severity of depression in diagnosed patients and for detecting possible depression in normal populations.

This study uses the BDI-Malay version which has been validated among Malays in Malaysia by Mukhtar and Oei (2007). It was translated using the original BDI. The authors concluded that the BDI-Malay can be used with confidence as an instrument to measure levels of depression for Malays in Malaysia.

iii) Beck Anxiety Inventory (Malay)

The Beck Anxiety Inventory- Second Edition (BAI-II) (Beck & Steer, 1993) is a 21-item scale that measures the severity of self-reported anxiety in adults and adolescents for the past week. It was developed to assess symptoms corresponding to criteria for diagnosing anxiety disorders listed in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition. The author incorporated items that are specific to the physiological and cognitive symptoms of anxiety and independent of the symptoms of depression.

The psychometric properties study of the Malay version of the BAI-II was conducted by Mukhtar and Zulkefly (2011). The study showed that BAI-Malay is a reliable and valid instrument to measure symptoms of anxiety in the Malay population and can be used in research and clinical service in Malaysia.

RESULTS

i) Islamic Religiosity and Depression Relationship

A significant negative correlation (<0.01) was found between depression and Islamic Practice subscale (-.347) and with Islamic religiosity scores (-.350). This is presented in Table 1.0

Table 1.0 Correlation between scores of Muslim Religiosity Personality Inventory (MRPI) and Beck Depression Inventory (BDI)

	MRPI		
	Islamic Worldview Total	Religious Personality Total	MRPI Total
BDI			
Pearson correlation	r = -.161	r = -.347	r = -.350
Significance (two-tailed)	p = .224	p = .007	p = .007

ii) Islamic Religiosity and Anxiety Relationship

A significant negative correlation (<0.05) was found between anxiety (-.287) and Islamic religiosity score. This is presented in Table 2.0.

Table 2.0 Correlation between scores of Muslim Religiosity Personality Inventory (MRPI) and Beck Anxiety Inventory (BAI)

	MRPI		
	Islamic Worldview Total	Religious Personality Total	MRPI Total
BAI			
Pearson correlation	*r* = -.239	*r* = -.237	*r* = -.287
Significance (two-tailed)	*p* = .068	*p* = .070	*p* = .027

Demographic Variables with Islamic Religiosity

i) Education and religiosity

Higher Islamic knowledge was found to be significant with higher educated patients (F=2.553, p=.025). Means plot indicate that the higher the patients' level of education, the higher they scored in the Islamic Worldview subscale.

ii) Age and religiosity

Significance (p<0.05) were found in the relationship of age groups with Islamic religiosity scores; Islamic Practice subscale (F= 4.170, p= .005), Islamic Knowledge subscale (F=3.019, p= .026), and Islamic Religiosity scores (F=6.493, p= .000). Means plot comparing the means of the scores with age groups revealed that the higher the age group, the higher they scored in both the subscales of the Muslim Religiosity Personality Inventory.

iii) Marital status and religiosity

Results revealed a significant difference between groups of marital status (p<0.05) in the Islamic practice subscale (F=4.627, p=.014) and the Islamic religiosity scores (F=5.201, p=.009). Means plot comparing the means revealed higher scores are obtained by widowed and married patients, compared to single patients.

iv) Cancer stage and survival time with religiosity

No significance was found between Islamic religiosity with cancer stage and length of time since diagnosis.

Interview Results

Ten patients were interviewed regarding their spiritual experiences after their diagnosis. All of the patients interviewed were at ease in expressing their experiences and feelings although a few were at first a bit reluctant in taking part in the research. However, they showed excellent cooperation when the researcher indulged on the topic of their spiritual journey after they knew they had cancer.

Several themes emerged from the interview. They are as below:

i) Whole Hearted Acceptance

Many patients talked about their acceptance with the illness that Allah has given them. Many stated they have accepted the calamity with total acceptance (*redha*). Some said in the beginning of the diagnosis, they felt sad and find difficulties in accepting the illness. The question of "Why me?" were also raised. However, they said that a few days later they felt calmer when the concept of *redha* sinked in and they were able to accept the illness as a trial from God.

A participant told of her experience losing her child and finding out about her illness:

"When the doctor told me I had cancer, I think I was okay with it. It was not hard for me to accept it because after the death of my son (a year ago), I felt that nothing in this world belonged to us, including our own body" (Participant 7)

ii) Feeling blessed and thankful

Several respondents expressed their thankfulness to Allah for giving them time to relook at their mistakes and improve themselves through religious means. A few patients noted they felt happier to be given a long medical leave as they have more time to dedicate time for worship. Another patient said she felt the cancer diagnosis increased her self-consciousness and made her to become closer to Allah.

A participant expressed her gratitude by comparing herself with patients in worse condition than her:

"When I compare myself with other patients with bad side-effects of chemotherapy, I felt more thankful, more accepting of my illness. I thank Allah for not putting me in an accident where the pain may be more and the disability is more" (Parcipant 1)

iii) Increased connection with Allah

Patients also stated they have made increased efforts to learn Islam after their diagnosis. As Allah encourages His servants to read, learn, and apply the teachings of

the Qur'an as to get closer to Allah, the patients noted that as they get closer to Allah, their hearts will be calm, their bodies are relaxed thus their stress reduced.

A patient noted of his experience:

"I was so confused and scared over what to do when the doctor told me I had cancer. I prayed in the nights alone, crying and asking for His help. He granted me with peace and calmness after that. I felt so blessed" (Participant 7)

iv) Belief in reciting Quran for peace and relief

Muslims are encouraged to consistently recite and memorize the verses from the Qur'an and prayers that the Prophet taught in their effort to heal their illness.
In the Quran, Allah said, "We send down (stage by stage) of the Qur'an that which is a healing and mercy to those who believe: to the unjust it causes nothing but loss after loss." (The Holy Quran, Al-Isra': 82).

A patient expressed the healing magic of the Holy Quran:

"One day I could not sleep because of the pain. I was feeling worried, and stressed. After reciting the as-shifa'" verses from the Qur'an, I felt calmer, the pain disappeared and I could sleep well" (Participant 9)

DISCUSSION

In this study, the significant correlation found between depression and anxiety with Islamic religiosity indicated the association between mental health and Islamic religiosity among cancer patients.

The significant negative correlation in the Islamic practice subscale with depression may indicate that Muslim cancer patient who manifests his beliefs through righteous works may have a greater tendency to have low depression levels. Righteous work or Islamic practice measured in the Muslim Religiosity Personality Inventory include having a spirit of volunteerism to benefit others, having a strong commitment to study Islam to benefit self and others and spending money on unfortunate people. Thus it could be that the Muslim patient who is able to control his wants and needs to benefit other people also has the tendency to be able to control his emotions whenever he is faced with a difficulty or calamity, thus buffering himself against depression.

The results also signified that Islamic knowledge is significantly associated with higher educated patients than lower educated patients, signifying higher belief and conviction with Islamic teachings among educated patients. This could probably be due to more opportunities to study about Islam (in school or university) which leads to more opportunities to understand and reflect on the Islamic teachings compared to lower educated patients. This is however inconsistent with previous findings on Iranian cancer patients which found that patients with primary education found prayers as more impactful than patients with other education level (Rezaei et al. 2008). In the present study however, education was not found to be significantly associated with the Islamic practice subscale.

The present study also found Islamic religiosity and both its subscales of knowledge and practice to be significantly associated with the age of the patients. The older they were, the higher their Islamic religiosity scores. This could be due to their maturity, numerous life experiences they have encountered and longer time and opportunities for them to learn about Islam than younger patients.

Interview results revealed themes which could further be categorized into the following groups of:

i) Islamic religiosity being a protective effect against depression and anxiety and
ii) Islamic religiosity being a therapeutic effect against depression and anxiety.

The themes 'Whole-hearted acceptance' and 'Feeling blessed and thankful' were grouped within the 'protective' group because analysis pointed out that the patients had already intact conviction within themselves even before the illness that whatever is inflicted upon them whether hardship or challenges in life are just some trials they had to go through as part of their journey to an everlasting world.

On the other hand, the themes 'Increased connection with Allah' and 'Belief in Quran for peace and relief' were found to emerge only after the patients found out about their illness. Interviews about their spiritual journeys revealed their closer connection with Allah after realizations that they may not live a long life and reflections upon their past lives.

As Muslims believe that sickness is expiation for sins, they make efforts to improve their worship and daily conducts with the goal to get Allah's pleasure. Abu Huraira narrated that the Prophet said, "If Allah wants to do good to somebody, He afflicts him with trials" (Hadith Sahih Al- Bukhari, Khan 1979).

This is furthermore emphasized when Allah said in the Qur'an, "Be sure We shall test you with something of fear and hunger, some loss in goods, lives and the fruits (of your toil), but give glad tidings to those who patiently persevere. Who say when afflicted with calamity, 'To Allah we belong, and to Him is our return" (The Holy Quran, Al-Baqarah: 155-156).

CONCLUSION

This study provides an insight into Islamic religiosity. It is an effort to fill in the gap in the religion-health literature which are conducted primarily in the populations of US Christians predominant or another.

The quantitative results were consistent with previous studies that religiosity has significant negative correlation with depression and anxiety. The study indicated that the Muslim patients differ in their beliefs and manifestations of the beliefs according to different age groups, education level and marital status and that Islam is comprehensive in a person when it comprises both Islamic beliefs and manifestation of the beliefs in their daily lives. The present study also indicated that patients with

higher manifestation of Islamic beliefs have lower tendency to be depressed.

Qualitative results revealed that for Muslim patients, the religion and mental health relationship is not just protective in nature, but that it can also be therapeutic. In the interviews, participating patients communicated about their spiritual journey with cancer, about how some of them started to increase their connection with the Creator, Allah and reading the holy book, Quran, and they noticed feeling calmness and peace. Getting close to Allah and accepting whatever Allah has willed is believed to be therapeutic for the health of the participating Muslims.

The author recommends caretakers and health practitioners to talk about meaning of life, reflection about their lives and relationship with the Creator with cancer patients. It could be the only meaningful thing they need at a moment when everything and everyone else could be of no help to them. They need God.

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Examination of the Stressors in Childcare Training: By Retrospective Methods of the Negative Experience

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Abstract
Many students express the difficulty and stressfulness of childcare training. Therefore it was necessary to check childcare training work whether they feel a sense of burden and difficulty in any respect. The purpose of this study, we analysed the negative experiences from the survey questionnaires' review of the childcare training of students.72 students were given the questionnaire. In the survey were asked to answer state the negative experiences they have had form childcare training. This research was analysed the text mining of the negative experience from the questionnaire. The text mining was turned out that the keyword "diaries", "name-calling", and "children" are the hidden background for the word "hard" which is the ward with most frequently appearance. For "diary", the importance of which will provide guidance with an emphasis on meaning to write a previously recorded to teaching how to write a diary revealed. In addition, it has resulted in poor quality of childcare was seen in the background of the "name-calling". Consideration that caregivers the opportunity of training various, as well as review the wages and working hours, we will fix as soon as possible to the work environment that is able to continue to work, even after birth and marriage is one of the most important issues. The relationship between the words "children" and "hard" ware due to lack of childcare and advance technology preparation facing the practice.

Ⅰ.Purpose

It seems that most students struggle at the time of their second childcare training, due to looking back at their first childcare training and predicting their next. Therefore, in order to make childcare training effective, it is necessary to consider whether the students feel sense of burden and difficulty in any respect.

Ⅱ. Methods

1. Research time and Target

The subjects were 72 Japanese university students (6 males, 66 females, mean age 20.44±0.50). In December of 2013, they were asked to answer a questionnaire which contained questions about the negative experience of childcare training. This research considered by analyzing the text mining of the negative experiences of childcare training from the questionnaire.

2. Survey content

(1) Basic attributes

The basic attributes of those surveyed, gender, age and grade.

(2)Negative experiences in childcare training

Those who stated they have had negative experiences were specifically also describe their experience the questions were as follows:

①Were there any unpleasant experience during the childcare training?

②Were there any serious problems? If there was describe what made it difficult to understand the training.

3. Investigative method

Students who have completed the childcare training for the first time were asked to look back on the events and describe their experiences. The questionnaire was given the students during the class period. The students were given 15-20minitues to complete the survey. After completing the survey, the questionnaire was collected and analyzed.

4. Methods of analysis

With respect to the data obtained from the free description, the analysis was performed using a text mining technique.

Ⅲ.Results

1. Extraction of the word by morphological analysis

In order to study the free description of negative experiences in childcare training, the following analysis was made.

Table 1 The number of times of an appearance of language

	junior college	university	total	(%)
hard	24	6	30	41.67
children	15	14	29	40.28
diary	16	12	28	38.89
write	10	7	17	23.61
say	6	5	11	15.28
teacher	2	7	9	12.50
myself	5	3	8	11.11
understand	2	6	8	11.11
Childcare worker	4	4	8	11.11

2. Analysis of Extraction of negative experience

In order to embody the negative experience in childcare training, the following analysis was made.

Table 2 Negative experience

	junior college	university	total	(%)
diary + write	6	6	12	16.67
Name-calling +say	1	3	4	5.56
everyday + diary	0	3	3	4.17
dairy + hard	2	1	3	4.17
time + too much	2	1	3	4.17

Ⅳ.Conclusion

1. Negative experience "diary"

The word that appeared most from the experiences is "hard" (41.67%), and "writing + diary " (16.67%) was used most often to explain the negative experiences of the training. The results reveal that many students have a feeling of difficulty associated with the diary. In addition, from the results of "daily + diary" (4.17%) and "hard +diary" (4.17%) and "time + take" (4.17%), it can be understood that it takes time to write a diary. It is revealed from the above results that the students have a negative

experience with the diary. Looking at students who aren't used to writing in journals anyway, it can be assumed the being forced to write is difficult. Also, it is important to express in an understandable way the exchanges between the students and the children and the feelings of the children.
It can be inferred that consideration and thanks given to those who have written a training diary is low. Therefore, it is necessary to continually explain the purpose behind keeping a diary, before the students begin writing the diary. It was found that this is the reason behind some of the students' negative feelings toward the childcare training.

2. Negative experience "name-calling "
In the free description, it cites that" the caregivers speak ill of each other", "speak ill of the child", "speak ill of the parent" is referred to as "speak ill of other apprentices ". In addition, the words that appeared most from the free description of the negative experiences was "hard" (41.67%). In previous studies, it is revealed that human nature is important in the child care field. In other words, it can be said that to enhance the humanity of its own is the essential nursery involved in the growth and development of children. In order to enhance the qualities required as a nursery, that the nursery themselves looking back on childcare, and improvements are necessary. Therefore, it is presumed to lead to the reduction of that that you go through self-study and training opportunities will say bad things about. It has resulted in poor quality of childcare was seen in the background of the "name-calling". That the caregiver is consideration to receive the opportunity of training various, as well as review the wages and working hours, we will fix as soon as possible to the work environment that is able to continue to work, even after birth and marriage is one of the most important issues.

3.Negative experience "children"
In free description of the negative experience, words that appeared most often was "hard" (41.67%). "Children" (40.28%) were the words that appeared in the second greatest number. For instance, "I can't memorize the name of the children", "children are not concentrated at the time of story-telling", "children come to a violent relationship" etc. "Children" was a frequent word of negative experience. Therefore, that there is a difficulty in the relationship with the child is found to apprentice. In particular, it is accompanied by difficulty in performing group nursing revealed. Choosing a child care teaching materials in consideration of the age is important, child care teaching materials to attract the child is required. Choosing a simple thing without interest of children is high and is an important nursery materials. In order to perform the nursery group, accumulation of experience of many of childcare practice is required. It is less opportunity is at present able to gain experience in front of the children of actual practice. The relationship between the "children" and "hard" ware due to lack of childcare and advance technology preparation facing the practice. Many trainees expressed that one difficulty in the training was poor communication, with caused the trainees to lose confidence.Therefore, students are given the opportunity to practice childcare methods with actual children. They can build a relationship with the child, and because they are in contact with the children, they can learn to care for them, and strive to understand the feelings of each individual child, which is important. In order to understand the children, there is a need to continue teaching about the importance of having an attitude to learn from children.

A Structured Review of Generic and Specific Instruments for Measuring the Subjectively Assessed Quality of Life of Seniors

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Abstract

The objective of the study is to offer a review of the instruments designed for measuring the subjectively assessed quality of life of seniors. At present it is possible to notice an increase of interest in the issue of the quality of life of specific groups of population; in addition, there is a large number of tools for its measuring. The aim of the present study is to provide a systematic review of generic and specific instruments for measuring quality of life of seniors which have been published in peer-reviewed journals and whose psychometric parameters have been verified. The search procedure formed a part of a larger retrieval search in which we analyzed 4829 abstracts in EBSCO and ProQuest full-text databases. We found 831 instruments which claimed to be measuring quality of life and were verified their reliability or validity. We identified 3 groups of instruments suitable for use in the senior age-group: generic methodologies applicable to adults in general, 7 generic tools and 9 specific tools designed exclusively for the senior age. The paper presents the tools designed for seniors which were analyzed and compared with regard to their psychometric parameters, purpose and theoretical framework utilized for their construction. In conclusion the authors of the study provide recommendations for the use of the selected methodologies for measuring the subjectively assessed quality of life of seniors.

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Already in the 1990s many publishing authors (e.g. Farquhar, 1995; Grundy, & Bowling, 1999) pointed out the fact that there is a significant increase in the number of older people who live longer, more healthy and lead more active lives, and for this reason it is necessary to reassess the way how the quality of life in this age group is conceptualized and measured. At the same time they emphasize that in the construction of tools for its measuring, the knowledge of understanding the concept of quality of life coming from subjective statements of older people should be applied. Older people usually welcome the attention paid to their personal view.

At the theoretical level but also at the empirical level it is necessary to discern between the quality of life in general (QoL) and health related quality of life (HRQoL) which is especially in seniors perceived as a key indicator. HRQoL may be simply defined as perception of the impact of health and sickness on several areas of a person's life (French, Irwin, Fletcher, & Adams, 2002), for example the physical, mental or social area. It is possible to state that HRQoL is a part of the general concept of QoL and it only represents the part of QoL which is directly related to the person's health (Davis et al., 2006).

The most general and most frequently encountered division in the description of tools for measuring the quality of life is their categorization into generic and specific tools. Generic tools are suitable to compare findings within different populations or groups and also after using certain interventions, and at the same time they are economically not demanding. Tools related to a specific illness evaluate special states and are focused on certain diagnostic groups. Specific tools are also able to capture more sensitively, and to quantify, even minimal changes which are important for the doctors as well as for the patients themselves. Majority of generic (general) tools for measuring the quality of life, including generic and specific tools of health related quality of life, have multidimensional nature as they examine for instance physical, social, emotional, environmental, mental or spiritual dimension, or the influence of the illness on the individual dimensions.

The objective of this study is to provide a structured overview and description of generic QoL and HRQoL tools and also specific instruments intended for measuring the quality of life in persons of senior age which have resulted from a more widely conceived analysis of two fulltext databases, EBSCO and ProQuest Central.

METHODS

Search strategy

The search scheme was supposed to include as many (peer reviewed) publications as possible dealing with measuring some of the aspects of quality of life associated with evaluation of psychometric or clinimetric quality of measurement. In the first step there were 4829 abstracts identified. These were analyzed by a focus group and the tools for measuring the quality of life encountered in them were gradually summarized and arranged in alphabetical order. In total there were 831 different tools found. Then further selection and categorization of these tools into groups followed – by their content, focus or by target group for which they are intended. Besides generic tools which are used in adult persons in general and are usable also for senior age (e.g. SF-36, WHOQOL-BREF, Health Utility Index, etc.), the analysis brought a list of 7 generic and 9 specific tools constructed exclusively for identifying subjectively

assessed quality of life in seniors. There were 16 tools included in the overview and in the description of instruments from the aspect of their theoretical framework, purpose, descriptive and psychometric characteristics.

Results

The tables 1 and 2 include seven generic and nine identified specific instruments developed for the senior population of people over 60 years old. Six of the seven generic measurements are self-assessed or can also use interview form of administration. Among the specific instruments there are five self-assessed tools and in cases of two of them, the use of a questionnaire is recommended in a structured interview, namely when administered to older people with vision problems. Especially, the OMFAQ can be administered only by a trained interviewer. Four of the specific instruments are used by proxy and they are assessed by caregiver or other medical professionals. This proxy-rating is mostly used for very old and severely demented persons. Self-assessment questionnaire can provide information from an individual or a patient that is not easily obtained from other sources.

Table 1
Generic QoL and HRQoL self-assessed quality of life instruments

Name, original authors, publication year	*Purpose*	*Theoretical framework*	*Items*	*Domains/scales/subscales (no. of items)*	*Response format and scoring*	*Administration and example of item (domain)*	*Psychometric properties*
CASP-19 (Hyde et al., 2003)	This is a self enumerated QoL scale for early old age people.	It is base on models of human needs satisfaction and self-actualization.	19	Control (4), Autonomy (5), Self-realisation (5), Pleasure (5)	4-point Likert scale: 0 = never to 3 = often. High score indicates a better QoL.	SA; Item No.10 – "I look forward to each day." (Autonomy)	Cronbach's alpha. Factor analysis. Face validity. Content validity. Construct and concurrent validity.
Leiden-Padua questionnaire – LEIPAD (DeLeo et al., 1998)	An internationally applicable instrument to assess QoL in the elderly.	Developed under the auspice of the European office of the WHO.	49	Core instrument scales: Cognitive function (5), Depression/anxiety (4), Life satisfaction (6), Physical function (5), Self-care (6), Sexual function (2), Social function (3) Moderator scales: Self-perceived personality disorders (5), Anger, resentment and irritability (4), Social desirability (3), Self-esteem (4), Faith in God (2)	Core scales use 4-point response format from 0 = best to 3 = worst condition. Moderator scale use dichotomy response format: 0 = yes, 1 = no. Lower score indicates a better QoL.	SA or interview; Item No.3 – "Are you able to dress all by yourself?" (Self-care scale)	Cronbach's alpha. Test-retest reliability. Factor analysis. Concurrent validity.
Older Americans Resource and Services Multidimensional Functional Assessment Questionnaire – OMFAQ (Fillenbaum &	Instrument for evaluation of QoL of the elderly that provides a comprehensive profile of personal functioning and	The OARS Program forms the clinical facet of the Duke University Center for the Study of Aging and Human	120+24+10	Part A: Activities of daily Living (14), Economic resources (15), Mental health (21), Physical health (16), Social resources (9), Demographic items (11), Informant items (10); Interview section: Interview-specific (4), Interviewer	6-point response scale: 1 = level of functioning excellent, 6 = level of functioning totally impaired.	OMFAQ must be administered by a trained interviewer; Item No.59 – "Can you prepare your own meals…" (Activity of daily living)	Cronbach's alpha. Inter-rater reliability (ICC). Test-retest reliability. Content and consensual validity. Criterion validity. Responsiveness to

Smyer, 1981)	service use.	Development.		assessments (15), Interview ratings (5) Part B: Services assessment (24) Short Portable Mental Status Questionnaire (10)			change.
Older People's Quality of Life Questionnaire – OPQOL (Bowling, 2009, 2013)	Measure of quality of life in older age.	It is conceptually grounded in lay views from the baseline QoL survey, integrated with theory from a synthesis of the literature.	32-35 full 13 brief	Life overall (4), Health (4), Social relationship and participation (7-8), Independence, control over life, freedom (5), Home and neighbourhood (4), Psychological and emotional well-being (4), Financial circumstances (4), Religion/ culture (2; can be eliminated).	5-point Likert response scale: 1 = strongly disagree to 5 = strongly agree. Higher scores represents higher QoL.	SA or interview; Item No.1 – "I enjoy my life overall." (Life overall)	Cronbach's alpha. Factor analysis. Face validity. Content validity. Construct validity (convergent and discriminant).
Quality of Life in Later Life – QuiLL (Evans et al., 2005)	Assessment of QoL in later life.	The conceptual framework derives from Campbell et al., & Lehman (in Evans et al., 2005).	64 full, 27 short	Social, Self, Safety, Occupy time, Neighborhood, Living situation, Health, Finances, Family + Overall quality of life	7-point Likert scale: 1 = terrible to 7 = delighted. High score indicates a good level of life quality.	SA or interview; "How do you feel about financial situation?" (Finances)	Cronbach's alpha. Inter-rater reliability (ICC). Test-retest reliability. Concurrent and discriminant validity. Responsiveness to change.
Quality of Life Profile-Seniors Version – QOLPSV (Raphael et al., 1995)	Profile was designed to evaluate the QoL of community-dwelling older people.	Toronto Quality of life model	111 full, 54 short, 24 brief	Being: Physical (12), Psychological (12), Spiritual (12), Belonging: Community (12), Physical (12), Social (12), Becoming: Growth (13), Leisure (13), Practical (13)	Completion in 2 stages: 5-point scales of importance and enjoyment (1. stage) and degree of control (2. stage)	SA or interview (up to 1 hour); "Being able to have clear thoughts." (Psychological Being)	Cronbach's alpha. Construct validity. Responsiveness to change.
WHOQOL-OLD	The module	It was	24	Sensory abilities (4),	5-point scales	SA, for use in	Cronbach's alpha.

(Power et al. & WHOQOL-OLD Group, 2005)	represents an empirical assessment of older adults quality of life from the respondent's point of view.	developed on the basis of WHO definition of the QoL.		Autonomy (4), Past, present and future activities (4), Social participation (4), Death and dying (4), Intimacy (4)	measures frequency, intensity and satisfaction. High scores indicates better QoL.	conjunction with WHOQoL-BREF or WHOQoL-100. Item No. 3 – "How much freedom do you have to make your own decisions?" (Autonomy)	Factor analyses. Convergent validity. Discriminant group validity.

Table 2
Older people specific quality of life instruments

Name, original authors, publication year	*Purpose*	*Theoretical framework*	*Items*	*Domains/scales/subscales (no. of items)*	*Response format and scoring*	*Administration and example of item (domain)*	*Psychometric properties*
Age-Related Hormonal Decline of Quality of Life Questionnaire – A-RHDQoL (McMillan et al., 2003)	Individualized questionnaire measuring QoL in older men with age-related hormonal decline.	No theory	21	Family life, Social life, Work, Health, Physical appearance, Physical capabilities, Physical stamina, Energy, Sex life, Sleep, Bodily pain, Stress-tolerance, Memory, Concentration, Travel, Holidays & leisure, Household tasks, Confidence, Motivation, Society's reaction, Worry about future	7-point scale of impact of the difficulties: -3 = very much better to 3 = very much worse; then importance on the 4-point scale: 3 = very important to 0 = not at all important. Respondents can also use the option: not applicable (N/A).	SA; Item No. 6a) – „If my hormone levels had not declined with age, my physical capabilities would be: ..." Item No. 6b) – "This aspect of my life is: ..."	Cronbach's alpha. Factor analyses (Unforced FA, Forced I-FA) Content and preliminary construct validity.
Aging Males' Symptoms scale – AMS (Heinemann et	To measure and to compare HRQoL of aging males over time or	HRQoL	17	Psychological (5), Somato-vegetative (7), Sexual (5)	5-point scale of severity: 1 = none to 5 = extremely severe	SA; Item No. 10 – "Decrease in muscular strength	Cronbach's alpha. Test-retest reliability. Factor analyses.

al., 1999)	before/after androgen replacement therapy.					feeling of weakness)." (Somato-vegetative factor)	Construct validity.
Nursing Home Vision-Targeted Health-Related Quality of Life questionnaire – NHVQoL (Dreer et al., 2007)	To assess vision-targeted HRQoL in older adults residing in nursing homes.	HRQoL	57	General vision (6), Reading (3), Ocular symptoms (9), Mobility (7), Psychological distress (10), Activities of daily living (6), Social activities/hobbies (8), Adaptation/coping (2), Social interaction (6)	4-6-points scale measure the amount of difficulty, frequency of problem, trueness of statement and degree of difficulty of the symptoms. High score represents the highest functional level.	Structured interview; Item No.3 – "How much of the time do you worry about your eyesight?" (Psychological distress)	Cronbach's alpha. Test-retest reliability. Construct validity.
Quality of Life in Late-Stage Dementia scale – QUALID (Wiener et al., 2000)	Can be used to assess QoL in patients with advanced dementia in long-term settings.	No theory	11	Factor of behavioral signs of discomfort (4), Factor of behavioral sign of social interaction (4), Factor of signs of negative affective mood (3)	5-point Likert scale: 1 = never to 5 = always	Structured proxy interview by caregiver; Item No. 5 – "Appears physically uncomfortable."	Cronbach's alpha. Inter-rater reliability (ICC). Factor analysis. Criterion validity. Construct validity.
Quality of life instrument for the Japanese elderly with dementia (QLDJ) Yamamoto-Mitani et al., 2002)	A proxy-rated instrument to assess the QoL of the Japanese elderly with dementia.	HRQoL	24	Interacting with surroundings (8), Expressing self (10), Experiencing minimum negative behaviors (6)	4-point Likert scale: 0 = not at all applicable to 3 = very much applicable	proxy by caregiver	Cronbach's alpha. Inter-rater reliability (ICC). Test-retest reliability. Factor analysis. Construct validity.
Quality of life questionnaire for dementia – QOL-	Disease-specific HRQoL questionnaire to	WHO definition of QoL.	31	Positive affect (7), Negative affect and action (6), Ability of communication (5),	4-point response scale: 1 = never to 4 = frequent.	SA or by proxy; "Irritable among others." (Negative	Cronbach's alpha. Inter-rater reliability (ICC).

D (Terada et al., 2002)	assess QoL in the elderly with dementia.			Restlessness (5), Attachment with others (4), Spontaneity and activity (4)	High score indicates better QoL.	affect and action)	Factor analysis. Content validity. Construct validity.
Quality of life questionnaire for elderly Japanese patients with glaucoma (Uenishi et al., 2003)	A questionnaire evaluates the QoL of elderly Japanese glaucoma patients.	No theory	31	Social and daily life (8), Psychological (8), Physiological (8), Satisfaction of daily life (7)	3-point response: 4 = yes, 2 = sometimes, 0 = no. Higher score represented worse QoL.	SA or interview; Item No. 11 – "Do you feel nervous?" (Psychological)	Cronbach's alpha.
Vienna List (Porzsolt et al., 2004)	A proxy-rating measurement for QoL in very old and severely demented persons.	WHO definition of QoL	40	Communication (15), Aggression (4), Bodily contact (5), Mobility (6), Negative affect (10)	5-point Likert scale: 1 = never, 5 = always	by proxy; "Worries about others." (Communication)	Cronbach's alpha. Factor analysis. Discriminative, content- and criterion-related validity.
Visual Symptoms and Quality of life questionnaire – VSQ **(**Donovan et al., 2003**)**	The questionnaire assesses visual symptoms/ dysfunction and impact on vision-specific QoL for people undergoing second eye cataract extraction.	No theory.	32 full, 14 short	Symptom and visual dysfunction (18), Vision-specific quality of life (9), Vision (3), Administrative issues (2)	4-7-points response formats, that measure level of difficulties and frequency of problems with vision	SA; Item No. 3 – "How would you describe the colures that you see now?" (Symptom and visual dysfunction)	Cronbach's alpha. Test-retest analysis (ICC, linear weighted kappa). Factor analyses. Content and construct validity. Responsiveness.

SA=self-administrated

The oldest instrument (OMFAQ) was published in 1981 and twelve of the other instruments were published after the year 2000. The shortest instrument has 11 items (QUALID) and the longest has 154 items (OMFAQ). We can conclude that all analyzed instruments are multidimensional, except the A-RHDQOL, which is an individualized tool. The number of domains varies between three (e.g. AMS, QLDJ) to twelve (e.g. LEIPAD, OMFAQ). Physical, psychological and social issues are the most frequently occurring domains within the analyzed instruments. They also include economic situation, sexual function, activities of daily living, communication, etc. Only one instrument (LEIPAD) assesses cognitive function and only four incorporate domains related to health status (OMFAQ, OPQOL, QuiLL, A-RHDQOL).

Each of the instruments produces a score profile across all domains and eleven include also global judgments of QoL, namely CASP-19, LEIPAD, OPQOL, QuiLL, WHOQOL-OLD, A-RHDQoL, AMS, QUALID, QLDJ, Quality of life questionnaire for elderly Japanese patients with glaucoma, VSQ. The analyzed instruments use 3- to 7-point scale as a response format and they measure intensity, frequency, satisfaction, level of functioning, impact of difficulties on the QoL and importance of various domains for the QoL. Reported completion times ranging from 5 minutes (QUALID) to 1 hour (QOLPSV).

Majority of the generic and disease-specific questionnaires were developed with the addition of qualitative methods (e.g. interview, responses to open-ended questions, etc.) to derive items and check face validity by observing patients completing the instruments. In general, there were these steps followed: initial development work, a pilot study with psychometric testing and then modification or creating a final version of the questionnaire. Majority of the currently available language versions was translated following international standards for linguistic and cultural translation of quality of life instruments. The research versions are available from the authors on request. Some of the described instruments have a shortened or brief version (OPQOL, QuiLL, QOLPSV, VSQ). Short instruments, as the CASP-19, OPQOL-brief, QUALID, AMS, VSQ-short, can be used as a screening assessment, as part of a single assessment process, and as a monitoring tool and outcome measure.

Internal consistency reliability was verified for all instruments. Values attained for Cronbach's alpha in subscales of the instruments ranged from 0,43 (domain sexual function in LEIPAD) to 0,96 (domain Activities of daily living in NHVQoL). Lower levels of reliability value were reported also for these domains: Control (α = 0,59; CASP-19), Social function and Life satisfaction (both α = 0,61; LEIPAD) or Autonomy (α = 0,65; CASP-19). Seven instruments have evidence of test-retest reliability with time interval between tests about two weeks.

Content validity is not widely reported (Haywood et al., 2004). The testing content validity of analyzed instruments occurred only in three generic and four specific tools. The content validity of the questionnaires was tested with individual cognitive interviews with the members of the focus groups that consisted of older people, patients and clinicians. These groups help to reduce validity and reliability errors in three ways: 1. they check that all relevant domains have been included, 2. they determine the dimensions that make up the domains, and 3. they ensure correct and understandable item wording (Bischoping, & Dyekma, 1999).

Most instruments in this review were assessed for construct validity through comparisons with other QoL instruments (e.g. SF-36, NHP or global subjective judgments of health status). Only four measures had demonstrable responsiveness to change, namely OMFAQ, QuiLL, QOLPSV, VSQ.

Each of analyzed generic instruments were developed using a QoL theory or framework. On the other hand, we found the absence of theory in the majority of specific QoL instruments for older people. Suggested a-theoretical approach to measuring the quality of life is typical not only for age-specific tools (see e.g. Babincak 2013). Theoretical framework is usually replaced by a factor-analytical approach where the structure of the measured quality of life is the result of a statistic procedure and is not based on a specific theory. Another problem is a too wide and vague theory or definition of the measured attribute. An example of this fact may be the often quoted WHO conceptualization which defines QoL as „individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectation, standards and concerns“ (WHOQOL Group, 1998). But in fact many tools based on this concept do not evaluate the position of the person in various contexts of life but the satisfaction in life or indicators of their health.

Conclusion

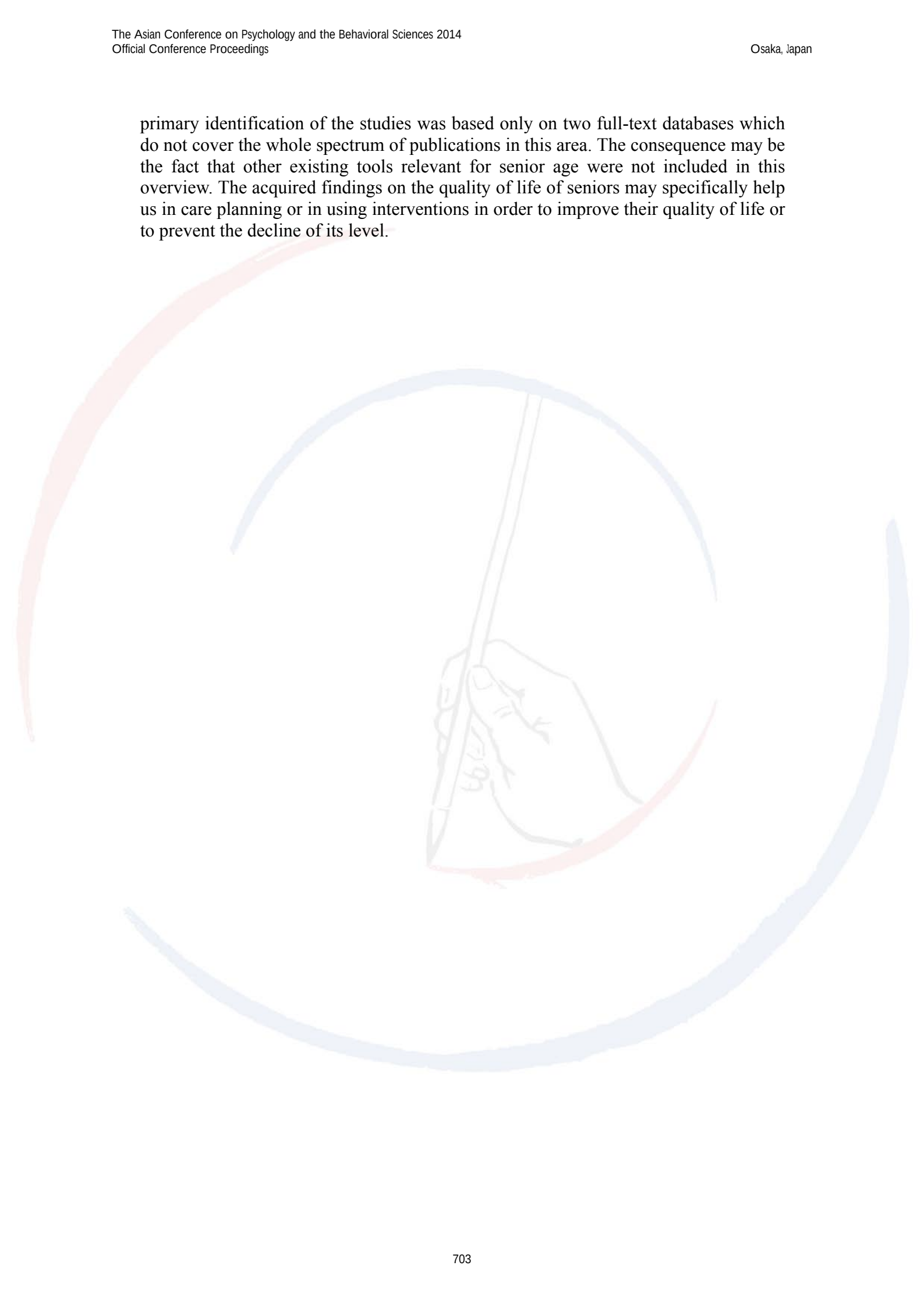
The review identified 16 instruments that have been evaluated for use with people over 60 years (especially for age range 65-75 years). The list includes seven generic and nine older-people-specific instruments, one of which is individualized (A-RHDQOL). The content of the questionnaire (e.g. OPQOL, CASP-19) reflects older people’s own definitions and interpretations of QoL. Proxy assessment of QoL applied mainly to people with severe dementia, because a central problem for QoL assessment in people with advanced dementia is low reliability due to memory, language impairment and reduced self-awareness (Weiner, 2006).

We can summarize that:

1. Compared with the generic instruments we discovered the absence of theory in the majority of specific QoL instruments designed for older people, although this a-theoretical approach to measuring QoL is typical not only for these age group. As Davis et al. (2006) notes, for the researchers it is inevitable to create theoretically supported tools of measuring the quality of life and to verify postulated assumptions empirically.
2. Majority of the instruments provide multiple evidence of reliability and validity. The OMFAQ is highlighted as an instrument that addresses most relevant assessment domains for seniors. It is important to note, although the length of the instrument may increases respondent burden, there is good evidence of its reliability, validity and responsiveness.
3. In the group of seniors, generic and specific tools designed exclusively for the people over 60 years old may be applied, as well as generic methodologies applicable to adults in general. We found slight prevalence of specific tools in comparison to the generic ones. Physical, psychological and social issues are the most frequently occurring domains within the analyzed instruments.

Regarding the limitations of the realized overview we would like to state that the

primary identification of the studies was based only on two full-text databases which do not cover the whole spectrum of publications in this area. The consequence may be the fact that other existing tools relevant for senior age were not included in this overview. The acquired findings on the quality of life of seniors may specifically help us in care planning or in using interventions in order to improve their quality of life or to prevent the decline of its level.



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Religiosity and Spirituality as Predictors of Subjectively Perceived Happiness in University Students in Slovakia

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Abstract
Several research projects discuss the existence of weak to moderately strong positive relation between religiosity or spirituality on the one hand and subjective well-being, life satisfaction or quality of life on the other hand (see Kelley, & Miller, 2007). Variables related to religiosity and spirituality of a person may be perceived in two ways: as protective factors of attaining subjective well-being or as barriers limiting its attainment. The objective of this study is verification of mutual relationship between the indicators of religiosity and spirituality with regard to subjectively perceived happiness and verification of predictive strength of these indicators with regard to subjective happiness. The sample of research participants consisted of 194 university students aged 18 to 26. The research used 4 tools: The Expressions of Spirituality Inventory-Revised (MacDonald, 2000), The Salience in Religious Commitment Scale (Roof, & Perkins, 1975), Subjective Hapinness Scale (Lyubomirsky, & Lepper, 1999) and The Oxford Happiness Questionnaire (Hills, & Argyle, 2002). Using multiple hierarchical linear regression (stepwise), we registered 2 dimensions of spirituality as significant predictors of subjective happiness – Existential Well-Being and Experiential/Phenomenological Dimension. Demographic data and confession types were not proved as predictors of happiness.

Key words:
religiosity, spirituality, subjective happiness, quality of life

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Theoretical background

The relationship between spirituality or religiosity and various dimensions of quality of life has been extensively examined during the recent decades (Sawatzky, Ratner, & Chiu, 2005). Several researchers discuss the existence of a weak to moderately strong positive relationship between various indicators of religiosity or spirituality on the one hand and subjective well-being, life satisfaction or quality of life on the other hand (see Kelley, & Miller, 2007). Several research findings may be quoted as an example. Diener and Clifton (2002) verified a mutual relationship between religiosity and happiness and also between religiosity and life satisfaction in two large samples (1,034 and 52,624 respondents). In both cases and in both samples a statistically significant but weak positive relationship was registered: $r = 0.07$ or 0.08 in the case of correlation between religiosity and life satisfaction and $r = 0.06$ in the case of religiosity and happiness. Thomas and Washington verified the relationship between „health-related quality of life" and religiosity in patients with hemodialysis and they registered a weak but inverse relationship between them ($\beta = -0.15$). Kačmárová (2012) verified the relationship between quality of life and the concept of God which consisted of feelings towards God and ideas of God and she registered weak to moderately strong relationships (r from -0.08 to 0.416). This was a case of age-specific sample of seniors. Mcintosh, Poulin, Silver, & Holman (2011) focused their attention on the affective component of subjective well-being in relation to religiosity and spirituality, in which religiosity and spirituality independently predicted higher positive affect ($\beta = 0.09$ for spirituality and $\beta = 0.12$ for religiosity). Sawatzky, Ratner and Chiu (2005) in their extensive meta-analythical study verified the relationship between quality of life and spirituality. They registered a moderate effect size in assessing simple bivariate correlations, which is a result that supports findings of the weak to moderately strong relationship between monitored variables. The result of regression analyses was interesting. On the basis of these analyses, variability of the relationships between monitored variables was influenced by different operational definitions of spirituality and quality of life. At the same time other potential mediators, such as age, gender, ethnicity or religious affiliation, were not proved in regression analyses. Therefore generally the existence of predominantly weak relationships between the indicators of religiosity and spirituality with regard to various indicators falling under the widely defined construct of quality of life may be predicted. However, it is necessary to pay special attention to the method of measuring (operational defining) spirituality and religiosity, since an identically named construct has different characteristics with a different way of measuring. It is not the intention of this study to dwell in detail on theoretical specification of the notions of spirituality and religiosity, or on the notions covered under the concept of quality of life. In the area of quality of life there is relative consensus regarding fundamental notions (Babinčák, 2013). In defining spirituality and religiosity several approaches may be found: a) those that perceive these notions as mutually exchangeable synonyms; b) approaches defining these notions as independent distinguishable constructs; and c) those that try to classify these notions into a hierarchical structure, most frequently in the sense of spirituality as a notion superior to religiosity which is a component of spirituality. In our study we will adhere to the pragmatic approach – and we will use these notions as they were defined by the authors of the methodologies used in our research (it is closest to the third approach).

Out of the great number of studies dealing with spirituality and religiosity in relation to quality of life, only some assess subjective happiness. In our research we decided to

focus in particular on this construct, which is primarily psychological, in contrast to the rather interdisciplinary notion of quality of life.

Objective

1) Verification of the mutual relationship between selected indicators of spirituality/religiosity and subjectively assessed happiness (as an independent construct).
2) Comparison of predictive strength of the indicators of spirituality/religiosity in relation to subjective happiness measured in two different ways.

Method

Sample

Research sample consisted of 194 university students majoring in Psychology, Social Work, Political Science and Philosophy. The average age of the students was 22.8 (from 18 to 26 years old). The division based on gender and faith is shown in table 1.

Table 1
Description of research sample

Religious affiliation	Male	Female	Total
Catholic	54	73	127
Protestant	8	9	17
Atheist	34	16	50
Other	0	0	0
Total	96	98	194

Measures

We used 2 measures to assess religiosity and spirituality independently from religious affiliation and 2 measures to examine subjective happiness (global assessment versus multidimensional assessment).
1) The Expressions of Spirituality Inventory-Revised (ESI; MacDonald, 2000) – methodology for determining experiences, attitudes, convictions and lifestyle concerning spirituality. Religiosity and spirituality are perceived as a multi-dimensional construct consisting of five areas: a) Cognitive Orientation towards Spirituality (COS), b) Experiential/Phenomenological Dimension (EPD), c) Existential Well-Being (EWB), d) Paranormal Beliefs (PAR) and e) Religiousness (REL). The ESI-R's α coefficients range from 0.788 for PAR to 0.933 for COS. Detialed descritpion of the scales used is specified in the appendix.
2) The Salience in Religious Commitment Scale (SRC; Roof, & Perkins, 1975) – three-item scale measures „the importance an individual attaches to being religious" (p.111). It is used to determine the extent to which adults consider their religious beliefs to be important. Measured construct is very similar to Allport's concept of internelized religiosity (Halama et al. 2006). The SRC's α coefficient is 0.913.
3) Subjective Hapinness Scale (SHS; Lyubomirsky, & Lepper, 1999) – it is a 4-item measure of global subjective happiness which represents a global, subjective assessment of whether one is a happy or an unhappy person (p.139). The SHS's α coefficient is 0.791.
4) The Oxford Happiness Questionnaire (OHQ; Hills, & Argyle, 2002). OHQ is a tool for measuring happiness as a multidimensional construct which includes frequent

experiencing of positive affects or joy, high average level of satisfaction and absence of negative feelings, such as depression and anxiety. It has 29 items and the OHQ's α coefficient is 0.898.
While SHS represents a one-dimensional measure, OHQ includes several dimensions and resembles the concept of subjective well-being (Diener, 1984). Other monitored variables were gender, age, domicile and self-classification into the categories of believer/unbeliever.

Results

Table 2
Descriptive statistics of scales used (N=194)

Variable/Scale	Minimum	Maximum	Mean	Std.deviation	Skewness
Age	18	26	22.80	1.78	-0.356
ESI - COS	0.00	4.00	2.15	1.05	-0.303
ESI – EPD	0.00	4.00	1.47	0.93	0.128
ESI - EWB	0.83	4.00	2.63	0.76	-0.006
ESI – PAR	0.00	4.00	1.75	1.14	0.008
ESI - REL	0.00	4.00	2.09	1.05	-0.338
SRC	1.00	7.00	3.46	1.89	0.218
SHS	1.75	7.00	4.95	1.05	-0.216
OHQ	2.79	5.66	4.22	0.59	0.341

Note: COS - Cognitive Orientation towards Spirituality; EPD - Experiential/Phenomenological Dimension; EWB - Existential Well-Being; REL – Religiousness; SRC - Salience in Religious Commitment Scale; SHS – Subjective Happiness Scale; OHQ - Oxford Happiness Questionnaire

Simple matrix of bivariate correlations between the indicators of spirituality and two methodologies measuring happiness is shown in Table 3. Only Existential Well-Being significantly correlates with happiness (r=0.694 or 0.650).

Table 3
Correlations (Pearsons r) between monitored variables and happiness (SHS, OHQ)

Variable/Scale	SHS	OHQ
Age	0.017	0.008
Domicile	-0.002	0.036
Gender	0.132	0.100
Type of confession	-0.056	-0.038
ESI		
Cognitive Orientation towards Spirituality	-0.043	-0.035
Experiential/ Phenomenological Dimension	0.062	0.051
Existential Well-Being	0.694**	0.650**
Paranormal Beliefs	-0.055	-0.128
Religiousness	0.096	0.114
The Salience in Religious Commitment Scale	0.053	0.040

Note: ** znamená $p < 0.01$; SHS – Subjective Happiness Scale; OHQ - Oxford Happiness Questionnaire; ESI - The Expressions of Spirituality Inventory-Revised

We used multiple hierarchical linear regression analysis (stepwise method) to verify how the variables of gender, domicile, type of believer, religiosity and spirituality as predictors influence subjectively perceived happiness as a criterion. In both regression models Existential Well-Being and Experiential/Phenomenological Dimension of

Spirituality were identified as the predictors of happiness. EWB explains 42% or 48% variability of happiness values and EPD around 3% (Table 4).

Table 4
Regression models for indicators of spirituality (ESI), religiosity (SRC), age, gender, domicile and type of faith as predictors and subjectively assessed happiness (SHS, or OHQ) as a criterion (accepted models $p < 0.05$)

Predictor	R	R^2change	b	T	p
Subjective Happiness Scale ($\mathbf{F_{total}}$ (2,191) = 101.499; **p < 0.001**)					
ESI - Existential Well-Being	0.694	0.482**	1.001	14.194	0.000
ESI – Experiential/Phenomenolog. Dimension of Spirituality	0.718	0.033**	0.208	3.622	0.000
(Constant)			2.010		
Oxford Happiness Questionnaire ($\mathbf{F_{total}}$ (2,191) = 77.836; **p < 0.001**)					
ESI – Existential Well-Being	0.650	0.422**	0.531	12.440	0.000
ESI – Experiential/Phenomenolog. Dimension of Spirituality	0.670	0.027**	0.106	3.045	0.003
(Constant)			2.670		

Note: * p< .05; ** p< ,01; gender, domicile and type of faith were dichotomic variables (man/woman, city/village, believer/non-believer)

Besides main findings we report also several additional results. When comparing respondents by classification into the category of believer/non-believer, we registered differences in correlations of spirituality/religiosity with happiness. In believers besides EWB also REL (r=0.170) significantly correlated with happiness. In non-believers (N=54) besides EWB also COS (r= -0.286) correlated with happiness. When we added interactions of indicators of spirituality/religiosity and classifications into the category of believer/non-believer (model with a dependent variable SHS) into regression models, another predictor was added into the resulting model – the interaction of EPD and classifications into the category of believer/non-believer (R^2change = 0.017). High EPD values are more frequently associated with high levels of happiness in believers than in non-believers.

Discussion
Research findings repeatedly confirm a connection between religiosity, spirituality and various aspects of quality of life (as an umbrella construct for several psychological variables). Usually these are positive relationships, while registered correlation coeficients are most frequently low or moderate (Kelley, & Miller, 2007). Despite that, registered relationships are relatively stable. The idea of a connection between spirituality and quality of life is demonstrated also in the effort of authors of different conceptions of quality of life to include the spiritual dimension among the areas of multidimensional construct of quality of life (see e.g. the concept of quality of life by World Health Organization, WHOQOL Group, 1998).
In our research we focused on happiness as a variable of global subjective assessment of quality of life and we analyzed its relationship towards indicators of religiosity and spirituality. We used two different operational definitions of happiness. The first one treats happiness as overall subjective assessment, to what extent a person considers themselves happy, and it may be asked about by one or a small number of similar questions. The second operational definition is broader; it does not consider happiness unidimensionally but the overall assessment of a person's happiness consists of

several aspects, such as frequent experiencing of positive affects or joy, high average level of satisfaction, absence of negative feelings, such as depression and anxiety etc. Besides main objectives we were also interested in finding whether with different conceptualizations of the same construct we register comparable results.
On the level of correlations we have not registered tight relations between religiosity/spirituality and happiness (except EWB). In regression models, Existential Well-Being and Experiential /Phenomenological Dimension of Spirituality were demonstrated as significant predictors of happiness values among demographic variables and subscales of ESI and SLC methodologies. Detailed description of said aspects of religiosity and spirituality is given in the appendix. For both tools for measuring happiness we registered the effect of experiential and existential dimension of spirituality while the cognitive, behavioral and paranormal elements of religiosity, or the aspect of internalised religiosity, were not confirmed. We did not register any major differences in the results based on different conceptualizations of subjective happiness. Simultaneously, a different impact of the existential dimension of spirituality on the values of happiness in believers and non-believers was indicated. This result, however, requires more detailed examination.
On the basis of registered results we can agree with the assertions of those authors who registered only a weak relation between the indicators of religiosity/spirituality with regard to happiness. A possible explanation may be sought in the mediator effect of other variables, based on which religiosity and spirituality do not affect happiness directly. For example according to Zullig, Ward and Horn (2006), perceived spirituality and life satisfaction was fully mediated by self-perceived health, and the perceived religiosity and life satisfaction was partially mediated by self-perceived health. „Students who describe themselves as spiritual or religious are likely to report greater self-perceived health and that greater self-perceived health likely influences life satisfaction“ (p.267). Another mediator effect is presented by Cowlishaw, et al. (2013); their results showed that the meaningfulness dimension of SOC (Sense of Coherence) mediated the influence of spirituality on life satisfaction over time, suggesting that spirituality may influence older adults' experience and perception of life events, leading to a more positive appraisal of these events as meaningful. Sawatzky, Ratner, & Chiu (2005) give the type of religiosity/spirituality, or quality of life, definition as a moderator of the relationship of the variables that we monitored. That means the way how the variables are defined and operationalised influences the relation between the variables more than age, gender, or other similar indicators. This moderator is important especially due to the absence of generally accepted definition of spirituality, religiosity and happiness.

Conclusion

In our research those dimensions of spirituality and religiosity which inform about positive functioning and deep spiritual experiences or spiritual existence were demonstrated as predictors of subjective happiness.
For better understanding of connections between religiosity/spirituality and happiness it is necessary to focus on the mediators mediating this relationship.

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Appendix

Description of scales used to measure spirituality (The Expressions of Spirituality Inventory-Revised; McDonald, 2000, p.187)

Cognitive Orientation Towards Spirituality. This dimension appears to pertain to the expressions of spirituality that are cognitive-perceptual in nature. By cognitive-perceptual is meant beliefs, attitudes and perceptions regarding the nature and significance of spirituality, as well as the perception of spirituality as having relevance and import for personal functioning. This dimension does not overtly involve religiousness or the expression of beliefs through religious means, though it does appear to be highly related to them.

Experiential/Phenomenological Dimension of Spirituality. This dimension concerns the experiential expressions of spirituality. Included within the rubric of "experiential" are experiences that are described as spiritual, religious, mystical, peak, transcendental, and transpersonal. Though this dimension appears to have some relation to broader altered states of consciousness and nonordinary experiences, empirical evidence suggests that it is a unique and identifiable construct.

Existential Well-Being. This dimension involves the expressions of spirituality that may be seen to be associated with a sense of positive existentiality. That is, it pertains to spirituality as expressed through a sense of meaning and purpose for existence, and a perception of self as being competent and able to cope with the difficulties of life and limitations of human existence.

Paranormal Beliefs. This dimension of the expressions of spirituality concerns belief in the paranormal. Based upon the analyses completed, it appears to be mostly related to beliefs of paranormal phenomena of a psychological nature (e.g., ESP, precognition, psychokinesis), though it is also composed of beliefs in witchcraft and spiritualism (e.g., ghosts or apparitions).

Religiousness. This dimension relates to the expression of spirituality through religious means. Based upon the empirical findings, it appears to better reflect religiousness that is Western oriented (i.e., it is related to Judeo-Christian forms of religious belief and practice). Moreover, it seems to focus on intrinsic as opposed to extrinsic religiousness. This dimension includes not only beliefs and attitudes of a religious nature, but also behavior and religious practice. Factor analytic work suggests that this dimension is highly related to the Cognitive Orientation Towards Spirituality dimension but is nonetheless conceptually unique.

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