

The 10th Asian Conference on
Psychology & the Behavioral Sciences (ACP)

CONFERENCE PROCEEDINGS

Organised by The International Academic Forum (IAFOR)
in association with the IAFOR Research Centre at Osaka
University and IAFOR's Global University Partners

ISSN: 2187-4743



THINK TOKYO

MARCH 26–29, 2020 | TOKYO, JAPAN

“To Open Minds, To Educate Intelligence, To Inform Decisions”

The International Academic Forum provides new perspectives to the thought-leaders and decision-makers of today and tomorrow by offering constructive environments for dialogue and interchange at the intersections of nation, culture, and discipline. Headquartered in Nagoya, Japan, and registered as a Non-Profit Organization (一般社団法人), IAFOR is an independent think tank committed to the deeper understanding of contemporary geo-political transformation, particularly in the Asia Pacific Region.

INTERNATIONAL

INTERCULTURAL

INTERDISCIPLINARY

iafor

The Executive Council of the International Advisory Board

Mr Mitsumasa Aoyama

Director; The Yufuku Gallery, Tokyo, Japan

Lord Charles Bruce

Lord Lieutenant of Fife
Chairman of the Patrons of the National Galleries of Scotland
Trustee of the Historic Scotland Foundation, UK

Professor Donald E. Hall

Herbert J. and Ann L. Siegel Dean
Lehigh University, USA
Former Jackson Distinguished Professor of English and Chair of the Department of English

Professor Arthur Stockwin

Founding Director of the Nissan Institute for Japanese Studies & Emeritus Professor
The University of Oxford UK

Professor Chung-Ying Cheng

Professor of Philosophy, University of Hawai'i at Manoa, USA
Editor-in-Chief, The Journal of Chinese Philosophy

Professor Steve Cornwell

Professor of English and Interdisciplinary Studies,
Osaka Jogakuin University, Osaka, Japan
Osaka Local Conference Chair

Professor A. Robert Lee

Former Professor of English at Nihon University, Tokyo from 1997 to 2011, previously long taught at the University of Kent at Canterbury, UK

Professor Dexter Da Silva

Professor of Educational Psychology, Keisen University, Tokyo, Japan

Professor Georges Depeyrot

Professor and Director of Research & Member of the Board of Trustees
French National Center for Scientific Research (CNRS) & L'Ecole Normale Supérieure, Paris, France

Professor Johannes Moenius

William R. and S. Sue Johnson Endowed Chair of Spatial Economic Analysis and Regional Planning
The University of Redlands School of Business, USA

Professor June Henton

Dean, College of Human Sciences, Auburn University, USA

Professor Michael Hudson

President of The Institute for the Study of Long-Term Economic Trends (ISLET)
Distinguished Research Professor of Economics, The University of Missouri, Kansas City

Professor Koichi Iwabuchi

Professor of Media and Cultural Studies & Director of the Monash Asia Institute, Monash University, Australia

Professor Sue Jackson

Professor of Lifelong Learning and Gender & Pro-Vice Master of Teaching and Learning, Birkbeck, University of London, UK

Professor Sir Geoffrey Lloyd

Senior Scholar in Residence, The Needham Research Institute, Cambridge, UK
Fellow and Former Master, Darwin College, University of Cambridge
Fellow of the British Academy

Professor Keith Miller

Orthwein Endowed Professor for Lifelong Learning in the Science, University of Missouri-St. Louis, USA

Professor Kuniko Miyanaga

Director, Human Potential Institute, Japan
Fellow, Reischauer Institute, Harvard University, USA

Professor Dennis McInerney

Chair Professor of Educational Psychology and Co-Director of the Assessment Research Centre
The Hong Kong Institute of Education, Hong Kong SAR

Professor Brian Daizen Victoria

Professor of English
Fellow of the Oxford Centre for Buddhist Studies

Professor Michiko Nakano

Professor of English & Director of the Distance Learning Center, Waseda University, Tokyo, Japan

Professor Thomas Brian Mooney

Professor of Philosophy
Head of School of Creative Arts and Humanities
Professor of Philosophy and Head of School of Creative Arts and Humanities, Charles Darwin University, Australia

Professor Baden Offord

Professor of Cultural Studies and Human Rights & Co-Director of the Centre for Peace and Social Justice
Southern Cross University, Australia

Professor Frank S. Ravitch

Professor of Law & Walter H. Stowers Chair in Law and Religion, Michigan State University College of Law

Professor Richard Roth

Senior Associate Dean, Medill School of Journalism, Northwestern University, Qatar

Professor Monty P. Satiadarma

Clinical Psychologist and Lecturer in Psychology & Former Dean of the Department of Psychology and Rector of the University, Tarumanagara University, Indonesia

Mr Mohamed Salaheen

Director, The United Nations World Food Programme, Japan & Korea

Mr Lowell Sheppard

Asia Pacific Director, HOPE International Development Agency, Canada/Japan

His Excellency Dr Drago Stambuk

Croatian Ambassador to Brazil, Brazil

Professor Mary Stuart

Vice-Chancellor, The University of Lincoln, UK

Professor Gary Swanson

Distinguished Journalist-in-Residence & Mildred S. Hansen Endowed Chair, The University of Northern Colorado, USA

Professor Jiro Takai

Secretary General of the Asian Association for Social Psychology & Professor of Social Psychology
Graduate School of Education and Human Development, Nagoya University, Japan

Professor Svetlana Ter Minasova

President of the Faculty of Foreign Languages and Area Studies, Lomonosov Moscow State University

Professor Yozo Yokota

Director of the Center for Human Rights Affairs, Japan
Former UN Special Rapporteur on Myanmar

Professor Kensaku Yoshida

Professor of English & Director of the Center for the Teaching of Foreign Languages in General Education, Sophia University, Tokyo, Japan

The Asian Conference on Psychology & the Behavioral Sciences 2020

Official Conference Proceedings

ISSN: 2187-4743



© The International Academic Forum 2020
The International Academic Forum (IAFOR)
Sakae 1-16-26-201
Naka Ward, Nagoya, Aichi
Japan 460-0008
www.iafor.org

Table of Contents

<i>Testing the Moderating Role of Self-Reliance and Social Support on the Mediated Relationship of Help-Seeking Attitudes and Behavior through Intentions</i> Mahjalin Araiza Bugtong	pp. 1 - 16
<i>Psychological Safety in Teams: Essentials to Developing High Performance and Continual Learning Teams</i> Kenneth Tan	pp. 17 - 26
<i>The Difference of the 'Regression in the Service of the Ego Between Art Students and Professional Artists</i> Toshiki Ito	pp. 27 - 30
<i>Smartphones at the Workplace: An in Situ Mixed-Method Study of Smartphone Use During Intellectual Work</i> Maxi Heitmayer	pp. 31 - 50
<i>Sailing Through: The Assessment of a Philippine Grief Support Program Using Bible-Based Lessons and Art Therapy</i> Alyssa Roxanne H. Publico	pp. 51 - 64
<i>Mindfulness Based Art Therapy to Reduce Anxiety Being Experienced by Chronic Kidney Disease Patients Who Required Hemodialysis</i> Veronica Clarissa Monty P. Satiadarma Untung Subroto	pp. 65 - 72
<i>In Search of Wellness in Hong Kong: The Evolution of Delusive Public Space in the Metropolis</i> Judy Chu	pp. 73 - 88
<i>Chinese Permanent Residents in Japan A Qualitative Study on Acculturation Strategies and Mental Health</i> ShiZhe Zhao Tomoko Tanaka	pp. 89 - 106
<i>Do Extroverted and Lonely Junior High Students Prefer Interacting through Social Media? Analysis of Social Media Time Using Diaries</i> Shiroh Ohno	pp. 107 - 112
<i>Factors in Teachers' Help-Seeking Preferences from the Viewpoint of Teachers with New Appointment Terms</i> Yutaka Konuma	pp. 113 - 116
<i>Mindfulness and Depression: The Mediating Role of Psychological Flexibility</i> Thanpitcha Sannarin Chaiyun Sakulsriprasert	pp. 117 - 128

Comparative Interpretation of Tree Painting between People on Different Loneliness Levels

Mario Albert
Lia Hervika
Novita Liesera

pp. 129 - 142

Clients' Experiences of Counseling Engagement in Thailand

Natawan Paoin
Panita Suavansri
Nattasuda Taephant

pp. 143 - 156

Planning and Designing Multi-function Commercial Space of Chinese Wonderland

Lim Hong En
Wu Tsann-Chung
Lim Yi Ting

pp. 157 - 162

Planning and Designing Research with Brand of Indigo Art Living Store for Chinese Dining Space - Li River Side

Lim Yi Ting
Wu Tsann-Chung
Lu Xuqi
Adrian Ng Yee Khai

pp. 163 - 168

The Dynamics of Depressive Symptoms on Criminal Investigators in Semarang (North Central Java) Police

Devario Delano
Pius Heru Priyanto

pp. 169 - 174

Health Consideration in Architectural Design: An Interrelation Between Architecture and Neuroscience

Dea Luma
Yoshiyuki Kawazoe

pp. 175 - 188

Unleash the Warrior in You: A Mixed Method Study on the Psychological Well Being of Student Athletes from the University of the East

Jemabel G. Sidayen
Frederick Fabellon

pp. 189 - 193

Testing the Moderating Role of Self-Reliance and Social Support on the Mediated Relationship of Help-Seeking Attitudes and Behavior through Intentions

Mahjalin Araiza Bugtong, University of Batangas, Philippines

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Studies have shown that mental health problems have become a growing public health concern. Despite this, a gap still exists in those who need mental health services and those who seek professional help. Although there are many studies on help-seeking, only few have focused on thoroughly examining the strength of relationships among the elements of help-seeking, namely, attitudes, intentions, and actual behavior. To gain an improved understanding of what influences professional help-seeking for mental health concerns, the researcher extended the study by adding variables such as self-reliance and social support. The researcher examined if the indirect influence of attitudes toward help-seeking on actual help-seeking behavior through help-seeking intention varies at individual's different levels of self-reliance and social support on a sample of 604 Filipino participants whose age ranged from 18 to 25 years. A moderated mediation analysis using Hayes' Process Model 9 revealed that none of the investigated factors of help-seeking moderated the relationship between attitudes toward help-seeking and actual help-seeking behavior through help-seeking intention. Nevertheless, the study found that social support predicts actual help-seeking behavior through help-seeking intentions. Thus, an individual who has positive attitudes toward seeking professional help, and who perceives social support for these behaviors will likely seek professional mental help. As such, social support can serve as social encouragement along pathways to mental health care.

Keywords: Mental Health, Help-Seeking Attitude, Intentions, Behavior, Self-Reliance, Social Support

iafor

The International Academic Forum
www.iafor.org

Introduction

One of the common and increasing public health issues in the world is mental health problems. These mental health issues may include concerns ranging from personal difficulties such as adjustment to significant life change to mental illnesses such as depression or anxiety. The World Health Organization (WHO) has recognized psychological health problems as second among the leading causes of disability and impairment in the world (Cairns, Massfeller, & Deeth, 2010). The prevalence of mental health illness stands as rough evidence concerning the general necessity for mental health treatment in an average population. Studies have shown that while sources of help can be formal or informal, seeking formal help such as psychological services can be more beneficial and effective (Rickwood, Deane, Wilson & Ciarrochi, 2005; National Collaborating Centre for Mental Health, 2004). However, although efficacious therapeutic interventions are available and accessible, formal help-seeking remains marginally an infrequent option for people with psychological problems. This is particularly true with many young adults, who in spite of having psychological concerns, don't look for help and, subsequently, don't get adequate treatment (Rickwood, Deane & Wilson, 2007).

As regards mental health, the most recent definition of this concept denoted it as a coping strategy that reflects an attempt to get external help to manage a mental health issue (Rickwood & Thomas, 2012). In particular, it means that help-seeking is a process which can vary from the actual behavior of looking for help to intentions to behave to a more general attitude to act in specific ways. This definition sees help-seeking as a behavioral process observing a linear relationship between attitudes, intentions, and behaviors. Furthermore, this definition is also grounded on a particular theory called the theory of planned behavior (TPB) stating that one's attitudes are crucial to the formation of intentions which in consequence affects the actual help-seeking behavior (Ajzen, 1991). In this study, the researcher decided on adopting the framework of help-seeking proposed by Rickwood and Thomas in 2012, which narrowed down the focus on attitudes toward help-seeking as sole predictor of intentions to seek help and excluding the other two, namely, subjective norms and perceived behavioral control. The researcher decided to conceptualize help-seeking using this model to support a more consistent approach of defining and measuring help seeking.

The current study defined attitudes toward help-seeking as an individual's overall evaluation of obtaining help from professionals in mental health. A few researches revealed that individual's help-seeking attitudes are amongst the best predictors of treatment seeking (Carlton & Deane, 2000; Mackenzie, Gekoski, & Knox, 2006). It often represents the most considerable variance in help-seeking for problems concerning mental health (Mo & Mak, 2009; Schomerus, Matschinger, & Angermeyer, 2009). Evidence also suggests that reduction in the use of mental health services results from the deepening of one's negative attitudes toward seeking help (Topkaya, 2012). There are also many studies that found support for the connection between attitudes and intentions (Ægisdóttir & Gerstein, 2009; Choi, 2008). This study described help-seeking intentions as the intent to seek for professional help. An individual's intention is also found to mainly influence actual help-seeking behavior (Armitage & Conner, 2001).

Whereas help-seeking attitudes and intentions have been viewed as a determinant of help-seeking, self-reliance was found to be a frequently stated reason for not accessing treatment among those having a mental health problem (Zartaloudi, 2010). Thus, dependence on oneself alone serves as a help-seeking barrier that further contributes to underutilization of mental health services (Chong, Abidin, Sherbourne, Vaingankar, Heng, Yap, & Subramaniam, 2012; Rickwood, Deane, & Wilson, 2007; Salaheddin & Mason, 2016). Another crucial factor is social support which denotes free and accessible assistance that comes from one's social network (Rickwood et. al., 2005). Based on some studies, high levels of social support were associated with more negative professional help-seeking attitudes and lower intentions to obtain mental health services (Vogel, Wester, Wei & Boysen, 2005, Powell & Kotschessa, 1995).

Goals and Hypothesis

A few studies uncovered that even though a relationship exists between help-seeking attitudes and intentions, enhancing attitudes does not automatically result to increased help-seeking intentions (Ægisdóttir et al., 2011; Christopher et al., 2006). Thus, examining variables which potentially affect the relationship between the two is essential. The researcher believed that extending the current research via the addition of variables that have antecedently been considered necessary to influence seeking help (self-reliance and social support), may provide a more complete or better theoretical understanding of this construct. Combining these two moderators, self-reliance and social support will help give a more complete picture of help-seeking as it gives light to the internal and external factors affecting one's intention to seek for psychological professional help.

Thus, in this study, the researcher endeavored to test the association among help-seeking attitudes, help-seeking intention, actual help-seeking behavior, self-reliance and social support. Specifically, the researcher intended to analyze the moderating effects of self-reliance and social support in the mediating role of help-seeking intention in the relationship between attitudes toward help-seeking and actual help-seeking behavior. The researcher aimed to test if the indirect influence through help-seeking intention varies at individual's different levels of self-reliance and social support. For this research problem, the researcher hypothesized that the influence of attitudes toward help-seeking on actual help-seeking behavior through help-seeking intentions is moderated by self-reliance and social support of individuals with mental health concerns, specifically, the influence through help-seeking intentions will be stronger among people with low self-reliance and low social support.

Conceptual Framework

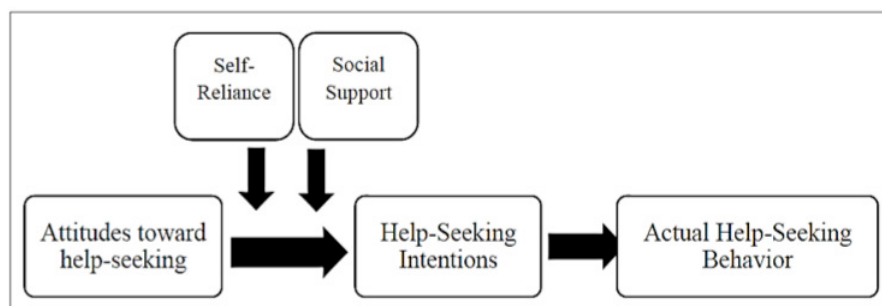


Figure. 1: Framework showing that Self-reliance and Social Support moderate the Relationship between Attitudes toward help-seeking and Actual help-seeking behavior through Help-seeking intentions

This conceptual framework is in line with the theory of approach-avoidance conflict. This theory presumes that conflict occurs when there is a behavior or goal that has both motivational influences and inhibitory influences of differing strengths which thus make the goal pleasant and unpleasant simultaneously (Elliot & Covington, 2001). The researcher used this theory in conceptualizing help-seeking as being an approach or avoidance conflict where positive help-seeking attitude is an approach factor that strengthens the possibility that one will seek out services while an increased level of self-reliance and social support are avoidance factors that weaken this possibility.

Methodology

Sample and Data Collection

The researcher employed a quantitative research design. Specifically, it was a survey method which involved administration of a questionnaire to obtain data on help-seeking attitudes, intentions, behaviors, and self-reliance and social support of individuals with mental health concerns. Data were gathered from a sample of Filipino emerging adults ($N = 604$) aged 18 to 25 ($M = 21$, $SD = 2.40$). Of them, 50% were males ($n = 302$, $M = 20.57$, $SD = 2.48$) and 50% were females ($n = 302$, $M = 21.69$, $SD = 2.19$), ensuring that both men and women were equally represented in the study. Sampling was carried out using snowball sampling.

Measures

Negative Life Events Scale for Students (NLESS; Buri, Post, & Alliegro, in press) is a checklist intended for use as a screening tool to identify individuals that would fit the population of interest for the current study to be conducted. Mental Help-Seeking Attitudes Scale (MHAS; Hammer, Parent, & Spiker, 2018) was used as a measure of the study's predictor variable, attitudes toward help-seeking. Mental Help Seeking Intention Scale (MHSIS; Hammer & Spiker, in press) was used to measure the mediator variable help-seeking intentions. And just like how it was done in earlier studies, actual help-seeking behavior was measured using this question, "Within the past six months, have you obtained help from a professional for mental health concerns which include but are not limited to problems coping with distressing

situations or life event, anxiety, and depression?” (Eisenberg, Golberstein, & Gollust, 2007; Franz, 2012, Zivin et al., 2009). Participants were considered as having an actual help-seeking behavior if they have obtained professional help within the past six months after finding themselves being in a distressing situation. Self-Reliance for coping with mental health problems (Self-Reliance – MHP; Britt Bennett, Crabtree, Haugh, Oliver, McFadden, & Pury, 2011) is a three-item questionnaire that was used to measure moderator variable, self-reliance. Multidimensional Scale of Perceived Social Support (MSPSS; (Zimet, Dahlem, Zimet & Farley, 1988) is a 12-item scale that measured the other moderator variable, social support.

Procedure

This study had two parts. First, there was a screening of qualified participants using NLESS Only those participants who reported having at least one troubling concern within the past six months continued to the next part of the study. Second, the participants answered an additional set of questionnaires. Following the NLESS, five sets of questionnaires including MHSAS, MHSIS, Actual Help-Seeking Behavior, Self-Reliance – MHP and MSPSS were then given. The researcher ensured to always counterbalance the order of the questionnaires to guard against order and sequence effect. Finally, the researcher debriefed the participants about the study and expressed her gratitude for participating. A leaflet about help-seeking for mental health problems was provided right after they answered the questionnaire set. This leaflet contains necessary information about mental health problems as well as contact details of psychologists and clinics that offer mental health services. Likewise, on the online version of the questionnaire, a Google link containing information about mental health clinics/professionals was included. Ethical approval was sought and obtained from the relevant authorities and panelists at the De La Salle University.

Data Analysis

The data were carefully screened before conducting statistical analyses to guarantee the accuracy of the data file. There have been no missing data as all participants completed all items on every scale. Bootstrapping was observed in order to deal with the outliers. Prior to data analysis, items in each instrument were factor analyzed ensuring that constructs are unidimensional. Each item in the instruments used namely MHAS, MHSIS, Self-Reliance – MHP and MSPSS did not fail to load on a single factor solution. Then, a reliability analysis was completed for each instrument via omega coefficient. For all the instruments mentioned above, no items that attenuated value of the omega coefficient were identified. After these properties were established, the researcher proceeded to descriptive analysis and testing of its hypothesis. The researcher made use of the model 9 of the PROCESS macro developed by Hayes (2015) to gain an insight into the moderated mediation model. Multiple regression analyses were conducted to weigh each component of the proposed moderation mediation model. A 10,000-bias-corrected bootstrap sample and a 95-percentile confidence interval estimate was requested in the PROCESS. Also, to achieve the main objective of the study, binary logistic regression was performed on the independent variable.

Results

Descriptive Statistics

Variable	N	Mean	SD	Min	Max
Help-Seeking Attitude	604	5.691	0.9447	1.778	7.000
Self-Reliance	604	2.940	0.8241	1.000	5.000
Social Support	604	5.425	1.124	1.000	7.000
Help-Seeking Intention	604	5.107	1.364	1.000	7.000
Actual Help-seeking Behavior	604	0.1126	0.3613	0.000	1.000

Table 1: Means and Standard Deviations

Typical ratings on help-seeking attitudes items went from 1.78 to 7.00 with a mean of 5.70 ($SD = 0.94$). The respondents' levels of self-reliance ranged from 1 to 5 with a mean of 2.90 ($SD = 0.82$). Vis-à-vis the level of social support, the analysis showed a mean of 5.43 ($SD = 1.12$). The respondents' help-seeking intentions ranged from 1.00 to 7.00 with a mean of 5.12 ($SD = 1.36$) and their actual help-seeking behavior ranged from 0 to 1 with a mean of 0.11 ($SD = 0.32$). Refer to Table 1.

Moderated Mediation Analysis

The data was analyzed through Hayes' Process analysis for first stage dual moderated mediation following the Model 9 path.

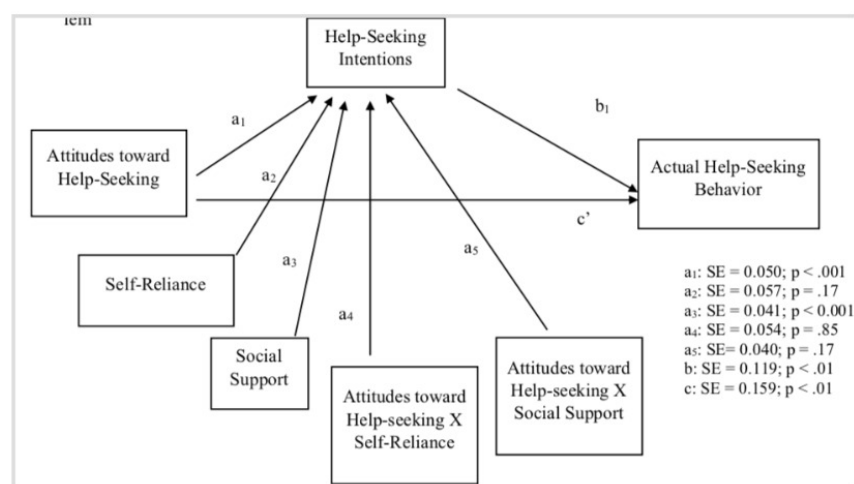


Figure 2: The Moderating Roles of Self-Reliance and Social Support on the relationship between attitudes toward help-seeking and actual help-seeking behavior through help-seeking intentions

In the model of help-seeking intention (M), self-reliance (W) did not significantly moderate the indirect effect of attitudes toward help-seeking on actual help-seeking behavior ($a4 = 0.010$, $p = .853$, 95% $CI = -.095$ to 0.115), as well as social support (Z) ($a5 = -0.0545$, $p = .173$, 95% $CI = -0.133$ to 0.024). Because the model shows that both the interactions are non-significant, it is therefore unnecessary to discuss the

conditional indirect effects of attitudes toward help-seeking and actual help-seeking behavior through help-seeking at different values of self-reliance and social support. Also, while no interactions can be observed, an additive effect can be seen in the relationship among attitudes toward help-seeking, social support and actual help-seeking behavior.

In testing moderated mediation, Hayes (2015) argued that it is more important to consider indices of partial moderated mediation, that is, the weights for self-reliance (W) and social support (Z) in this equation: $a_4b = 0.00325$ and $a_5b = -0.0177$, respectively. Inference about partial moderated mediation comes from a boot-strap CI for these indices, which when estimated using 10,000 bootstrap samples (see Table 2) is -0.0375 to 0.055 for self-reliance (W) and -0.0582 to 0.016 for social support (Z). As the CI for the index of partial moderated mediation by self-reliance includes zero, it can be concluded that independent of any moderation of the indirect effect of attitudes toward help-seeking by social support, self-reliance does not moderate this indirect effect. Put simply, even when social support is held fixed, the indirect effect is unrelated to the self-reliance, and same applies when the CI for the index of partial moderated mediation by social support includes zero.

		Outcome	
		M : Help-Seeking Intentions	Y : Actual Help-Behavior
Constant		5.118 (0.047)	3.785(0.658)
X : Attitudes toward Help-seeking	$a_1 \rightarrow$	0.757 (0.050)***	$c' \rightarrow$ -.4389 (0.159)**
W : Self-Reliance	$a_2 \rightarrow$	-.0772 (0.057)	
Z : Social Support	$a_3 \rightarrow$	0.172 (0.041)***	
XW : Attitudes toward Help-seeking x Self-Reliance	$a_4 \rightarrow$	0.010 (0.054)	
XZ : Attitudes toward Help-seeking x Social Support	$a_5 \rightarrow$	-.0545 (0.040)	
M : Help-seeking Intention			$b \rightarrow$ 0.325 (0.119)**
		R 0.582	
Moderator	Index of Partial Moderated Mediation		95% bootstrap CI ^a
W	$a_4b = 0.0032$		-.0375 to 0.055
Z	$a_5b = -.0177$		-.0582 to 0.016

^aPercentile bootstrap CI based on 10,000 bootstrap samples.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2: Ordinary least squares regression coefficients (with standard errors) from a first stage dual moderated mediation model

The results also revealed that only the moderator, social support, significantly predicts help-seeking intention ($b = 0.172$, $p < .01$, 95% $CI = 0.092$ to 0.252), indicating a mediational role of help-seeking intention on the relationship between social support and actual help-seeking behavior. A post hoc analysis specifically mediation analysis was conducted to confirm the findings that social support predicts actual help-seeking behavior through help-seeking intentions.

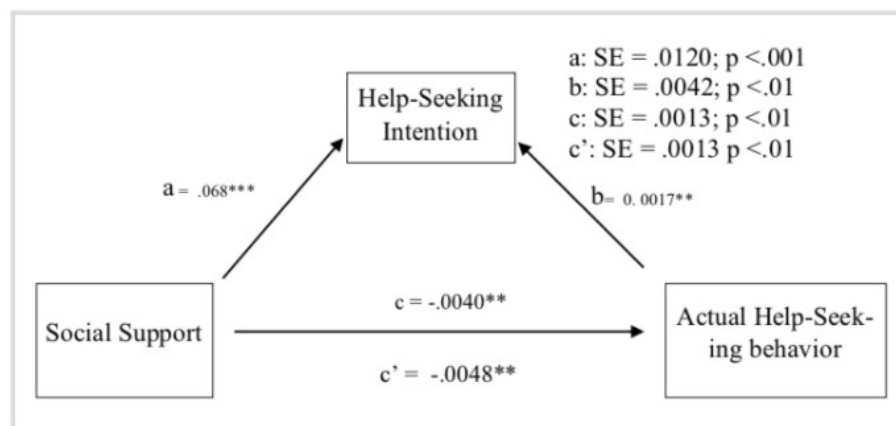


Figure 3: Mediational Role of Help-Seeking Intention on the Relationship Between Social Support and Actual Help-Seeking Behavior

The said post hoc analysis followed Model 4 (Refer to Figure 3), which suits the simple mediation model. The analysis only involved the previous moderator social support as the independent variable and help-seeking intention as mediator to check if there was a significant change in the dependent variable, actual help-seeking behavior if attitudes toward help-seeking and self-reliance were not present in the analysis. In order to conduct this analysis, three paths were observed (Refer to Table 3). Post hoc analysis revealed that in this sample, the relationship between social support and actual help-seeking behavior appears to be partially mediated by help-seeking intention.

Path	a	b	Total Effect (c)	Direct Effect (c')	Outcome		Sig
					Indirect Effect (a*b)	Bootstrapped Confidence Interval	
SS-->HSI-->AHSB	0.0684	0.0017	-0.0040	-0.0048	0.0008	0.0001-0.0019	Sig

Table 3: Post Hoc Analysis on the Relationship of Social Support and Actual Help-Seeking Behavior through Help-Seeking Intention

Discussion

Results of the study can be summarized into two points: firstly, social support and self-reliance do not moderate the indirect effect of attitudes toward help-seeking on actual help-seeking behavior through help-seeking intentions. Secondly, only social support predicts actual help-seeking behavior through help-seeking intentions and in addition it has an additive effect on the relationship among help-seeking attitudes, intentions and behavior. In explaining the results, the researcher looked into the relevance of cultural influences in the samples.

Social Support and Self-Reliance do not moderate the indirect effect of Help-Seeking Attitudes on Actual Help-Seeking Behavior through Help-Seeking Intention

Culture plays a big role in shaping attitudes and social interactions of people including individuals with mental illness (Abdullah & Brown, 2011). When people have a poor understanding of mental illness; they may be unable to correctly

recognize mental problems or may have incorrect beliefs about the effectiveness of treatment interventions, and thus become more reluctant to seek help from professionals. It could be that instead of social support and self-reliance, help-seeking patterns of the samples is more influenced by their mental health literacy. The samples in the study are Filipinos and according to Baello & Mori (2007), most of what Filipinos know about mental health is still limited. Filipinos may have not yet fully realized the value of mental health in the same way as they realized the importance of physical health. To note, according to Tan (2008), the Philippine folk conceptualizations of illnesses do not distinguish between physical and psychological disorders. Severe mental health illnesses, for instance, are believed to be caused by a person's 'softness' of character and that being able to cope with one's psychological problems is also perceived to be one's own responsibility (Thompson, Woelz-Stirling, Cahill, & Kelaher, 2002). Likewise, with this limited knowledge, knowing how to identify when the difficulties they are facing are beyond the normal threshold is a struggle. One study reported that young people were aware of their distress, but continuously altered their definition of what was "normal" distress to avoid seeking help (Eisenberg et al., 2007).

Another possible explanation could be stigma which evidently persists in the culture of Filipinos. Some Filipinos are still suffering from stigmatizing attitudes and discriminatory behaviors (Tuliao, 2014). Shanani (2014) stated that demeaning terms such as "abnoy" and "baliw" are even incorporated in casual conversations among Filipinos. The labeling of oneself as socially unacceptable for having psychological problem could influence an individual's choice to ask for help (Vogel & Wester, 2003; Corrigan & Watson, 2002). As in a sample of undergraduate students, Cheng, Hsiu-Lan, McDermott, Ryon, Lopez & Frederick (2015), found that more prominent levels of self-stigma predicted weaker intentions to access counseling services.

Also, prominent among Filipinos was a general concern about what others, including the source of help, might think of them if they were to seek help. This could be seen as "hiya" in the culture of Filipinos. Hiya is a painful emotion that comes from either an existing or imagined transgressions by social norms or figures of authority, and its avoidance in social interactions is paramount. (Bulatao, 1964). Therefore, in the event that having psychological problems are disliked or frowned upon then disclosure of such conditions to the public are to be avoided at all costs.

Aside from the factors mentioned above, religiosity might also play a role in individuals' help-seeking patterns. Countries like Philippines have a powerful adherence to God (Braun, & Browne, 1998) and these religious values strengthen customary respect for relying on God. One possible reason why results also did not reinforce on the importance of self-reliance in the treatment-seeking process could be because instead of reliance on self, reliance on God is more associated with seeking or not seeking professional help for the samples in the study. They usually resort to prayers first and unfortunately no other steps follow such as seeking for professional help as they tend to think that it is just another problem that can be overcome because their faith won't fail them. Literature also suggests that high level of spirituality was related with lower mental health help-seeking and that individuals tend to leave most of their problems even mental health problems to God (Hermansdóttir, & Ægisdóttir, 2016; Bradley, Schwartz, & Kaslow, 2005; Abe-Kim, Gong, & Takeuchi, 2004).

Furthermore, regardless of the level of self-reliance and social support, if a person does not have the financial capability to seek professional help, he/she won't seek help. Thus, it may also be important to look at the possible role played by individual's financial support. There are some countries, for instance, Philippines, where most pressing issue is poverty, and as such, financial difficulty is a factor. As Chen, Crum, Martins, Kaufman, Strain & Motjabai (2013) suggest, financial difficulty keeps individuals from obtaining mental health services. Also, according to the TPB, individuals are likely to engage in a behavior if they believe that the behavior will lead to particular outcomes which they value and if they feel that they have the necessary resources to perform the behavior. It could be that while a person may have positive attitude toward help-seeking, he/she does not have a sufficient degree of actual control over the behavior. This degree of control over the behavior may also include the perception of financial control. For example, even if the individual perceives professional help-seeking as pleasant, when he/she does not have the financial means to access this help, he/she will not seek help.

Only Social Support Predicts Actual Help-Seeking behavior through Help-Seeking Intentions and in addition, it has an additive effect on the relationship among Help-Seeking Attitudes, Intentions and Behavior

Similar to many previous studies, social support was observed to be predictive of help-seeking intentions. More so, the findings of the study revealed that social support predicts actual help-seeking behavior through help-seeking intentions. These initial findings were also confirmed in the post hoc analysis using simple mediation. The present study also uncovered that adding social support in the model could increase help-seeking attitudes and therefore intensify help-seeking intentions. When one has positive attitudes toward help-seeking and a high social support, one could expect a surge in the intentions to seek help. This denotes a reliance-on-others-promoting effect of social support which consequently increases intentions and behaviors. Correspondingly, while many studies propose a negative relationship, with social support inhibiting the use of mental health services (Vogel et.al. 2005), the current study recommends the opposite. To the knowledge of the researcher, this is a novel result as previous studies argued that having high perceived social support from significant others could discourage one from planning to seek professional psychological help (Turner & Quinn, 1999; Lukito Setiawan, 2006).

The present study found that having high social support can actually increase intentions. This suggests that even in the presence of supportive social networks, these individuals are more likely to have intentions to seek formal services for mental healthcare. Taking into consideration the theory of planned behavior may allow one to understand the findings in the study. According to the theory, intention is the immediate antecedent of behavior and is itself a function of attitude toward the behavior, subjective norm, and perceived behavioral control. In TBP, subjective norm is a function of normative beliefs, which represent perceptions of specific salient others' preferences about whether one should or should not engage in a behavior. Social support which is defined in the study as person's perceived social support that comes from one's social network could be a part of this variable which also explains why it can predict help-seeking intention. According to the TPB, individuals are likely to engage in a behavior if they believe that the behavior will lead to particular outcomes which they value and if they believe that people whose views they value

think they should carry out the behavior. Thus, an individual with positive attitudes about seeking professional help, and who perceives social support for these behaviors from key referent others will likely seek professional help. More so, when the individual's social support approves and sees professional help-seeking as positive, he/she may likewise develop the same feeling because his/her referent groups do.

Another possible explanation could be the value of dependence within the Filipino family. Social support promoting reliance on others could be better understood in a Filipino context. For instance, according to Warner (2014), Filipinos have a social value of "pagsangguni", or the seeking of opinions before making a decision. For Filipinos, decisions are made only after a mutual agreement among the closest social networks. Hence, suggesting that the social support among Filipinos may have originated from this social value. And as such, when this is high, they can be more prompted to finally make a decision action to seek for professional help.

Conclusion

Mental health help-seeking is really a multifaceted experience that varies depending on a wide-range of individual, interpersonal, and sociocultural factors. Research should continue to examine the path from help-seeking attitudes to willingness to seek help to actual help seeking and explore factors hypothesized above that prevent or influence individual from seeking actual help from formal sources across cultures.

Limitations and Recommendations

Several limitations of the present study should be considered when going through the results and when planning for future research. First, a potential selection bias within the use of snowball sampling, as well as the use of an internet survey could have excluded people that might have possibly changed the results. Further limitation was that, one of the variables was assessed via one-item or dichotomous (Yes/No) measure. Furthermore, the instrument use to measure self-reliance did not yield a strong internal reliability, thus suggesting future researchers to utilize a more reliable scale when measuring self-reliance. Another drawback is the way that other potentially moderating factors were not measured.

Implications

Nevertheless, the study likewise had a few qualities, most remarkably a large sample size, robust statistical techniques, and a crucial topic that was moderately unexplored in the previous literature on emerging adults help-seeking patterns. The sample of this study was snowball, yet, the heterogeneity and also the sample size are thought to be strength for the objective of the analyses. The study was also able to represent gender in equal balance. The findings of this study provided research-based data in light of how to investigate a potential moderated mediation effect of a certain variable in an existing relationship. More importantly, from the knowledge of the researcher, this study is among the first to capture and investigate the relationship among all the three major elements of help-seeking pattern, namely attitudes, intentions, and help-seeking, where previous studies focused only on one or two. The study was also able to confirm and support the most recent proposed model of help-seeking by Rickwood & Thomas (2012).

Furthermore, these findings have provided necessary implications for interventions in mental health help-seeking. Ultimately, the discrepancies of results of the study from previous research could also enlighten clinicians about considering variations in help-seeking patterns among people across cultures. Mainly, health professionals and researchers should be informed about making false speculations that do not seem to be supported by particular research findings in a particular culture. Recommendations and suggestions for interventions should comprise of culturally sensitive, comprehensive and holistic approach that tends to the individual and to the cultural milieu.

From a clinical perspective, it may be useful to note that cultural differences are likely to also impact the adherence to and outcomes of mental health care in treatment planning. If it is the case that cultural factors play a comparable (or perhaps even more important) role in predicting use of mental health services, either initial contact or adherence to follow-up appointments, this information has significant implications for clinical treatment and interventions. Also, public health intervention and outreach efforts aimed at identifying those with unmet need for treatment may benefit from this information. For instance, intake screening procedures that include cultural values/traits may be of prognostic significance for predicting adherence or risk of treatment discontinuation.

The findings also underscore the significance of social support in affecting mental health help-seeking behaviors. The present findings are encouraging because social support may serve as an important means of overcoming other barriers associated with mental health treatment. Being able to rely on and disclose to family, friends and significant other may also normalize the act of seeking psychological help. It is clear that there are many potential social influences on the help-seeking process, and first on this list is the family. As such, interventions should also be targeted at this group of people. These people may also need help to develop mental health literacy to enable them to determine if their child needs help, where such help is available, and how to sensitively encourage their child to accept such help. Therefore, strengthening social support that has accurate knowledge on mental health can be an intervention on the part of clinicians to aid help-seeking behavior.

References

- Abe -Kim, J., Gong, F., & Takeuchi, D. (2004). Religiosity, spirituality, and help - seeking among Filipino Americans: Religious clergy or mental health professionals?. *Journal of Community Psychology*, 32(6), 675-689.
- Ægisdóttir, S., & Gerstein, L. H. (2009). Beliefs About Psychological Services (BAPS): development and psychometric properties. *Counselling Psychology Quarterly*, 22(2), 197-219.
- Ægisdóttir, S., O'Heron, M., Hartong, J., Haynes, S., & Linville, M. (2011). Enhancing attitudes and reducing fears about mental health counseling: An analogue study. *Journal of Mental Health Counseling*, 33(4), 327-346.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta - analytic review. *British journal of social psychology*, 40(4), 471-499.
- Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low - income, African American women with a history of intimate partner violence and suicidal behaviors: Self - esteem, social support, and religious coping. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 18(6), 685-696.
- Braun, K. L., & Browne, C. V. (1998). Perceptions of dementia, caregiving, and help seeking among Asian and Pacific Islander Americans. *Health & Social Work*, 23(4), 262-274.
- Britt, T. W., Bennett, E. A., Crabtree, M., Haugh, C., Oliver, K., McFadden, A., & Pury, C. L. (2011). The theory of planned behavior and reserve component veteran treatment seeking. *Military Psychology*, 23(1), 82.
- Buri, J. R., Post, M. C., & Alliegro, M. C. (In press). Negative life events scale for students (NLESS). *College Student Journal*.
- Cairns, S. L., Massfeller, H. F., & Deeth, S. C. (2010). Why do postsecondary students seek counselling?. *Canadian Journal of Counselling and Psychotherapy (Online)*, 44(1), 34.
- Carlton, P. A., & Deane, F. P. (2000). Impact of attitudes and suicidal ideation on adolescents' intentions to seek professional psychological help. *Journal of Adolescence*, 23(1), 35-45.
- Chen, L. Y., Crum, R. M., Martins, S. S., Kaufmann, C. N., Strain, E. C., & Mojtabai, R. (2013). Service use and barriers to mental health care among adults with major depression and comorbid substance dependence. *Psychiatric services*, 64(9), 863-870.

- Cheng, H. L., McDermott, R. C., & Lopez, F. G. (2015). Mental health, self-stigma, and help-seeking intentions among emerging adults: An attachment perspective. *The Counseling Psychologist*, 43(3), 463-487.
- Choi, J. Y. (2008). Seeking health care: Marshallese migrants in Hawai 'i. *Ethnicity and Health*, 13(1), 73-92.
- Chong, S. A., Abidin, E., Sherbourne, C., Vaingankar, J., Heng, D., Yap, M., & Subramaniam, M. (2012). Treatment gap in common mental disorders: the Singapore perspective. *Epidemiology and Psychiatric Sciences*, 21(2), 195-202.
- Christopher, M. S., Skillman, G. D., Kirkhart, M. W., & D'Souza, J. B. (2006). The effect of normative and behavioral persuasion on help seeking in Thai and American college students. *Journal of Multicultural Counseling and Development*, 34(2), 80-93.
- Corrigan, P. W., & Watson, A. C. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice*, 9(1), 35-53.
- Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical care*, 45(7), 594-601.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 13(2), 73-92.
- Franz, A. (2012). Predictors of help-seeking behavior in emerging adults.
- Hammer, J. H., & Spiker, D. A. (in press). Dimensionality, Reliability, and Predictive Evidence of Validity for Three Help Seeking Intention Instruments: ISCI, GHSQ, and MHSIS. *Journal of Counseling Psychology*.
- Hammer, J. H., Parent, M. C., & Spiker, D. A. (2018). Mental Help Seeking Attitudes Scale (MHSAS): Development, reliability, validity, and comparison with the ATSPPH-SF and IASMHS-PO. *Journal of counseling psychology*, 65(1), 74.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1-22.
- Hermannsdóttir, B. S., & Aegisdóttir, S. (2016). Spirituality, Connectedness, and Beliefs About Psychological Services Among Filipino Immigrants in Iceland. *The Counseling Psychologist*, 44(4), 546-572.
- Lukito Setiawan, J. (2006). Willingness to seek counselling, and factors that facilitate and inhibit the seeking of counselling in Indonesian undergraduate students. *British Journal of Guidance & Counselling*, 34(3), 403-419.
- Mo, P. K., & Mak, W. W. (2009). Help-seeking for mental health problems among Chinese. *Social psychiatry and psychiatric epidemiology*, 44(8), 675-684.

National Collaborating Centre for Mental Health. (2004). Depression: management of depression in primary and secondary care. *London: National Institute for Clinical Excellence*, 24.

Powell, G. N., & Kotschessa, B. (1995). Factors that influence professional employees' willingness to seek counseling. *Psychological Reports*, 77(3), 872-874.

Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems?. *Medical Journal of Australia*, 187(7), S35.

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology research and behavior management*, 5, 173.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-journal for the Advancement of Mental health*, 4(3), 218-251.

Salaheddin, K., & Mason, B. (2016). Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. *Br J Gen Pract*, 66(651), e686-e692.

Schomerus, G., Matschinger, H., & Angermeyer, M. C. (2009). Attitudes that determine willingness to seek psychiatric help for depression: a representative population survey applying the Theory of Planned Behaviour. *Psychological Medicine*, 39(11), 1855-1865

Topkaya, N. (2014). Gender, Self-Stigma, and Public Stigma in Predicting Attitudes toward Psychological Help-Seeking. *Educational Sciences: Theory and Practice*, 14(2), 480-487.

Turner, A. L., & Quinn, K. F. (1999). College students' perceptions of the value of psychological services: A comparison with APA's public education research.

Professional Psychology: Research and Practice, 30(4), 368.

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology*, 50(3), 351.

Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The Role of Outcome Expectations and Attitudes on Decisions to Seek Professional Help. *Journal of Counseling Psychology*, 52(4), 459.

Warner, M. (2014). *Culture and management in Asia*. Routledge.

Zartaloudi, A. E. (2010). Help-seeking as a threat to self-reliance and self-esteem of an individual with mental health problems: a questionnaire survey. *The Scientific Journal of the Hellenic Regulatory Body of Nurses*.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.

Zivin, K., Eisenberg, D., Gollust, S. E., & Golberstein, E. (2009). Persistence of mental health problems and needs in a college student population. *Journal of affective disorders*, 117(3), 180-185.

Contact email: mahjalin.bugtong@ub.edu.ph

Psychological Safety in Teams: Essentials to Developing High Performance and Continual Learning Teams

Kenneth Tan, Certis Corporate University, Singapore

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

This study aims to study and improve workplace performance and team learning by improving team Psychological Safety through a proprietary designed program called the Certis ALIVE Program. Team Psychological Safety measures how much the team grow and learn from mistakes and allows risk-taking behaviour (Edmondson, A. 1999). Research was also done to understand the literature insights to how psychological safety is built and how the lack of trust will affect team performance and team learning. Based on key research done by Amy Edmondson on psychological safety and learning organizations. Quantitative and qualitative data was collected, analysed and discussed to measure and evaluate the effects of the ALIVE program in meeting its objectives of encouraging and building trust and psychological safety within and across teams.

Keywords: Psychological Safety, Trust, Learning, High Performance

iafor

The International Academic Forum
www.iafor.org

Introduction

Psychological safety affects trust within and across teams in an organization and the key aspects of psychological safety are trust, voice, engagement, team learning and team performance/efficacy. Organizations that invest in building trust within and across teams will see team performance and learning improve. The best approach to develop trust through encouraging voice, engagement and sharing of ideas at meetings, either formal, informal, within organic or cross-functional/task force teams and discussions. This is also where most time is spent by staff and employees of organizations.

As most work teams collaborate and discuss during organic team sessions, cross-functional team meetings, taskforce meetings and discussions, the platform to build trust and psychological safety should be to focus on these meetings and design them well so that Voice, Courage and Engagement of all participating members occurs, building a culture of open sharing and learning. It was also found that, Certis, as a global organization with over 34,000 people, over \$364,000 of man hours was invested in meetings annually, which made re-designing how meetings were conducted to encourage voice and courage as well as efficiency and productivity was absolutely critical.

Key design factors for such ALIVE meetings are:

- Set a time-boxed AGENDA with clear objectives.
- Frame issues so that we LEARN.
- Use INFORMATION and data to derive insights.
- Encourage equal share of VOICE.
- Make it safe for everyone to speak up.
- ENGAGE members to establish mutual purpose and engender mutual respect.

Key roles in meetings were also identified to allow for role-based learning and situational leadership opportunities rather than title/rank-based leadership to occur. These roles include the Chairperson, the Observer, the meeting Participant, the meeting Secretary. Responsibilities were also assigned to these roles to ensure that certain behaviours were encouraged and exhibited and reinforced.

Question Description	(P-Value) X-B
If I make a mistake on this team, it is often held against me.	0.10
Members of my team are able to bring up problems and tough issues.	0.14
People on my team sometimes reject others for being different.	0.83
It is safe to take a risk on my team.	0.06
It is difficult to ask other members of my team for help.	0.54
No one on my team would deliberately act in a way that undermines my efforts.	0.09
Working with members of my team, my unique skills and talents are valued and utilised.	0.15

Table 1: Question Descriptions and P-Values on Psychological Safety

End of meeting observations and sharing were also conducted to immediately give feedback to the chairperson or members on how well the key aspects of Voice, Courage and Engagement were encouraged and reinforced. Post meeting surveys were also conducted to ensure data collection and analysis is done for future improvement, redesigns and review.

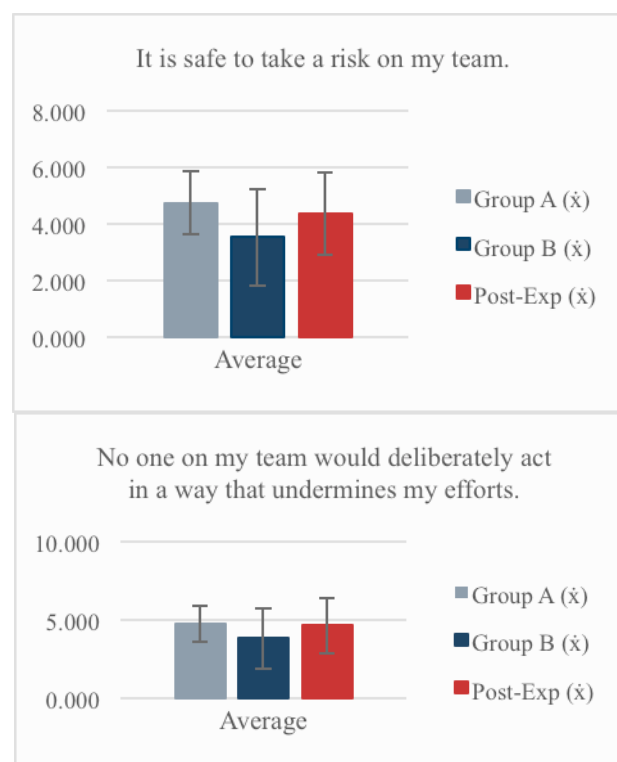
Research Study

This experiment aims to assess the effectiveness of the ALIVE programme. It aims to improve workplace performance and team learning by improving team Psychological Safety. Team Psychological Safety measures how much the team grow and learn from mistakes and allows risk-taking behaviour (Edmundson, 1999).

Team A is the control group and Team B is the experimental group, that will undergo the ALIVE programme and is surveyed before and after the ALIVE programme. The survey was conducted using a seven-point Likert-scale. Team A, Team B, and Team B after the ALIVE programme would be denoted as 'A', 'B', and 'X' in the subsequent discussions.

Results

Using a 10% level of significance, the ALIVE programme appeared to have a positive impact on the participants. Interestingly, participants shared that “It is safe to take risks (in their) team” and “No one (in their) team would deliberately act in a way that undermines (their) efforts” as seen in the tables below.



Charts 1 & 2: Key Results Comparison on Risk Taking and Undermining Teammates

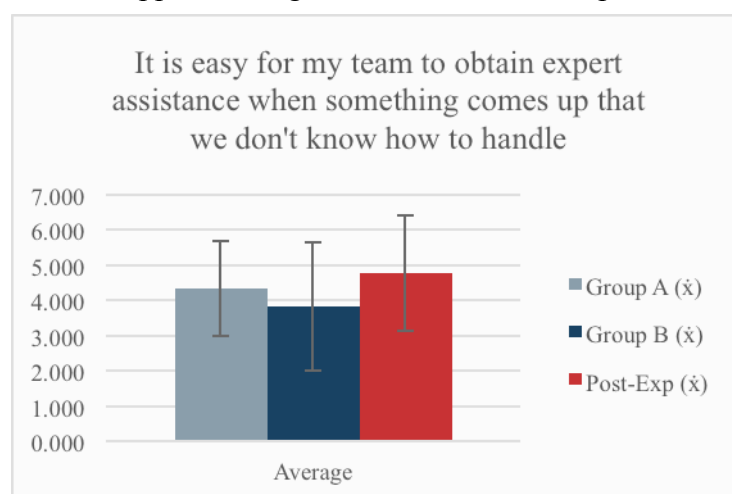
Data Analysis

This paper will highlight the variables which show significant improvements from the experimental group (Team B) after the ALIVE programme. This analysis will thus highlight questions which shows improvement in Team B's Performance. Four questions were subsequently identified, specifically; Supportive Organisational Context, Team Composition, Team Efficacy, and Team Learning Behaviours, and results tabulated and shown below.

Supportive Organisational Context	(P-Value) X-A	(P-Value) X-B
It is easy for my team to obtain expert assistance when something comes up that we don't know how to handle.	0.18	0.05*

Table 2: Supportive Organisational Context

Chart 3: Supportive Organisation Context Comparison



Team Composition	(P-Value) X-A	(P-Value) X-B
All members of my team have more than enough training and experience for the kind of work we have to do.	0.36	0.10

Table 3: Team Composition

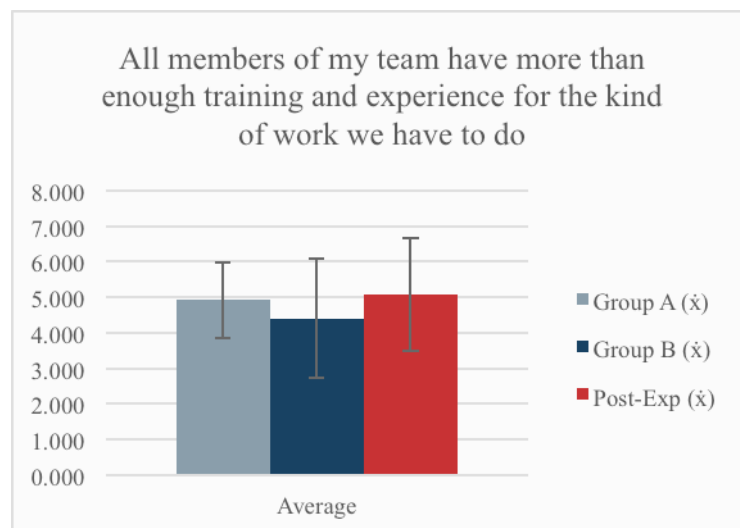


Chart 4: Team Composition Comparison

Team Efficacy	(P-Value) X-A	(P-Value) X-B
My team can achieve our task without requiring us to put in unreasonable time or effort.	0.05*	0.08 ⁺

Table 4: Team Efficacy

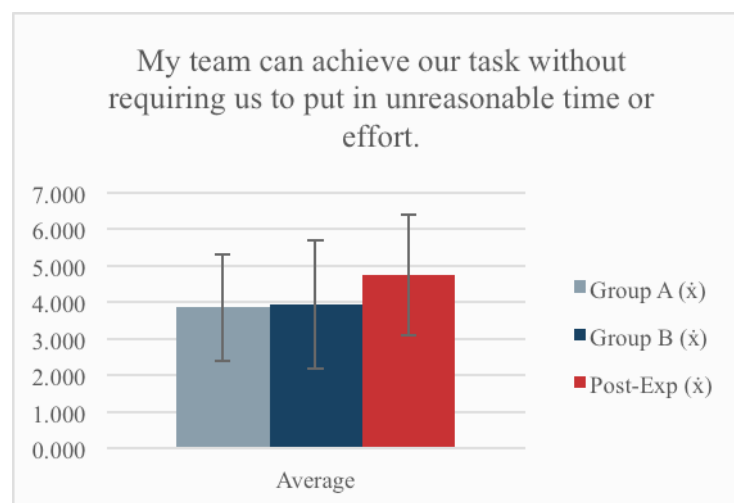


Chart 5: Team Efficacy Comparison

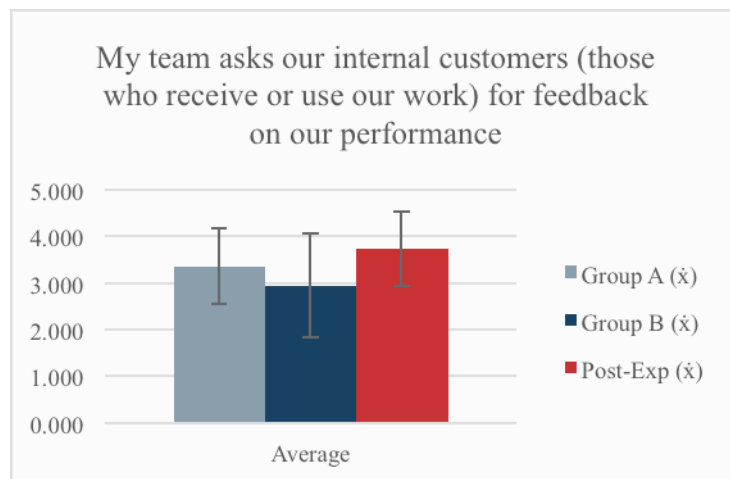


Chart 6: Team Learning Behaviours Comparison

Team Learning Behaviours	(P-Value) X-A	(P-Value) X-B
My team asks our internal customers (those who receive or use our work) for feedback on our performance.	0.08 [*]	0.01 ^{**}

Table 5: Team Learning Behaviours

There were however observed that there are some inconsistencies, most likely as a result of Team B experiencing certain work issues or setbacks during the surveyed period. Hence affecting the overall results, where the survey showed evidence that the team was affected by mistakes and leader issues as seen below.

Question Description	(P-Value) A-B	(P-Value) X-A	(P-Value) X-B
If I make a mistake on this team, it is often held against me.	1.00	0.00	0.10
My team relies on outdated information or ideas.	0.99	0.00	0.09
My team does our work without stopping to consider all the information team members have.	0.94	0.00	0.05

Table 6: Data on Team Mistakes and Leader Issues

Overall, the experimental group demonstrated improvements post-ALIVE, specifically in areas of Risk-taking (“It is safe to take a risk on my team.”), Perceived trust (“No one on my team would deliberately act in a way that undermines my efforts.”), Team Efficacy (“My team can achieve our task without requiring us to put in unreasonable time or effort.”) and Team Learning Behaviours (“My team asks our internal customers (those who receive or use our work) for feedback on our performance.”) as seen in the table below. Post experimental group results were also better than the control group for Team Efficacy and Team Learning Behaviours.

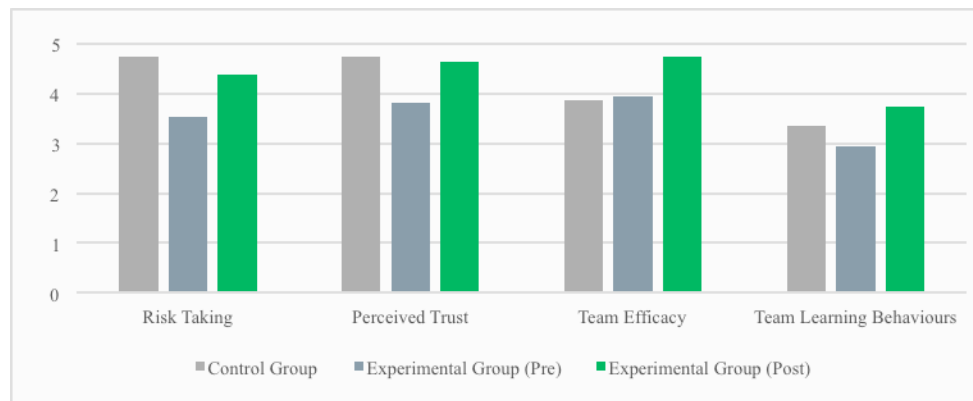


Chart 7: Key Control, Experimental Pre and Post Results

To further validate the causality between team psychological safety and the observed organisational outcomes, a qualitative study on the participants involved was also conducted. Individuals shared that they observed other members of the team having more courage to express their views and opinions.

Focus Group Discussion

To validate the causality between team psychological safety and the observed organisational outcomes, a qualitative study on the participants involved was designed and conducted. A focus group discussion was conducted to further understand the quantitative results. The focus group discussion also capitalised on interactions between participants to draw insights from their experiences. Below are the questions for the focus group discussion.

Validation that the ALIVE Programme has improved team psychological safety

- 1) After the ALIVE programme, do you feel more comfortable in taking risks at your workplace?
- 2) How has the ALIVE programme changed the way the team dealt with mistakes?
- 3) Do you have an experience of how the team dealt with mistakes using the ALIVE principles? Can you share the details about it?

Benefits of team psychological safety on the organisation

- 4) With the team having a higher bandwidth for mistakes, how has it impacted your team's performance?
 - a. Has your team developed a more supportive culture?
 - b. Do you feel that there's better synergy within the team?
 - c. Has your team become more efficient in the tasks you do?
 - d. How did members of your team cope and learn from mistakes after the ALIVE programme?

Focus Group Results Analysis

The focused group discussions statements and responses were analysed and key results and observations are shared here. Participants who underwent the focused group discussion agreed that they have developed team psychological safety after the ALIVE programme. However, they expressed that it is unclear if this can be

completely attributed to the programme as it depends on the individuals to revisit the lessons learned.

This was observed when participants shared that they adopted a more open mindset when they are dealing with mistakes of a team member. This was done through better communication as members are more willing to share opinions, prioritise agenda, and confront difficulties faced. Hence, expressing that they have greater bandwidth for mistakes.

The team articulated that they have observed members of their team applying lessons learned from the ALIVE programme. Individuals shared that they observe other members of the team having more courage to express their views and opinions. This has facilitated discussions on the short-comings of the members of the team, allowing them to grow together. Additionally, members have learned how to deliver feedback with tact.

There was also feedback about the programme that while it is not the objective of the ALIVE programme, members expressed that this progress depends largely on the initiative of the individual and could be more reliable. Some members expressed the need for a systemic or process-driven change to inculcate sustained change.

Nevertheless, results from both the survey and interview demonstrated that the team benefitted from the ALIVE programme. The enhanced team psychological safety was observable immediately after members of the team underwent the ALIVE programme.

Discussion and Conclusion

From this program study, quantitative and qualitative research and implementation, there is observable impact from the ALIVE programme on team psychological safety. Teams that are clear about their mission and objectives and have leaders that communicate these objectives often are fundamental components to psychological safety (Edmondson, 1999). From this study, it also appears that team psychological safety has impact on positive organisational context, better perceived team composition, enhanced team efficacy, and improved team learning behaviours.

From the quantitative data alone, it was impossible to prove causality from a quantitative study. Hence, we conducted follow-up focused group discussion to understand the relationship between bandwidth for risk taking behaviour and better perceived organisational performance.

In conclusion, the ALIVE programme has achieved its intended objectives and the study shows positive results in Psychological Safety for teams after the implementation of this programme.

References

Edmondson, A. (1999). Psychological safety and learning behaviour in work teams. *Administrative science quarterly*, 44(2), 350-383.

Delizonna, Laura (2017). High-performing teams need psychological safety. Here's how to create it. *Harvard Business Review*. <https://hbr.org/2017/08/high-performing-teams-need-psychological-safety-heres-how-to-create-it>

Contact email: kennethsh_tan@certisgroup.com

The Difference of the 'Regression in the Service of the Ego Between Art Students and Professional Artists

Toshiki Ito, Kobe University, Japan

The Asian Conference on Psychology & Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Present study aimed at exploring the difference of the 'regression in the service of the ego' between art students and professional artists. The subjects were 21 art students of graduate school (average age 25.5) and 25 professional artists (average age 46.4). They were administered Rorschach test and the result was analyzed according to the scoring system (Holt, 1977) that measures the regression in the service of the ego from the viewpoint of primary process and secondary process. The result showed 5 differences between art students and professional artists. ①Art students showed tendency to respond more primitive aggressive responses than professional artists. ②Professional artists showed tendency to respond more primary condensation responses than art students. ③Professional artists significantly showed more primary symbolic representation than art students. ④Professional artists showed tendency to respond more primary autistic elaboration responses than art students. ⑤Professional artists significantly showed more total responses of formal primary process than art students. The result of ① indicated that regression to primitive aggression was not relevant to creativity. The results of ②③④ suggested that various aspects of formal primary process promoted creativity of professional artists. The result of ⑤ showed that professional artists more easily regress in the general aspects of primary process. It was considered that professional artists more tend to regress to primary process than art students and it was suggested that this tendency to regress underlies their creation.

Keywords: Regression In The Service Of The Ego, Rorschach Method, Artist

iafor

The International Academic Forum
www.iafor.org

Introduction

A number of previous studies showed that the art students tend to be a “regression in the service of the ego” than the general students (Myden, W. 1959 , Wild , C. 1965 , Dudek , SZ 1968 , 1984 , etc.) . However, there have been few studies on how “regression in the service of the ego” is different between art students who can be regarded not as professional artists and artists who is working as an expert (Dudek, SZ & Chamberland-Bouhadana, G. 1982). The purpose of this study is to compare in detail the differences in the “regression for the ego” between art graduate students and professional painters.

Method

(1)subject

21 graduate students of Art Department (average age 25 . 5 years old) and 25 professional painters that have been evaluated as “talented“ by curator, art critic, etc (average age 46.4 years old, SD = 6.87).

(2)procedure

The Rorschach method is administered individually, and the primary process responses are scored according to Holt (1977), and the primary process responses are compared to determine whether there is any difference. When administering the Rorschach method, if a subject reported that he might be psychologically distressed, he was able to stop immediately.

hypothesis

Professional painters perform ”regression in the service of the ego” more than art graduate students. Therefore, they produce more primary process responses.

Conclusion

Result

The number of responders in each category of primary process responses in terms of content and form was calculated and tested by Fisher ‘s direct probability method.

As for Ag1 number of responders art graduate student group tended to be more observed. (9 people of graduate student group - 4 people of painter group)

In the total number of C1, the number of responders who showed 2 or more tended to be larger in the painter group . (7 people of graduate student group - 16 people of painter group)

As for total number of Sym1, the number of responders who showed one or more was significantly more in painter group than in graduate students (the $p < .05$). (Graduate student group 10 people - group painter 21 people)

As for AuE11, responders who showed one or more responses tended to be more in painter group than in graduate student. (3 people of graduate student group - 11 people of painter group) The number of responders with three or more responses in the total number of formal primary process responses was significantly greater in the painter group ($p < .05$). (11 people of Graduate student group - group painter 22 people).

Discussion

Ag1 is a primitive and aggressive expression of aggression, and previous research suggests that Ag1 is not related to creativity (Ito 1993). There is an age difference of more than 20 years between the graduate students and the painters, and It can be said that the painters control their own destructive impulses and do not regress to impulses unrelated to creativity

The total of C1 is the total number of reactions in the category of first primary process responses related to condensation. Most subjects responded in this category, both in the graduate student group and in the painter group, but in case of those who showed two or more responses, the painter group was significantly more. In other words, painters are more likely to regress in this category. Condensation is a category in which images combine and overlap in various ways, indicating that professional painters are regressing to see more complex things.

Sym1 is a category that symbolizes abstract concepts by colors and images. This means that the painters respond more symbolically, and that this category is more regressive.

AuE11 expresses the artist's unique view of the world, and is a specification of responses that are generally difficult to understand. This tendency was more common among painters because painters were more likely to regress to a world where they could only see things on their own, making it possible to create more original works.

The result that those who showed three or more in total number of formal primary process responses were more in the painter group showed that the painter group generally regressed more easily than the graduate student group. It can be said that the hypothesis was supported.

In the future, it will be necessary to examine qualitative differences in order to verify the differences in the details between the two groups.

Acknowledgements

This work was supported by JSPS KAKENHI Grant Number 19K03338.

References

Holt,R.(1977). A method for assessing primary process manifestation and their control in Rorschach responses. In Rickers-Ovsiankina, M. A. (Ed.). *Rorschach Psychology 2nd ed.* New York: John Wiley & Sons Inc., pp. 375-420.

Smartphones at the Workplace: An in Situ Mixed-Method Study of Smartphone Use During Intellectual Work

Maxi Heitmayer, London School of Economics and Political Science, United Kingdom

The Asian Conference on Psychology & the Behavioral Sciences
Official Conference Proceedings

ABSTRACT

Smartphones and other ICTs have become permanent companions in our daily lives, and increased use of these devices has impacted and often changed our daily routines. Users are in constant negotiation and coordination between the online and offline worlds they inhabit, and decisions about how to use their time and attention are becoming increasingly challenging. This has serious implications for tasks that require undivided attention or longer periods of focus, with work perhaps being the most relevant. Particularly intellectual work is susceptible to be affected by these developments, as it makes heavy use of such technologies. This paper presents findings from a mixed-methods study using first-person wearable video cameras. The data set comprises 200 hours of audio-visual and self-confrontation interview footage with 1130 unique smartphone interactions, of which 462 took place while participants were working (N=37 users). Building upon a transdisciplinary body of literature on time-use and human-computer-interaction, we provide new empirical evidence on the perceived disruptiveness of ICTs at the workplace, and the decisions users make on where to direct their attention in real, naturally occurring contexts. We observe that (a) time management relates to a set of self-regulation strategies involving the smartphone that structure work tasks, breaks, and leisure activities, (b) interaction patterns and intervals between instances of smartphone use remain statistically invariant across activities despite users' expressed preferences to use their devices less during work tasks, (c) it is not notifications, but the thought of a potential notification that leads to interruptions, with 89% of smartphone interactions being user-initiated.

Keywords: Video Ethnography, subjective experience, smartphones, workplace, interruptions

iafor

The International Academic Forum

www.iafor.org

1. Introduction

Constant and ubiquitous access to the Internet afforded by smartphones has changed how people navigate their daily lives, and communicate with others. The immediacy with which smartphones relay messages and information has dramatic effects on the volume of external influences that users need to manage while engaged in virtually any task, be it work or leisure. At the same time, smartphones and other portable devices allow users to work flexibly both on the temporal and spatial dimension. They can thus be an enabling factor for, or a barrier to productivity, with research producing mixed results. Crucially, previous research has generally used either external observations or self-report measures independently, and it has de-contextualised the studied activities. We use Subjective Evidence Based Ethnography (SEBE), to document the individual experience of using the smartphone during work and make sense of these often complex situations (Lahlou, Le Bellu, & Boesen-Mariani, 2015). This creates a mixed method, *in situ* account of the lived experiences of users, the challenges they face, and the practical solutions they have developed based on first-person video recordings, in-depth interviews and quantitative analyses from a dataset of over 200 hours of video with 1130 unique smartphone interactions, 541 of which took place during work. We give an ethnographic account grounded in objective observations and subjective user interpretations to show pathways for further steps to improve our understanding of habitual smartphone use. Specifically, we address the questions:

- How do smartphones affect the flow of activities?
- How do users experience smartphones interactions during work?

2. Previous Research

Smartphone use at work is ultimately a question of time and attention allocation. For employees, it is a decision on work and leisure utility, balancing private and professional demands, and for employers it is a question of productivity and profit. Traditional studies have investigated decision-making related to time from an economic angle (Aguiar, Hurst, & Karabarbounis, 2012; Andorka, 1987; Hill, 1985; Perlow, 2011; Robinson, 1977; Szalai, 1966). For many occupations, and especially for intellectual and creative jobs, reaching a state of “flow”, i.e., full absorption in an activity is crucial (Csikszentmihalyi, 2008, 2012). To reach this state, undivided attention over a longer period of time is necessary. Here, smartphones enter the stage. The smartphone has become a steady companion to 3.5 billion people around the globe (Holst, 2019) and almost every employee in the developed world has access to one (Van Laethem, van Vianen, & Derks, 2018, p. 3). Always within arm’s reach, it caters to most of our needs instantaneously. But smartphones afford a constant *over*-supply of information, thus becoming drivers of time stress and complicating reaching flow.

Several studies show an association of *Media-Multitasking*, the use of multiple devices in parallel or in short consecutive turns (Wallis, 2010), with difficulties in focusing on an ongoing task (Baumgartner & Sumter, 2017; Cain & Mitroff, 2011; Ophir, Nass, & Wagner, 2009; Rosen, Mark Carrier, & Cheever, 2013; Shin, Webb, & Kemps, 2019; Uncapher et al., 2017) and reductions in working and long-term memory (Sanbonmatsu, Strayer, Medeiros-Ward, & Watson, 2013; Uncapher, K.

Thieu, & Wagner, 2016; cf. Minear, Brasher, McCurdy, Lewis, & Younggren, 2013). Early work found that “time spent uninterrupted on individual activities was spent in very short blocks of time, sandwiched between interactive activities. Seventy-five percent of the blocks of time spent uninterrupted on individual activities were one hour or less in length, and, of those blocks of time, 60 percent were a half an hour or less in length” (Perlow, 1999, p. 64). This study was published before the widespread use of smartphones, and things have changed dramatically since then.

Studies find that users switch to their phones from work activities every four to six minutes (Rosen et al., 2013; Yan, Chu, Ganesan, Kansal, & Liu, 2012), while the numbers for general use are slightly higher (Van Berkel et al., 2016; Visuri et al., 2017). Experimental work found that half of adolescents and one third of adults stay on their main task for less than two minutes before switching to another media activity (Baumgartner & Sumter, 2017). More generally, due to the reduction in continuous time spent on tasks and an increase in interruptions, the nature of work itself has changed (Yeykelis, Cummings & Reeves, 2014, 2017). Paradoxically, strong media-multitaskers appear to be worse at switching between tasks effectively (Ophir et al., 2009). Finally, dividing one’s attention between tasks was related to reduced overall task performance (Bowman, Levine, Waite, & Gendron, 2010).

Interventions to address media-multitasking have considered three pathways so far, awareness, restriction, and mindfulness, with evidence being inconclusive, particularly for restrictive approaches (Parry & le Roux, 2019). Since most studies also did not control for long-term effects, it is necessary to examine media-multitasking in context before meaningful interventions can be made. This is further underlined by the finding that smartphones are “habit-forming” devices (Oulasvirta, Rattenbury, Ma, & Raita, 2012) and robust data from large scale studies showing a convergence of fast-paced app launching and switching behaviours among users (Böhmer, Hecht, Schöning, Krüger, & Bauer, 2011; Ferreira, Goncalves, Kostakos, Barkhuus, & Dey, 2014; Morrison, Xiong, Higgs, Bell, & Chalmers, 2018). Given that children and adolescents are particularly susceptible to media-multitasking, future “media generations” (Sun & Zhong, 2020) might need additional support.

These general findings are reproduced in workplace environments. Qualitative studies find that users associate smartphones with increased mobility and flexibility at work, an enhanced capacity to engage with colleagues and clients, as well as reduced uncertainty and fewer mistakes (Li & Lin, 2019; MacCormick, Dery, & Kolb, 2012). On the downside, this reliance on smartphones can turn into dependence, leading to anxiety, uncontrolled use, and ultimately decreases in productivity (Li & Lin, 2019). Quantitative evidence supports these perceptions, linking smartphone addiction to lowered work-related and non-work-related productivity and finding a negative relationship between total hours spent on the smartphone and total hours worked (Adamczyk & Bailey, 2004; Czerwinski, Cutrell, & Horvitz, 2000; Duke & Montag, 2017). Another issue is cyberslacking, the personal use of devices at work (Lavoie & Pychyl, 2001; Mills, Hu, Beldona, & Clay, 2001). Cyberslacking becomes particularly problematic when it is triggered by dysphoric states or repetitive, boring tasks (Vitak, Crouse, & Larose, 2011). Messaging applications are one of the key tension lines between smartphones enhancing work and cyberslacking, with researchers suggesting to separate private and work conversations within individual apps (Jeong, Jung, & Lee, 2020).

Smartphone use at work also increases the duration of smartphone use after work and reduces the emotional well-being of users (Cambier, Derks, & Vlerick, 2019; Derks, van Mierlo, & Schmitz, 2014; Duke & Montag, 2017; Van Laethem et al., 2018). As people use their work phones at home or their private phones for work, job pressures can intrude into their private lives (Derks et al., 2014). This, together with the feeling of having to respond to work communication as soon as possible creates *telepressure* (Barber & Santuzzi, 2015). Responses to being constantly connected vary tremendously between, and fluctuate even within individuals (Cambier et al., 2019), making it difficult to recommend straightforward policies. Importantly, telepressure intrudes back into the workplace, increasing smartphone use at work and reducing perceived engagement (Van Laethem et al., 2018). Similarly, *nomophobia*, a feeling of discomfort related to not being reachable and potentially missing out on information when users do not have access to their devices has mixed effects on productivity (King et al., 2013). Workers high in nomophobia perceive themselves as more engaged and productive when they use the phone to enhance their work performance. On the other hand, these users also experience reduced levels of productivity, emotional stress, and exhaustion when they cannot check their device (Wang & Suh, 2018). Simply restricting the use of smartphones will, therefore, result in unintended consequences.

Frequent interruptions also cause *disruption* as users need time to return to their previous task and make more errors completing them after having been interrupted (Borst, Taatgen, & van Rijn, 2015). An early study found that people only return to their previous work task in 40% of cases after an interruption (O'Connell & Frohlich, 1995). More recently, it was shown that tasks interrupted externally were more likely to be resumed, and resumed faster than the ones users self-interrupted (Mark, Gonzalez, & Harris, 2005), with observational research suggesting that users interrupt themselves about as often as they get interrupted (González & Mark, 2004). External interruptions furthermore significantly increase subsequent self-interruptions in following hours, suggesting that certain environments condition people to self-interrupt (Dabbish, Mark, & González, 2011). Workers who are constantly interrupted seem to adapt their working style to their experience and one study found that interrupted work was performed faster than uninterrupted work (Mark, Gudith, & Klocke, 2008). However, interrupted workers also experience more stress, time pressure, and effort, as well as a higher workload and frustration (Mark et al., 2008, p. 110). Importantly, workers with high levels of self-control experienced significant costs when blocking software was installed on their devices as interruptions serve as structuring elements and breaks for them (Mark, Czerwinski, & Iqbal, 2018).

3. The Present Study

Current literature either relies on qualitative and survey data, which is susceptible to *self-report bias* (Andrews, Ellis, Shaw, & Piwek, 2015; Boase & Ling, 2013; Ellis, Davidson, Shaw, & Geyer, 2019), or logging techniques that can be limited to data from the device. This contrasts with the importance context plays for human behaviour. Some researchers have begun to collect visual data to provide empirical evidence of how users interact with their devices in context (Brown, McGregor, & Laurier, 2013; Brown, McGregor, & McMillan, 2014, 2015; Licoppe & Figeac, 2013; McMillan et al., 2017; Pizza, Brown, McMillan, & Lampinen, 2016). We propose to

take this further with Subjective Evidence-Based Ethnography. The SEBE protocol consists of three phases: First, participants are given unobtrusive, miniature cameras worn at eye-level (*subcams*) to gather first-person audio-visual material (*subfilms*). In the *replay interview*, participant and researcher watch the subfilms together and discuss salient moments. Finally, the researcher conducts the analysis and consults participants for feedback on her interpretation to triangulate the results (Lahlou, 2011, pp. 8–9; Lahlou et al., 2015). As users often misremember their actual behaviour, the use of SEBE provides clarification and enables the researcher to obtain rich data on situated multi-media processes, and interpretations, even if the participant did not notice her behaviour in the moment. The SEBE protocol also upholds the highest ethical standards and participant privacy by design (Everri, Heitmayer, Yamin-Slotkus, & Lahlou, 2020; Lahlou, 2018).

The experience of time stress is an ailment typical of the young, urban, working population (Hamermesh & Jungmin, 2007). We created a typical case sample for this group with international, but predominantly European participants aged 21–29, mostly living in London, UK (N= 37, 54% female). Participants were asked to wear their subcams throughout the day doing what they would do normally. Overall, this has generated a data corpus of over 200 hours of video materials. This extraordinarily large and rich data corpus enabled an analysis of situated user behaviour on an unprecedented level.

4. Results

4.1 Qualitative Analysis

Interviews were transcribed literally and analysed using directed Qualitative Content Analysis to describe emerging themes in a systematic way (Mayring, 2000, 2015; Schreier, 2014). Participants were enthusiastic about the research experience and generally concluded that the material they gathered constituted an accurate and representative depiction of their behaviour, with many of them reporting that they forgot about the camera after wearing it for a short time. The interviews covered a broad range of smartphone activities users engaged in. In this paper, we focus on two key themes that emerged from the analysis: *Managing the use of time* and *Notifications*.

All participants described *managing their use of time* through the phone, both for work and for leisure. Participants use asynchronous conversations through chat to do multiple things at the same time as “full attention is not needed” (P18) and to stall for time while figuring out responses. They also frequently used short phone breaks to plan their schedules, from the bus ride to an appointment, to a night out with friends.

Smartphones were further used to *pass time*, for example while waiting for friends or commuting to “make it feel like time is going faster” (P24). Low levels of engagement in work tasks and other activities that were perceived as non-rewarding like cooking, cleaning, or commuting, led participants to take their phones “looking for something to do with it” (P8). Importantly, almost all participants ‘fidget’ with their phones occasionally. Fidgeting is user-initiated and includes opening and closing apps without an evident purpose and even typing. Most participants could not give a

reason for their behaviour beyond stating that it felt natural to regularly check the phone.

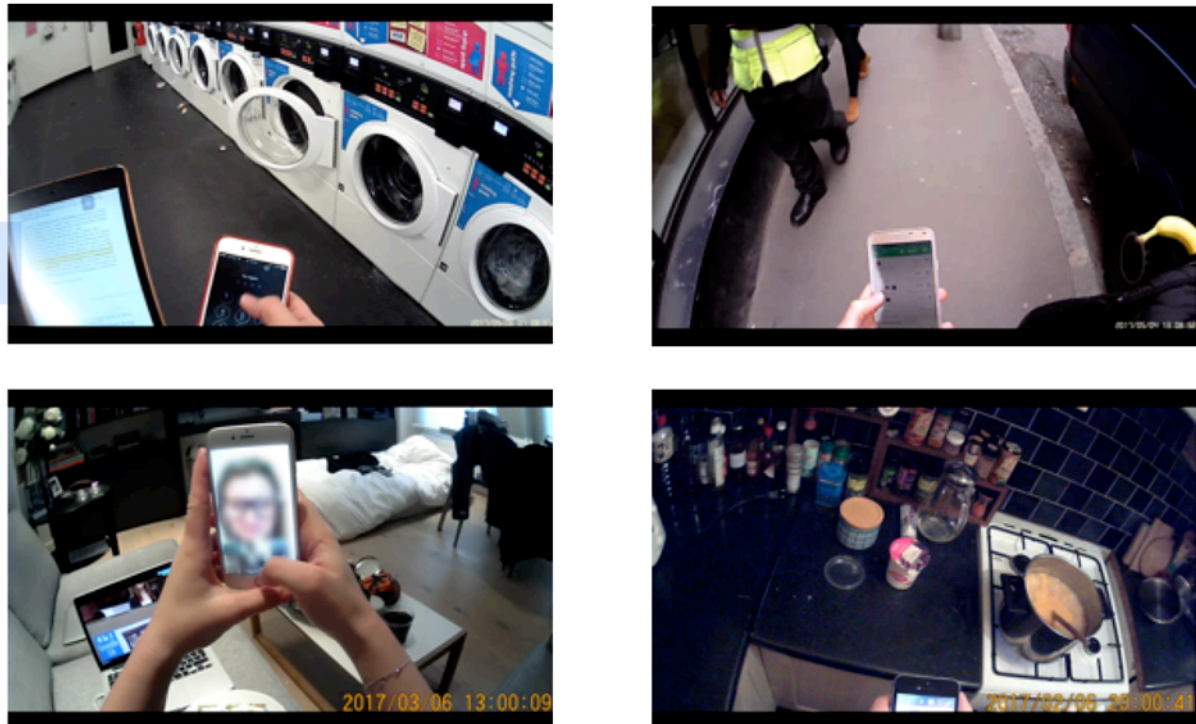


Figure 1: Various instances of smartphone use (clockwise): Tablet and Smartphone while doing laundry, looking up public transport on the go, watching videos and sending selfies during dinner, sharing pictures of food while cooking.

Most participants check all apps and notifications in preparation of putting their phone aside to *settle into work*: “I try to get rid of the messages before I work, so I can focus. Otherwise, it is in the back of my mind” (P7). Similarly, participants described that ‘getting into the flow’ with work depended on their surroundings (“It’s like the atmosphere has changed now. You know, sometimes there’s this ‘ebb and flow’ while working. I also think I was more focused because people before me were working as well”, P4), and the presence of the smartphone (“If I really want to get into the flow, the smartphone needs to be gone”, P5). Though most participants described feeling pressed for time during work, they usually allowed themselves to check their phones as a short break:

But my thought process is like I don’t have enough time to take an actual full-time break, I don’t have enough time to go outside or read a book. So, I’ll only allow myself 2 minutes and really it’s the only thing that I can do in that time. It’ll be like I’ve been typing for a while and I can feel my attention dropping and I know if I just stop for like two minutes I can carry on. (P24)

At the same time, participants acknowledged that their break time could be spent differently, and breaks often become longer than planned:

Sometimes that time for easing your mind would be better spent just stretching instead of going on Facebook. Because it gets you in a loop. Like, ‘I’m gonna be here for five seconds. Oh, but this video is fun. Okay, I’m gonna see just one more video. Okay

wait, this video is funny and down here, another video that I wanna see. And I'm gonna see those two videos and then I'll go back to work...' And then five seconds turn into five or ten minutes. (P3)

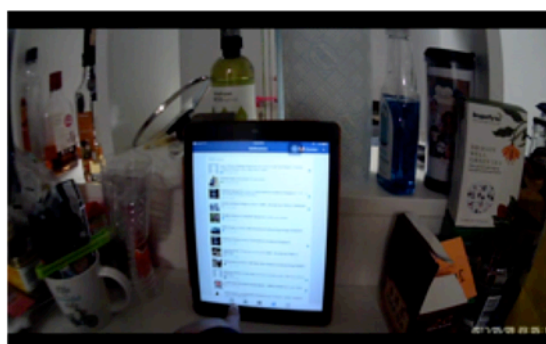
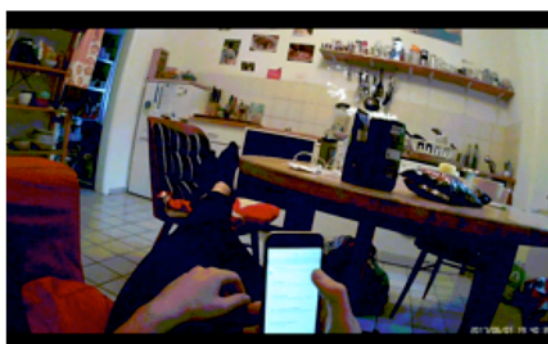
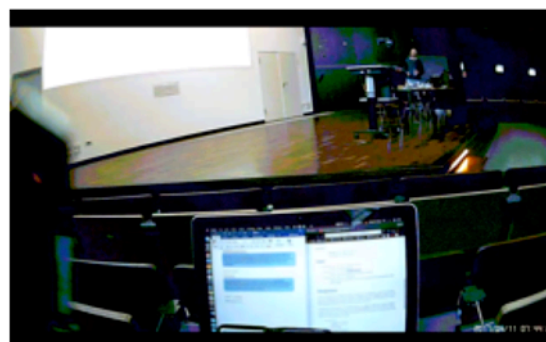
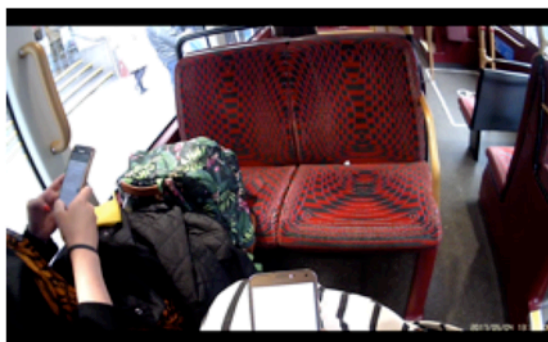


Figure 2: Various habits and routines of ICT use (clockwise): Smartphones during commute, Smartphone hidden behind Laptop during lecture, 'Coming home' with groceries still on the table, Tablet while preparing tea.

Participants also used their phones to *structure the flow activity*. Phones, thus, helped to 'fill in' unproductive spaces between activities:

I'm waiting for the machine to do a calculation and I want to use this break time efficiently, so I'm checking maps to figure out how to get to the event tonight. (P28)

Similarly, participants use the phone to organise their private lives during work to help with nomophobia:

I'm gonna send a message to one of the groups and see if someone wants to do something. It's awesome. Because you know, in ten minutes you can make up a plan and enjoy the night. Which would be harder if you don't have your device. (P17)

But distractions were also welcomed under certain circumstances. Many participants mentioned being more lenient with themselves and 'wanting to be distracted' after completing a task, or when the workday comes to an end ("Mentally, it's like: Oh, it's five! You've worked so much, you can be on the phone", P7). This depended on the type of work participants were doing, and could even carry on into the next day:

It depends on how interesting and close to my goals the things I'm doing are. If I finished or delivered something and the day after I'd go to work, I'd be really

distracted and would probably use my phone more. Here I was doing an analysis and it was really difficult to distract me. (P19).

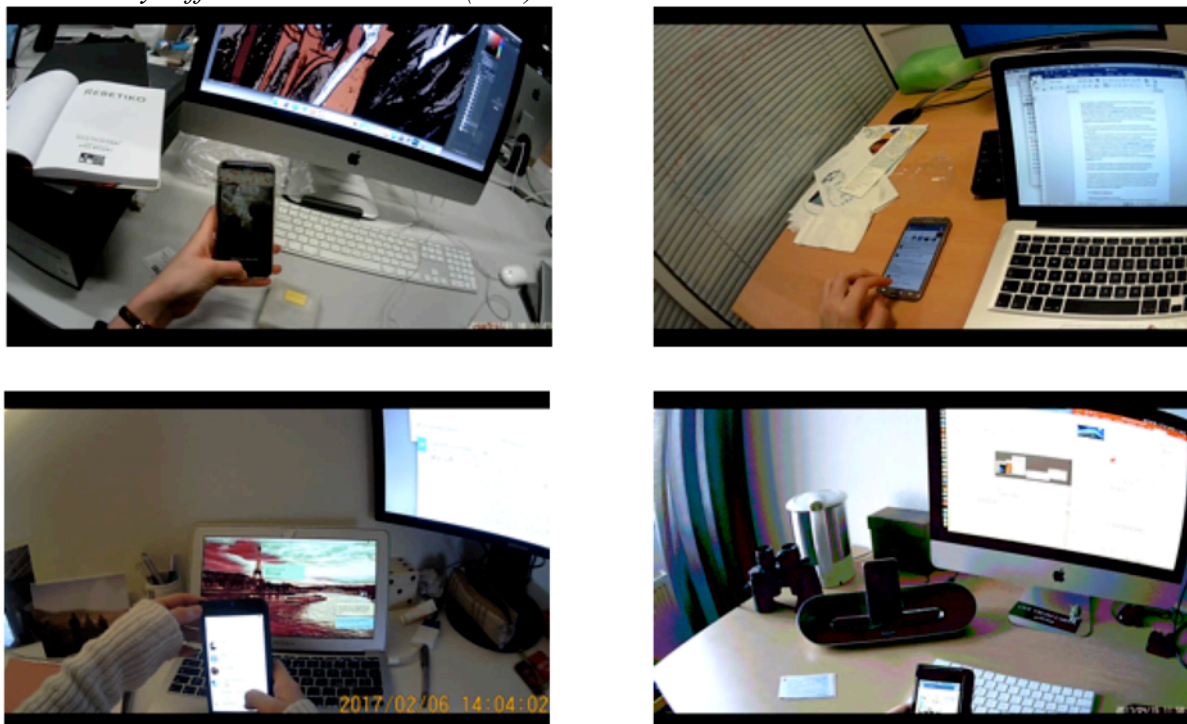


Figure 3: Various instances of smartphones disrupting intellectual work.

Participants also enjoyed being able to briefly distract themselves whenever they want, and suggested that they evaluate these distractions based on the utility they gain:

But here I reach out for the phone and social media for a purpose, so it's okay, it's not just a waste of time (P4).

I feel like I'm scrolling for a long time, and I haven't found anything interesting. Which means that I have been wasting my time and start feeling guilty. At least I should be getting something interesting, otherwise it's obvious that I am not using my time wisely. (P3)

The second key theme figuring in the interviews was *notifications*. All participants described varying *preferences for receiving* notifications for different settings. Strategies for achieving the right level of 'distance' include muting the phone, putting it out of reach, or turning off notifications for specific apps, but also harsher measures such as switching off the phone, leaving it at home, wearing earplugs, and even handing over passwords to social media accounts to friends.

Actually, that's something important from my housemate. All chats are silenced except for this one. If it's something that I haven't pre-programmed as important then the phone isn't even going to vibrate. (P19)

Participants also perceived different levels of *urgency to respond*, depending on the nature of the message. Overall, participants agreed that most notifications are unimportant. One frequently mentioned exception to this were notifications connected

to coordinating offline activities. Another exception were E-Mails, which were generally regarded as high priority, demanding quick responses and turning other notifications into distractions and nuisance. Particularly client-facing messages demanded immediate responses:

I tend to put off my standard deadlines because it's always less urgent than dealing with an annoying client who's breathing down your neck like 'I need it now'. (P11)

Constantly *being available* was cited as negative for well-being by most participants due to being 'mentally tiring' and spouses, family and friends 'getting mad when you don't answer'. Particularly group chats were characterised as sources of 'information overload' and distress. Notably, for several participants this pressure extended into sleeping hours:

No, I never turn it off. Only at night sometimes. But sometimes I get paranoid and think what if something happens back home? I want to be reachable, but I feel I should turn it off more because you don't get that sense of freedom. It's a nice feeling to be unreachable. (P28)

Finally, notifications were also perceived as *disruptions*. Receiving a notification led participants to almost immediately attend to their phones (see fig. 3). Several participants also reported having a folder for 'disruptive' apps on their phone. Interestingly, some users were aware that their notifications might distract colleagues within earshot:

I have my phone on my notebook cuz sometimes it's going to buzz, and I don't want people to hear it, but I also don't want to turn it off completely in case there's something important. It kinda muffles the sound, cuz on the table it goes like "naa, naa" and I get a bit embarrassed. (P11)

The disruptiveness of smartphones at the workplace became especially evident when other disruptions were present too. When a ringing phone, an incoming Email or talking colleagues interrupted participants, they usually picked up their phones. This was most salient in open-plan offices where ambient noise levels tend to be high ("Ok, too much talking around me. I can't do any work. So, Facebook." P12). Adjusting notification settings, thus, was often not sufficient to regulate engagement with a device to the desired level. In fact, most participants were annoyed with how regularly they check their phone for messages. In that context, the phone has been poignantly described as a 'vice' that is pleasurable to indulge in, but needs to be avoided to attain daily goals (P19).

4.2 Quantitative Analysis

After the qualitative analysis we quantitatively coded smartphone use in the subfilms. For every instance in which participants used their smartphones, we recorded duration, location, type of interaction, and other variables characterising the interaction. Overall, this resulted in a dataset of N=1130 smartphone interactions. We did not observe significant differences in use across age, sex, and education levels. Smartphone interactions lasted 64.4s on average. Note that this value is affected by a few longer outlier cases; 25% of interactions lasted 8s, and 50% 23s or less. A similar

picture emerged for the time between smartphone interactions, which averaged at 290.5s, with 25% of intervals between use being 40s, and 50% being 137s or less. Based on

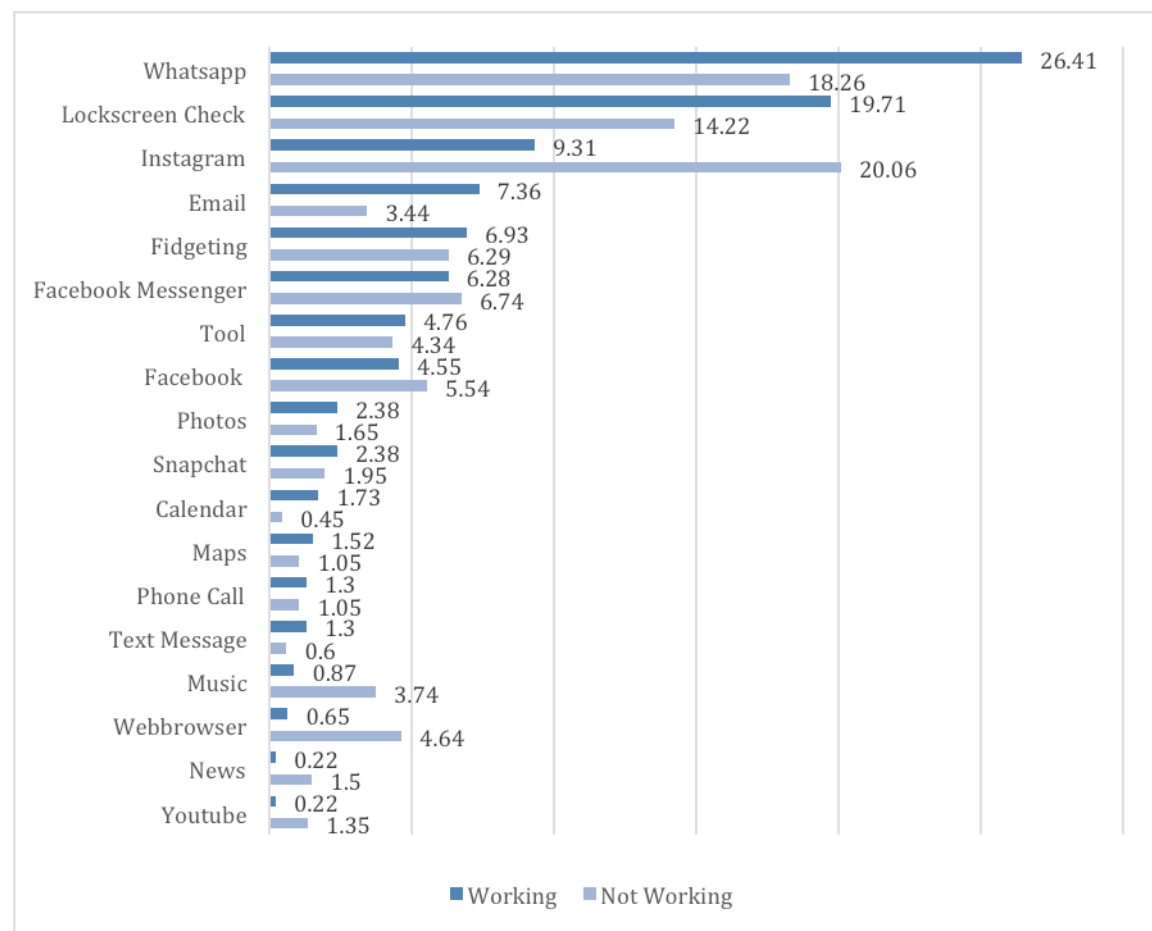


Figure 4. Observed smartphone activity categories by frequency while participants were working vs. not working (Activities with a frequency <1% in both contexts have been excluded).

the averages, our findings indicate that participants interact with their phones for 10 minutes every hour in a ‘one minute every five minutes pattern’ (note that data collection was limited to waking hours).

The most frequent smartphone activity we observed in our sample was using WhatsApp, a popular messaging app in most of Europe, which represented one quarter of all interactions in working, and one fifth in non-working contexts. The lock screen check, i.e., briefly activating the screen without fully unlocking the phone, Instagram, and Email followed after. Calls, text messages, and maps only made up about 1% each of the sample (see fig. 4). Especially for work contexts, it would be insightful to examine the distribution of tasks across devices (landline, smartphone, computer, etc.) to understand which devices participants use for which activity, and why.

Smartphone usage lasts longer when users were interacting with their phones before, compared to when they come from a different activity (104s vs. 46s, $p < 0.000$). This confirms the notion that users can get caught in a loop when they engage with their

devices more in-depth. Furthermore, while the type of activity participants were engaged in did not significantly influence time between pickups, its influence on the duration of use was highly significant ($p < 0.000$). Interactions with Facebook, Instagram, and the browser, apps conducive to prolonged scrolling, lasted significantly longer than others ($p < 0.000$, respectively; see fig. 5).

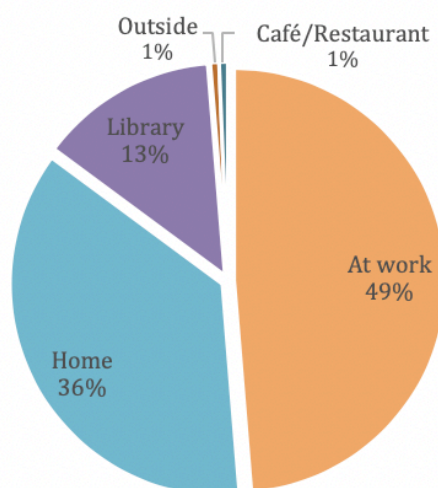


Figure 5. Distribution of observed smartphone interactions while working between different locations.

Moreover, interactions initiated by users lasted longer on average than those initiated by devices (67s vs. 43s), suggesting that participants respond to prompts when their phones are calling their attention, but actively engage with them when they pick them up out of their own initiative. While this is aligned with the qualitative analysis, the difference is marginally insignificant in our sample ($p < 0.095$), making further investigation necessary.

Participants worked at their workplace in roughly half of cases, at home in a third, and at other locations in the rest (see fig. 5). We find that interactions were significantly shorter when participants were working (37s vs 83s; $p < 0.000$), but we, again, did not find a significant effect for time elapsed between interactions ($p = 0.201$). We further did not find significant differences when participants worked from home, suggesting that the activity participants are engaged in matters more than the context they are in. We also found that people were alone roughly half of the time, both when they were at work and when they were working, suggesting an even spread of social contexts participants worked in.

Importantly, 89% of smartphone interactions in our sample were initiated by users. There were no significant differences for being at the workplace or in other locations, which is not surprising as most participants keep their phones muted most of the time. However, when participants were working, significantly less interactions were initiated by the phone compared to when they were not working (7% vs 17%, $p > 0.000$). Given that the intervals between smartphone interactions do not vary between working and non-working contexts, users actually self-interrupt more to attend to their phones while working, which is in line with previous research. In

situations where notifications were not muted, there was no significant difference in response time across working and non-working activities ($p=0.078$).

5. Discussion

The analysis revealed the smartphone as the key logistical tool that connects the professional and private lives of participants and helps managing experienced workload by segregating larger tasks into smaller portions. We further observed a strong tension between the desire to engage with smartphones to obtain information and communicate with others, and the desire to focus and avoid frequent distractions. To deal with this tension, participants have developed nuanced habits that help them achieve the desired ‘distance’ to their devices. Yet, the data shows that contexts are blurry and motivations to engage with or avoid the phone overlap.

The quantitative analysis revealed that phone interactions were shorter, and proportional use of ‘time-consuming’ apps like Instagram or Facebook was lower when participants were working. This suggests a more task-oriented approach to smartphone use while working, compared to a focus on discovery and distraction in non-working contexts. However, the intervals between smartphone interactions remain statistically invariant across every context we observed and tested. Hence, though participants use their phones in a more focused manner while working, they cannot resist the urge to check their phones every five minutes. This urge to interact with the phone in such frequent intervals stands as the central finding of this paper and appears to be both cause and effect of the patterns of smartphone interactions we observed.

Notifications are the key to understanding these patterns, both when they occur, and when they do not. First, they attract the attention of users. Participants have, thus, described various preferences on which, and what type of notifications they allow in different contexts. While, generally speaking, the more demanding the task, the less participants wanted to receive notifications, when tasks became too intense or difficult, participants actually welcomed notifications as means for escapism. Settling into work was usually preceded by dealing with notifications and then switching them off. Switching them back on helped participants transition back into their private lives and often occurred before participants completely stopped working.

We observed that phones were set to silent in most situations and, consequently, that 89% of interactions were initiated by users. With notifications muted, participants checked their phones proactively much more, which is in line with the predictions of telepressure and nomophobia. This draws into question the sentiment of many users that notifications are disrupting them. Rather, the *thought of a potential notification* seems to drive smartphone interactions. Hence, it is not push-based information delivery that causes disruption and needs to be addressed, but user-initiated pull-based information searching. Supporting evidence for this can be found in other studies as well (Banovic, Brant, Mankoff, & Dey, 2014; Church, Ferreira, Banovic, & Lyons, 2015).

We further found that natural breakpoints occurring between and within activities are key for understanding when and why participants pick up their phones. Moments like turning a page, switching software, but also drinking or stretching in one’s seat

routinely led participants to interact with their phones. After a natural break, three types of interactions occurred (lock screen checks, regular interactions, and fidgeting) with the first two being the most common. Participants generally exhibited surprise when they saw themselves fidgeting aimlessly, and were unable to reconstruct what they were doing (typically, fidgeting interactions entailed rapidly opening and closing apps, sometimes before they had fully launched, and swiping around on the touchscreen). A tentative interpretation points to participants' descriptions of phone use as being natural, automatic, and the device being "an extension of the body" (P23). Given that the patterns and triggers of fidgeting appear deeply embodied, cues from natural breakpoints may lead participants to perform these unconscious interactions while their minds remain preoccupied with another activity. Investigating this phenomenon further is important to develop strategies and interventions to help users reduce the frequency in which they interact with their phones. Although it had already been suggested that phone-checking may be more automatic than users believe (Duke & Montag, 2017), the extent to which habitualised smartphone interactions occurred in this study has greatly exceeded what we expected.

Based on our findings, we do not think that limiting the use of devices or certain apps at the workplace will benefit productivity and well-being. Apart from the problem that private and professional are hard to separate sometimes, our findings lead us to believe that people will be more productive if they can quickly check their devices if needed. It is not the nature of the interaction that causes slacking, but the reason why the phone is in the user's hand: When responding to a prompt, both private and professional matters can be dealt with without running a large risk of slacking. Picking up their phone proactively, users are likely to spend more time than intended in work and private contexts alike.

6. Conclusion

This paper investigated smartphone use with a situated first-person technique, providing empirical evidence on the subjective experience of using a smartphone in working and non-working contexts. Not too long ago, it was argued that "in practice, time must be allocated in large discontinuous 'lumps', often between 'packages' of activities" (Perlow, 1999, 114). Since then, the widespread use of smartphones and other devices has drastically changed how users spend their time: Smartphones now are the key tool participants use to structure the flow of their daily lives and a much larger share of smartphone interactions than expected was habitualised and even occurred without participants taking conscious note.

89% of interactions in our sample were initiated by users, not devices. Strikingly, our participants interacted with their phones roughly every five minutes irrelevant of any external influence. We have thus observed 'lived' telepressure and nomophobia on an unprecedented scale. Hence, we believe that limiting the use of smartphones or apps at work will not only not yield the desired results, but also create substantial negative externalities. Rather, it appears that users need to re-learn how to engage with their devices purposefully. Given that participants in our study have developed successful coping strategies that are fine-tuned to their specific use, an exciting avenue for the design of policies and interventions is to build upon these strategies and co-create natural, embodied, and applied interventions with users in the contexts of their workplace.

References

- Adamczyk, P. D., & Bailey, B. P. (2004). If not now when?: the effects of interruption at different moments within task execution. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*.
<https://doi.org/10.1145/985692.985727>
- Aguiar, M., Hurst, E., & Karabarbounis, L. (2012). Recent Developments in the Economics of Time Use. *Annual Review of Economics*.
<https://doi.org/10.1146/annurev-economics-111809-125129>
- Andorka, R. (1987). Time Budgets And Their Uses. *Annual Review of Sociology*.
<https://doi.org/10.1146/annurev.soc.13.1.149>
- Andrews, S., Ellis, D. A., Shaw, H., & Piwek, L. (2015). Beyond self-report: Tools to compare estimated and real-world smartphone use. *PLoS ONE*.
<https://doi.org/10.1371/journal.pone.0139004>
- Banovic, N., Brant, C., Mankoff, J., & Dey, A. K. (2014). ProactiveTasks: The short of mobile device use sessions. In *MobileHCI 2014 - Proceedings of the 16th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services*. <https://doi.org/10.1145/2628363.2628380>
- Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology*.
<https://doi.org/10.1037/a0038278>
- Baumgartner, S. E., & Sumter, S. R. (2017). Dealing with media distractions: an observational study of computer-based multitasking among children and adults in the Netherlands. *Journal of Children and Media*.
<https://doi.org/10.1080/17482798.2017.1304971>
- Boase, J., & Ling, R. (2013). Measuring Mobile Phone Use: Self-Report Versus Log Data. *Journal of Computer-Mediated Communication*.
<https://doi.org/10.1111/jcc4.12021>
- Böhmer, M., Hecht, B., Schöning, J., Krüger, A., & Bauer, G. (2011). Falling asleep with Angry Birds, Facebook and Kindle: A large scale study on mobile application usage. In *Mobile HCI 2011 - 13th International Conference on Human-Computer Interaction with Mobile Devices and Services*.
<https://doi.org/10.1145/2037373.2037383>
- Borst, J. P., Taatgen, N. A., & van Rijn, H. (2015). What Makes Interruptions Disruptive? <https://doi.org/10.1145/2702123.2702156>
- Bowman, L. L., Levine, L. E., Waite, B. M., & Gendron, M. (2010). Can students really multitask? An experimental study of instant messaging while reading. *Computers and Education*. <https://doi.org/10.1016/j.compedu.2009.09.024>

- Brown, B., McGregor, M., & Laurier, E. (2013). iPhone in Vivo: Video Analysis of Mobile Device Use. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1031–1040). New York, NY, USA: ACM. <https://doi.org/10.1145/2470654.2466132>
- Brown, B., McGregor, M., & McMillan, D. (2014). 100 days of iPhone use: Understanding the details of mobile device use. In *MobileHCI 2014 - Proceedings of the 16th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services*. <https://doi.org/10.1145/2628363.2628377>
- Brown, B., McGregor, M., & McMillan, D. (2015). Searchable Objects: Search in Everyday Conversation. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 508–517). New York, NY, USA: ACM. <https://doi.org/10.1145/2675133.2675206>
- Cain, M. S., & Mitroff, S. R. (2011). Distractor filtering in media multitaskers. *Perception*. <https://doi.org/10.1068/p7017>
- Cambier, R., Derks, D., & Vlerick, P. (2019). Detachment from work: A diary study on telepressure, smartphone use and empathy. *Psychologica Belgica*. <https://doi.org/10.5334/pb.477>
- Church, K., Ferreira, D., Banovic, N., & Lyons, K. (2015). Understanding the Challenges of Mobile Phone Usage Data. In *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services* (pp. 504–514). New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/2785830.2785891>
- Csikszentmihalyi, M. (2008). Flow: The psychology of optimal performance. In *Optimal experience: Psychological studies of flow in consciousness*. <https://doi.org/10.1017/CBO9781107415324.004>
- Csikszentmihalyi, M. (2012). The flow experience and its significance for human psychology. In *Optimal Experience*. <https://doi.org/10.1017/cbo9780511621956.002>
- Czerwinski, M., Cutrell, E., & Horvitz, E. (2000). Instant Messaging and Interruption: Influence of Task Type on Performance. *Proceedings of OZCHI 2000*. [https://doi.org/10.1016/S1361-3723\(02\)01112-0](https://doi.org/10.1016/S1361-3723(02)01112-0)
- Dabbish, L., Mark, G., & González, V. M. (2011). Why do i keep interrupting myself?: Environment, habit and self-interruption. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/1978942.1979405>
- Derks, D., van Mierlo, H., & Schmitz, E. B. (2014). A diary study on work-related smartphone use, psychological detachment and exhaustion: Examining the role of the perceived segmentation norm. *Journal of Occupational Health Psychology*. <https://doi.org/10.1037/a0035076>
- Duke, É., & Montag, C. (2017). Smartphone addiction, daily interruptions and self-reported productivity. *Addictive Behaviors Reports*.

<https://doi.org/10.1016/j.abrep.2017.07.002>

Ellis, D. A., Davidson, B. I., Shaw, H., & Geyer, K. (2019). Do smartphone usage scales predict behavior? *International Journal of Human Computer Studies*.
<https://doi.org/10.1016/j.ijhcs.2019.05.004>

Everri, M., Heitmayer, M., Yamin-Slotkus, P., & Lahlou, S. (2020). Ethical challenges of using video for qualitative research and ethnography. In A.-K. Koistinen, T. Lähdesmäki, & V. Čeginskis (Eds.), *Ethnography with a Twist. Methodological and Ethical Challenges and Solutions in Contemporary Research*. Milton Park: Routledge.

Ferreira, D., Goncalves, J., Kostakos, V., Barkhuus, L., & Dey, A. K. (2014). Contextual experience sampling of mobile application micro-usage. In *MobileHCI 2014 - Proceedings of the 16th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services*.
<https://doi.org/10.1145/2628363.2628367>

González, V. M., & Mark, G. (2004). “Constant, constant, multi-tasking craziness”: Managing multiple working spheres. In *Conference on Human Factors in Computing Systems - Proceedings*.

Hamermesh, D. S., & Jungmin, L. (2007). Stressed out on four continents: Time crunch or yuppie kvetch? *Review of Economics and Statistics*.
<https://doi.org/10.1162/rest.89.2.374>

Hill, M. S. (1985). Patterns of Time Use. In F. Juster & F. Stafford (Eds.), *Time, Goods and Well-Being* (pp. 133–176). Ann Arbor: Survey Research Center. Retrieved from file:///C:/paper/AllPapers/1-MKTG/Hill 1985 - Chapter.pdf

Holst, A. (2019). Number of smartphone users worldwide from 2016 to 2021 (in billions).

Jeong, Y., Jung, H., & Lee, J. (2020). Cyberslacking or Smart Work: Smartphone Usage Log-Analysis Focused on App-Switching Behavior in Work and Leisure Conditions. *International Journal of Human-Computer Interaction*.
<https://doi.org/10.1080/10447318.2019.1597574>

King, A. L. S., Valença, A. M., Silva, A. C. O., Baczynski, T., Carvalho, M. R., & Nardi, A. E. (2013). Nomophobia: Dependency on virtual environments or social phobia? *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2012.07.025>

Lahlou, S. (2011). How can we capture the subject’s perspective? An evidence-based approach for the social scientist. *Social Science Information*, 50(3–4), 607–655.
<https://doi.org/10.1177/0539018411411033>

Lahlou, S. (2018). *Installation theory: The societal construction and regulation of behaviour*. *Installation Theory: The Societal Construction and Regulation of Behaviour*. <https://doi.org/10.1017/9781316480922>

- Lahlou, S., Le Bellu, S., & Boesen-Mariani, S. (2015). Subjective evidence based ethnography: method and applications. *Integrative Psychological and Behavioral Science*, 49(2), 216–238. <https://doi.org/10.1007/s12124-014-9288-9>
- Lavoie, J. A. A., & Pychyl, T. A. (2001). Cyberslacking and the procrastination superhighway: A web-based survey of online procrastination, attitudes, and emotion. *Social Science Computer Review*. <https://doi.org/10.1177/089443930101900403>
- Li, L., & Lin, T. T. C. (2019). Smartphones at Work: A Qualitative Exploration of Psychological Antecedents and Impacts of Work-Related Smartphone Dependency. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/1609406918822240>
- Licoppe, C., & Figeac, J. (2013). Patterns of Gaze Switching in the “Naturally-Occurring” Uses of Smartphones in Urban Mobile Settings. *Paris: TELECOM ParisTech*.
- MacCormick, J. S., Dery, K., & Kolb, D. G. (2012). Engaged or just connected? Smartphones and employee engagement. *Organizational Dynamics*. <https://doi.org/10.1016/j.orgdyn.2012.03.007>
- Mark, G., Czerwinski, M., & Iqbal, S. T. (2018). Effects of individual differences in blocking workplace distractions. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/3173574.3173666>
- Mark, G., Gonzalez, V. M., & Harris, J. (2005). No task left behind? Examining the nature of fragmented work. In *CHI 2005: Technology, Safety, Community: Conference Proceedings - Conference on Human Factors in Computing Systems*.
- Mark, G., Gudith, D., & Klocke, U. (2008). The cost of interrupted work: More speed and stress. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/1357054.1357072>
- Mayring, P. (2000). Qualitative Content Analysis. *FQS - Forum Qualitative Social Research*.
- Mayring, P. (2015). Qualitative Content Analysis: Theoretical Background and Procedures. https://doi.org/10.1007/978-94-017-9181-6_13
- McMillan, D., Brown, B., Lampinen, A., McGregor, M., Hoggan, E., & Pizza, S. (2017). Situating Wearables. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems - CHI '17*, 3582–3594. <https://doi.org/10.1145/3025453.3025993>
- Mills, J. E., Hu, B., Beldona, S., & Clay, J. (2001). Cyberslacking! A liability issue for wired workplaces. *Cornell Hotel and Restaurant Administration Quarterly*. <https://doi.org/10.1177/0010880401425004>
- Minear, M., Brasher, F., McCurdy, M., Lewis, J., & Younggren, A. (2013). Working memory, fluid intelligence, and impulsiveness in heavy media multitaskers.

Psychonomic Bulletin and Review. <https://doi.org/10.3758/s13423-013-0456-6>

Morrison, A., Xiong, X., Higgs, M., Bell, M., & Chalmers, M. (2018). A large-scale study of iPhone app launch behaviour. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/3173574.3173918>

O’Conaill, B., & Frohlich, D. (1995). Timespace in the workplace: dealing with interruptions. In *Conference on Human Factors in Computing Systems - Proceedings*.

Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences of the United States of America*. <https://doi.org/10.1073/pnas.0903620106>

Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. (2012). Habits make smartphone use more pervasive. *Personal and Ubiquitous Computing*. <https://doi.org/10.1007/s00779-011-0412-2>

Parry, D. A., & le Roux, D. B. (2019). Media multitasking and cognitive control: A systematic review of interventions. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2018.11.031>

Perlow, L. (2011). THE TIME FAMINE: TOWARDS A SOCIOLOGY OF WORK TIME. *Academy of Management Proceedings*. <https://doi.org/10.5465/ambpp.1996.4980545>

Pizza, S., Brown, B., McMillan, D., & Lampinen, A. (2016). Smartwatch in Vivo. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 5456–5469). New York, NY, USA: ACM. <https://doi.org/10.1145/2858036.2858522>

Robinson, J. (1977). *How Americans use time*. Praeger Publishers Inc.

Rosen, L. D., Mark Carrier, L., & Cheever, N. A. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2012.12.001>

Sanbonmatsu, D. M., Strayer, D. L., Medeiros-Ward, N., & Watson, J. M. (2013). Who Multi-Tasks and Why? Multi-Tasking Ability, Perceived Multi-Tasking Ability, Impulsivity, and Sensation Seeking. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0054402>

Schreier, M. (2014). The SAGE Handbook of Qualitative Data Analysis Qualitative Content Analysis. *The SAGE Handbook of Qualitative Data Analysis*. <https://doi.org/10.4135/9781446282243>

Shin, M., Webb, A., & Kemps, E. (2019). Media multitasking, impulsivity and dual task ability. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2018.11.018>

Sun, T., & Zhong, B. (2020). Multitasking as multisensory behavior: Revisiting media

multitasking in the perspective of media ecology theory. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2019.09.027>

Szalai, A. (1966). Trends in Comparative Time-Budget Research. *American Behavioral Scientist*, 9(9), 3–8.

Uncapher, M. R., K. Thieu, M., & Wagner, A. D. (2016). Media multitasking and memory: Differences in working memory and long-term memory. *Psychonomic Bulletin and Review*. <https://doi.org/10.3758/s13423-015-0907-3>

Uncapher, M. R., Lin, L., Rosen, L. D., Kirkorian, H. L., Baron, N. S., Bailey, K., ... Wagner, A. D. (2017). Media multitasking and cognitive, psychological, neural, and learning differences. *Pediatrics*. <https://doi.org/10.1542/peds.2016-1758D>

Van Berkel, N., Luo, C., Anagnostopoulos, T., Ferreira, D., Goncalves, J., Hosio, S., & Kostakos, V. (2016). A systematic assessment of smartphone usage gaps. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/2858036.2858348>

Van Laethem, M., van Vianen, A. E. M., & Derks, D. (2018). Daily fluctuations in smartphone use, psychological detachment, and work engagement: The role of workplace telepressure. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2018.01808>

Visuri, A., Sarsenbayeva, Z., Van Berkel, N., Goncalves, J., Rawassizadeh, R., Kostakos, V., & Ferreira, D. (2017). Quantifying sources and types of smartwatch usage sessions. *Conference on Human Factors in Computing Systems - Proceedings, 2017-May*, 3569–3581. <https://doi.org/10.1145/3025453.3025817>

Vitak, J., Crouse, J., & Larose, R. (2011). Personal Internet use at work: Understanding cyberslacking. In *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2011.03.002>

Wallis, C. (2010). *The impacts of media multitasking on children's learning and development: Report from a research seminar. Report from a research seminar. In: The Joan Ganz Cooney Center at Sesame Workshop.* <https://doi.org/10.1089/cyber.2010.0350>

Wang, G., & Suh, A. (2018). Disorder or driver?: The effects of Nomophobia on work-related outcomes in organizations. In *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/3173574.3173624>

Yan, T., Chu, D., Ganesan, D., Kansal, A., & Liu, J. (2012). Fast app launching for mobile devices using predictive user context. *MobiSys'12 - Proceedings of the 10th International Conference on Mobile Systems, Applications, and Services*, 113–126. <https://doi.org/10.1145/2307636.2307648>

Sailing Through: The Assessment of a Philippine Grief Support Program Using Bible-Based Lessons and Art Therapy

Alyssa Roxanne H. Publico, University of the Philippines, Philippines

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

The Sailing Through workshops began in 2018 by my father and I through the Christian Advocacy Reaching Everyone (CARE) Foundation, and first conducted exclusively for our church (International Churches of Christ Quezon City). These support groups address different life challenges such as grief, caregiving for terminally ill loved ones and mental health issues. They are composed of Bible-based lessons, art therapy or creative exercises for self-expression, and smaller subgroups for building more intimate, sincere relationships. Since last year, several opportunities have risen for us to share what we've learned with others. As we continue to share our experiences, more and more have expressed their interest to set up their own support groups and adapt our current model. But before we reach out to train others and conduct groups to help the community, we saw the need for a thorough assessment of the Grief Support Group (GSG) workshops. Through two focus group discussions consisting of short art-related activities, I interviewed four participants of 2018's Grief Support Group and four participants from 2019's Grief Support Group. Through thematic analysis, the results show that the overall experience of the participants fulfills the program's objectives. The strengths of the workshop include teaching the importance of empathy, learning how to listen without judgment, and activities that encourage honoring the memory of those who have passed on. Some areas of improvement include the need for follow-up sessions post-GSG, the incorporation of journal-writing, addressing other forms of loss, and exploring other creative therapies.

Keywords: Grief, Filipino, Art Therapy, Support Groups, Spirituality

iafor

The International Academic Forum
www.iafor.org

Introduction

The Sailing Through Grief Support Group is one of the many programs under Christian Advocacy Reaching Everyone (CARE) Foundation. These programs were designed to help members of the International Churches of Christ Quezon City (ICOC QC) to address unmet needs stemming from life challenges.

The Grief Support Group program was designed to help people struggling after the loss of a loved one. The support group's curriculum was based off the workbook *Grief Journey In Motion* by Dr. Tim Sumerlin, who came to Manila in July 2017 to teach ICOC church leaders how to conduct grief support groups. What makes our program different from Sumerlin's is that in helping the members talk about what they've experienced and felt, we use art therapy to facilitate discussion.

Objectives of the Sailing Through Grief Support Groups

1. Provide emotional and spiritual support for people who have lost a loved one
2. Establish an empathic community for griever to find comfort and a place to express what they feel
3. Allow participants to share their memories of loved ones who have passed on
4. Encourage the participants to honor the memory of their loved one through creative works

Components of the Sailing Through Support Groups

1. Bible-based Lessons

	Topic
Session 1	Jesus Embraces Grief—Will You?
Session 2	The Father's Heart For the Griever
Session 3	We Reach Out: Our Friends, Family and Grief
Session 4	Your Grief Narrative: A Lifetime of Loss
Session 5	Personal Grief: Why Does This Hurt So Much?
Session 6	This One Hurts the Most: Examining a Relationship
Session 7	Writing Your Narrative: Saying Goodbye to the Hurt
Session 8	Enduring Relationships: Finding Solace and Joy

Table 1: Topics under "Grief Journey In Motion." Copyright: Dr. Tim Sumerlin¹ (2016).

Every session is guided by the "Grief Journey In Motion" booklet by Dr. Tim Sumerlin with a different topic per week. Each meeting begins with a roundtable

¹ Sumerlin, T., PhD. (2016). *Grief Journey In Motion: Finding Peace In Grief Recovery* (Vol. 1). Spring, Texas: Illumination.

discussion led by my father, Andre Publico, and he provides a lesson related to the topic. These Bible-based lessons unpack scriptures that talk about God's heart for the griever and comfort for those who have lost a loved one. For Christians, spirituality and love from God are core values in grief. Without being able to process grief properly, connecting with God in downtrodden times is difficult.

Reynolds (2017) speaks of the positive and negative aspects of the Christian perspective in the face of grief.² While religion and spirituality provide comfort and reassurance that the bereaved will someday reunite with their loved ones, often faith can be shaken through the loss of a loved one—mainly because Christians don't always know how to properly handle grief. In our grief support groups, we talk about how others have hurt us through the unsolicited advice that pushes us away from God rather than draws us toward Him. Especially for Filipinos, spirituality plays an important role in the grieving process as the Philippines's roots in emotional healing have come from spiritual leaders.³ (Tuason & Arellano-Carandang, 2015)

2. Art Therapy

Malchiodi (2007, p. 17) describes art therapy as a “hybrid discipline” of art and psychology.⁴ As such, the focus of art therapy is not to improve one's skills but to express oneself when words are not enough. I conduct these activities (called Expressive Exercises) following each lesson. Each activity is tied in with the theme of the session. These are done to facilitate discussion and allow the participants to talk about their experiences.

With grief, it is difficult to express or put emotions into words. Having these creative activities allows the participants to engage with their emotions and experiences and translate what they feel onto paper.⁵ (Liebmann, 2006) As the sessions continue, the participants are also able to observe their progress and use the art that they create as a record of their personal reflections. We have found that at first, asking the participants to discuss among one another without any art was difficult, but creating something before discussion acted as a catalyst for conversation within their small groups.

3. Small Groups

In *Grief Journey In Motion*, Sumerlin (2016) strictly recommends to keep every batch with a maximum of 12 participants in order to keep conversations intimate and private. We further divided the 12 into smaller, same-sex subgroups. This provides everyone with equal opportunity to share their experiences and have a safe space for discussion after the art therapy exercises. The size of the group matters as well, as we uphold strict confidentiality rules. We do not allow the participants to share the experiences that others disclose to them, but they are free to share their own personal experiences and learnings outside of the support group. The small size of the group

² Reynolds, Charles, "A GUIDE FOR UNDERSTANDING AND COPING WITH GRIEF: A CHRISTIAN'S PERSPECTIVE" (2017). Integrated Studies. 64.
<https://digitalcommons.murraystate.edu/bis437/64>

³ Tuason, M. G. T., & Arellano-Carandang, M. L. (2015). Counseling Around the World: An International Handbook, 117-124.

⁴ Malchiodi, C. A. (2007). Expressive therapies. New York: Guilford.

⁵ Liebmann, M. (2006). Art Therapy for Groups. Hove: Routledge.

also enables better relationship-building among the participants, and for a more “family-oriented” model for GSG.

The main purpose of this study is to evaluate the effectivity of the Grief Support Program, seeking comments and address areas wherein the program can be improved. This study serves as well as an assessment of the program before reaching out to the community and making it available outside the church.

Research Questions

1. What were the experiences of participants that gave them intense grief? How did these affect their lives before the Grief Support Program?
2. How did participants give meaning to their grief before the sessions? After the sessions?
3. What were their motivations for attending the program?
4. In what ways did the personal lives of those who completed the program change? For those still undergoing the program, what have they learned so far?
5. What are the Grief Support Group’s strengths? What areas need improvement?

Methodology

This study consisted of two Focus Group Discussions (FGDs). The first consisting of 4 participants from the current year’s Grief Support Program and the second consisting of 4 participants from 2018’s Grief Support Program. Each FGD was split into two parts: the first being a discussion on what happened and how losing their loved one affected the participants, the second being a discussion on their memories, honoring the loved one who passed away, and GSG’s role in helping them move forward.

The FGDs were later on transcribed into two Google Doc files. Using Thematic Analysis, important quotes were pulled from the files and attached with comments, which were encoded into an excel file. The file contained nine columns: one for the moderator’s questions, and the rest for the participants’ answers. These codes were sorted into preliminary themes and refined further into final themes.

Results and Discussion



Figure 1: Batch 2018 FGD



Figure 2: Batch 2019 FGD

What were the experiences of participants that gave them intense grief? How did these affect their lives before the Grief Support Program?

Theme 1: They experienced traumatic losses involving injustice, sickness, and natural disasters.

PARTICIPANT	GRIEF EXPERIENCE	CATEGORY
Linda (sister of Miguel)	Father was murdered by relatives	INJUSTICE
Lani	Mother died of kidney failure	SICKNESS
Bernard	Mother was run over by an FX	INJUSTICE
Alec	Father died of cancer	SICKNESS
Miguel (brother of Linda)	Father was murdered by relatives	INJUSTICE
Renzo	Grandfather died of old age; Father died of cancer	SICKNESS; SICKNESS
Kiko	Two brothers died in a storm surge	NATURAL DISASTERS
Lita	Father died of cancer	SICKNESS

Table 2: Grief Experiences and their Categories

Theme 2: The events themselves burn a deep memory.

When asked to describe what happened to them, the participants from Batch 2019 recalled with great detail the pain that they experienced. I was struck the most by Linda and Miguel's accounts of their father's death. Even when they were not part of the same Grief Support Group batch, nor were they in the same FGD, their descriptions of the night of their father's murder were almost identical.

"I was only nine years old at that time [...] it was a happy day actually, because it was at summer time—it was a full moon. Ate Maria asked us, me & Kuya Miguel, to 'Let's kneel down, let's pray. Tata is facing something.' We used to pray the rosary very quickly, but we didn't finish it. Ate Maria started crying, so I was thinking, 'What's happening? What's happening?'" and I heard from afar people screaming then suddenly it was all quiet then suddenly everyone was shouting. And then, a group of men came home and told us, "Pack some things—some clothes of your dad" my sister would ask "Why? Why?" they said, "We're bringing your papa to the hospital." (Linda, 2018 Batch)

"I truly remember May 8 1986 was a full moon [...] as we grew up, we were used to have Ate Maria leading our evening prayer. In the middle of our prayer my father came home [...] with wounds on his head because [...] he was ambushed and hit with bottles on his head. He came home to get his gun. Then my brother, Kuya Bong*, and my mother followed him. After about three hours, at around midnight, our uncles came and said, 'Pack up your things, you have to leave from here. Your father is dead. We have to take him to the hospital.'" (Miguel, 2019 Batch)*

Kiko's brothers were killed in the midst of a storm. He described the evening the typhoon struck in great detail, and shared how the weather was so violent, he felt as though he was being whipped by the wind. Lita was traumatized by how quickly her father died right after being diagnosed with cancer. It was only ten days following his diagnosis that his heart stopped beating. Renzo was not in the same room when his father died, but witnessed the death of his grandfather. These are just a few examples of the many experiences the participants shared. All of them recalled the emotions, the setting, the scene and the people surrounding them the moment their loved one passed away. Some were brought to tears as they spoke about their loss. These memories seemed to come back all at once as they told their stories.

Theme 3: They felt not only the physical loss, but the loss of their "normal" life.

For every participant, there was a deep sense of disbelief the moment they heard or they witnessed the passing of their loved one. Many likened it to watching a movie with the memories so vivid and detailed in mind. The shock of losing a loved one was strong enough to make them question reality itself as though it were a dream. As days, months, and years went by, time allowed the loss to truly sink in and show how different life became without the loved one physically with them.

Lita shared about how she feared seeing a family member get sick, and dreaded going to hospitals because she got "flashbacks" of what happened when her father passed away.

"I felt so scared that another family member would die. A year after my father died, my mother had a stroke. I was so afraid that God would take her. It was so hard for me to imagine that she would be taken away. I struggled seeing another loved one in the hospital. Everything that had happened when my father died came back in flashbacks." (Lita, Batch 2019)

Miguel and Linda spoke of their thoughts following their father's passing. They were 10 and 9 years old respectively. Children often have difficulty grieving out of fear that

once they talk about the loss, the tears would never stop. (James and Friedman, 2009) Death is such a vague and abstract concept that being faced with it at such a young age is overwhelming and unbelievable.

“All I heard was, ‘Your father is gone...’ it [came] from Nana’s mouth. ‘Your father is gone.’ She broke down and cried. I could not understand... what does it mean to say ‘Your father is gone’?” (Linda, Batch 2018)

Miguel shared about how his grief was worsened when he was maltreated soon after his father’s death. He was forced to live with relatives who later on physically abused him. He blamed his father’s murderers for all the other tragedies that followed.

“Everything changed, from the way I looked at life, the way I looked at the world. I started to doubt everything. I doubted everyone, especially those surrounding us. I hated that place, where we lived.” (Miguel, Batch 2019)



Figure 3: Drawings by Miguel on a paper bag symbolizing his memories with his father

The participants spoke so much of the roles that each loved one played in their lives. They would give endearing titles to them such as, “My Tata, my teacher, my idol, my hero,” (Miguel), “Jingjing and Butch, my two best buddies in the whole world” (Kiko), “Papang and Daddy, my favorite subjects to draw” (Renzo), “Tatay, my teacher and provider--taught me how to swim, served me, was there for me” (Lita), “Mama, a leader, konsehala, cook, and teacher,” (Lani), “Mama, a dragon lady but also a sweetheart” (Bernard) and “Papa, a musician and historian” (Alec).

How did participants give meaning to their grief before the sessions?

Theme 4: The prevalence of regret, self-blame and personal responsibility made grieving difficult to process.

With the gravity of the experiences the participants endured, I asked how they made sense of their grief before the Grief Support Groups. But with that question came the topic of regret, self-blame, and personal responsibility. Stroebe et. al (2014) defines self-blame in the context of bereavement “making self-attributions about the cause of

the death, and a sense of culpability due to failure to live up to standards of the deceased or one's self"⁶ while regret involves painful thoughts and feelings about the past and wishing things would have been better or at least, different. These are perfectly illustrated in the words of Kiko and Alec:

"I regret how after being a Christian, after knowing that what my dad needed was more than feeding him, was more than giving him medicine, was more than checking his schedule—what he needed was the support of his son, the love of his son." (Alec, Batch 2018)

"‘You missed a lot, mom’ [...] You missed how good my brothers are. You only know me now that you’re staying with me, but you missed my two kids [...] my two siblings they are very good people. They are very good kids. The youngest is just a bit mischievous, but he was the brightest in his class [...] if she only knew she could have—she could have done better as a parent and as a mother." (Kiko, Batch 2019)

This theme permeated in all the stories shared by the participants. Renzo, for example, blamed himself for not being with his grandfather when he dropped his wallet and fell, sending him to the hospital. Lita blamed herself for not fulfilling her father's request for grapes to eat, because his doctor instructed him not to eat before surgery. Miguel and Linda wanted to take revenge on the relatives who killed their father.

Other than regrets made because of what they did not do, the participants also spoke of the moments their loved ones missed out on. Linda wished her father was there during her grade school graduation. She was a valedictorian at her school and was tasked to give a speech, but was disappointed when no one in the audience listened to her. Lita expressed her wish for her father to be at her wedding day to walk down the aisle with her. These were important moments growing up that were laced with heartache by the absence of their loved ones.

Theme 5: Grief changed the participants' personal ambitions.

Kiko lost his confidence, felt like he had no voice to speak up for himself, and gave up on his dream of taking the UPCAT (the college entrance exam for the University of the Philippines).

"...when I lost my brothers part of me was lost confidence vision [...] direction even I don't know what to do. Whatever you had for me that you wanted me to learn in school, sure [...] I really wanted to take the UPCAT [...] but because I had no voice, I [felt] didn't deserve it. I had no confidence. I didn't initiate." (Kiko, Batch 2019)

Renzo shared about how the passing of his father inspired him to pursue Fine Arts in college. He shared about how he and his father shared a passion for art. In this quote, he recalls his father's support and assurance:

"...for my daddy, he died when I was in my last year of high school. For college, I decided I really want to pursue our shared passion, which is art. That's what made

⁶ Stroebe, M., Stroebe, W., Schout, R. V., Schut, H., Abakoumkin, G., & Li, J. (2014). Guilt in Bereavement: The Role of Self-Blame and Regret in Coping with Loss. PLoS ONE, 9(5). doi:10.1371/journal.pone.0096606

me decide, 'Yes, I will pursue what my Daddy wanted.' At that time I began thinking it would be so hard to not have my father here, because I really wanted to show him my projects. Every time I would show him my drawings, he would always be so proud of me." (Renzo, Batch 2019)

Kiko's mother was not present with him in the midst of his brothers' deaths while Renzo had his family around him during his father's passing. We can conclude that different situations bring different effects to the future of the bereaved. Some refuse to speak while some use the experience as a motivation. Both responses are valid, respected, and honest.

What were their motivations for attending the program?

Theme 6: The participants joined GSG with the initial goal of helping others.

For many of the participants, they shared that they originally joined the Grief Support Groups thinking that their learnings would help other people, but would later on come to realize that in order to help others, they would need to first process their own grief.

"On my way home one time, I asked myself, "Why was I invited to the grief group?" Is there something that I need to learn? As the sessions went by, I realized its purpose. My husband lost family members one year after another; first his mother and next his sister. He would always talk about them, and I'd always tell him to "move on" which I later learned was not right." (Lita, Batch 2019)

Theme 7: The participants were searching for a group they could feel safe in.

"I need help, I need somebody to help me with these things so my expectation was that I would be a better person with people grieving after these sessions because I myself am grieving and I'm starting to maybe progress towards healing—progress towards not hiding." (Kiko, Batch 2019)

A number of participants also found themselves searching for a group where they could safely confide their sorrows and open up to others who could relate. Grief is likened to a weight too heavy for one to carry alone, or to something buried deep inside one's self that just wants to explode no matter how hard it is pressed. And with such painful emotions, grief needs to be handled gently and compassionately.

In what ways did the personal lives of those who completed the program change?

Theme 8: The GSG sessions taught the participants the importance of empathy.

Wondra and Ellsworth (2014) describe empathy as "feeling what another person feels."⁷ Empathy is a skill that is built through being with another person in their grief. It is about understanding the depth and the darkness that takes hold of one's

⁷ Wondra, J. D., & Ellsworth, P. C. (2015). An appraisal theory of empathy and other vicarious emotional experiences. *Psychological Review*, 122(3), 411-428. doi:10.1037/a0039252

thoughts in a time of loss and communicating unconditional care. Linda and Lani shared:

“If I didn’t go through GSG, I probably would be more judgmental of others who are grieving. Maybe I could size up that they are weak and not emotionally strong, but now I have to be more understanding.” (Linda, Batch 2018)

“I think I grew in my ability to listen, because I got tired of it, haha! You know how someone can confess so much to you, and all I could do back then was choose a part of what they said, and deal with that. Now I can somehow read between the lines.” (Lani, Batch 2018)

Theme 9: The 2018 participants observed changes in their character

I asked the participants the question, “If you did not attend the Grief Support Groups, what would your life be like now?” Alec expressed:

“I guess if I didn’t join GSG I’d still be in that unprocessed state, everything swept under the rug, and [would try to] go on with life [...] or look as if everything’s okay and that everything’s under control, but deep inside still be hurting [...] so I think the major part for me was where I learned how to be more in touch with my emotions instead of building a wall and being unemotional and logical.” (Alec, Batch 2018)

Creating a space for empathy comes with a lot of room for change and growth. In our grief support groups, we strictly prohibit others from correcting one another or criticizing a person’s thinking. Whatever character changes the participants experience come from themselves, not from someone telling them what they should or should not do. When we make others feel understood, they grow on their own.

Theme 11: The 2018 GSG participants felt less alone in their grief.

Grief is marked by low feelings such as depression, isolation and loneliness. Stroebe (2018) speaks of how grief poetry is full of sorrowful language.⁸ In this melancholy, it is so easy for one to feel alone and so difficult to believe that others are there for them. Through the Grief Support Program however, many of the participants expressed that they soon felt less isolated when they became involved in the stories and lives of fellow grievers.

“I kept wondering, ‘Am I the only one who feels this way?’ It’s strange cause other people say, ‘Oh, someday that feeling will pass... she passed away already, so you need to move on,’ but they don’t really know what’s going on in my life. So having GSG was good in a way because I started to think, ‘Oh wow, what I feel isn’t abnormal; it’s actually very normal because the others also grieve the same way.’” (Bernard, Batch 2018)

What are the Grief Support Group’s strengths? What areas need improvement?

⁸ Stroebe, M. (2018). The Poetry of Grief: Beyond Scientific Portrayal. OMEGA--Journal of Death and Dying, 78, 67-86. doi:DOI: 10.1177/0030222818792706

Theme 12: GSG teaches the importance of processing one's pain.

Processing grief in the context of GSG is about creating meaning from the memories of the loved one and taking an honest, holistic look at the relationship. Miguel spoke about how grief, if not processed properly can become an endless cycle. When we are able to fully express our frustration and pain, we find healing.

"In the GSG classes I learned the importance of mourning and grieving. I understood that grieving is a process, and without processing it the right way, your grief can cycle endlessly." (Miguel, Batch 2019)

Lani shared the same sentiments, commenting on one of the lesson on "excess baggage" and our art therapy activity on "What's in my Grief Journey Suitcase?" She spoke about how the activity allows the participants to look back on what they lost, and the pain they currently carry with them.

"What impacted me was the lesson on excess baggage. [...] With all the pain that you need to embrace, there are things you'll need to let go of and leave behind, yet at the same time, there is something else left to be honored." (Lani, Batch 2018)

Theme 13: Art Therapy is a helpful tool in beginning self-expression.

The participants saw the art therapy exercises as helpful tools for discussion. Some found expressing themselves to be difficult at the start, but the activities brought out the deep emotions and memories kept within.

"The artworks helped. It was an opener for [me] to express what's going on inside of me. Sometimes it's not really what the drawing says, itself but it's an opener or a starter for you to tell what you feel deep inside. Those activities really helped me so I know how to begin sharing my story." (Linda, Batch 2018)

"I gained a sense of eagerness and a reason why I would make artworks—and that is to show my memories. I feel the sadness deep in my soul, but I can translate it into something I can look at, and something that I can remember." (Renzo, Batch 2019)

I especially appreciated this quote from Lita, who spoke about how the art therapy activities brought life back to the memories she shared with her father. In all the research I've done on art for healing, I have never heard of anyone speak about how catharsis through creativity can recall positive emotions. This was a gem for me to hear.

"For me, the artworks give back color to my past, and the good memories I had. At the same time, I'm able to express my feelings and thoughts, and I am reminded of how beautiful my memories with my father were when I draw." (Lita, Batch 2019)

Theme 14: As a new program, the Grief Support Groups have more ideas to explore.

1. Follow-up sessions post-GSG

"I wished we had follow-up sessions after [...] this was the first time that we got together since it ended. I felt like we gained some understanding of how to process

grief, but there's still more that needs to be processed afterwards.” (Linda, Batch 2018)

2. Keeping journals for each session

“If I can suggest, I think journals would help as well.” (Linda, Batch 2018)

3. Addressing other loss issues

“As for the second batch, I feel that they're dealing with a different kind of grief. I see that most of them need to process a relational kind of grief. Other than the death of a loved one, it's more of the death of a relationship.” (Lani, Batch 2018)

4. Exploring other creative therapies

Although this was not explicitly stated as something that needed to be improved in the program, Miguel expressed how he struggled sometimes with the drawing exercises. Though the Grief Support Group exercises don't strictly call for drawings (other activities include creating collages, sculptures, or memory boxes), I considered his reflections on poetry as his personal form of therapy.

“I think art is a language—it helps me, because I can release what I need to release. But sometimes, if I can't draw it, I'll try writing it through poetry because for me that's my first language.” (Miguel, Batch 2019)

Conclusion

For the Sailing Through Grief Support Program, the overall experience of those who have been part of GSG shows that participants enjoy the workshops and benefit from the lessons, activities and relationships that they build. According to the participants, the strengths of the workshop include: empathy for others, lessons on how to listen without judgment and what to say versus what not to say, and creating artworks that enable self-expression. They also spoke of suggestions for improvement such as follow-up sessions post-GSG, journals, addressing losses of other kinds and exploring other creative therapies.

It would be worth exploring how other forms of creative therapies can work in bereavement groups such as drama therapy, poetry therapy, dance therapy or even music therapy. As Sailing Through continues to conduct more workshops, it would also be worth exploring if art therapy is the best mode of expression or if the other forms of creative therapy are better suited for caregivers support groups or mental health support groups.

The integration of art therapy with the Bible-based lessons can be further explored into how the activities can be reproduced. If others were to be trained in the future to conduct the Grief Support Groups, it would be wise to prepare a guide or worksheets behind the concepts for the art therapy activities.

For other bereavement support groups, it is worth exploring a small group model where participants are given equal opportunity to share their thoughts. It is also

preferred that if someone were to join a support group, if not all of the members know each other, each participant should be accompanied by a friend or someone they already knew before the support groups began.

References

- Liebmann, M. (2006). *Art Therapy for Groups*. Hove: Routledge.
- Malchiodi, C. A. (2007). *Expressive therapies*. New York: Guilford.
- Reynolds, Charles, "A GUIDE FOR UNDERSTANDING AND COPING WITH GRIEF: A CHRISTIAN'S PERSPECTIVE" (2017). *Integrated Studies*. 64. <https://digitalcommons.murraystate.edu/bis437/64>
- Sumerlin, T., PhD. (2016). *Grief Journey In Motion: Finding Peace In Grief Recovery* (Vol. 1). Spring, Texas: Illumination.
- Stroebe, M. (2018). The Poetry of Grief: Beyond Scientific Portrayal. *OMEGA--Journal of Death and Dying*, 78, 67-86. doi:DOI: 10.1177/0030222818792706
- Stroebe, M., Stroebe, W., Schout, R. V., Schut, H., Abakoumkin, G., & Li, J. (2014). Guilt in Bereavement: The Role of Self-Blame and Regret in Coping with Loss. *PLoS ONE*, 9(5). doi:10.1371/journal.pone.0096606
- Tuason, M. G. T., & Arellano-Carandang, M. L. (2015). *Counseling Around the World: An International Handbook*, 117-124.
- Wondra, J. D., & Ellsworth, P. C. (2015). An appraisal theory of empathy and other vicarious emotional experiences. *Psychological Review*, 122(3), 411-428. doi:10.1037/a0039252

Contact email: ahpublico1@up.edu.ph

***Mindfulness Based Art Therapy to Reduce Anxiety Being Experienced by
Chronic Kidney Disease Patients Who Required Hemodialysis***

Veronica Clarissa, Tarumanagara University, Indonesia
Monty P. Satiadarma, Tarumanagara University, Indonesia
Untung Subroto, Tarumanagara University, Indonesia

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Chronic Kidney Disease (CKD) and hemodialysis are conditions that potentially trigger negative emotional responses such as anxiety, depression, anger, guilt, and fear of death. Anxiety is commonly appear following the diagnosis of kidney failure and the requirement of hemodialysis. The anxiety is based on the potential impact of body image change and death. The anxiety may reduce the individual capacity on daily life and on dealing with the future. Mindfulness Based Art Therapy (MBAT) is a therapeutic method that combines the philosophy of mindfulness and art therapy. MBAT helps clients to understand the emotional self and self-expression by art activities. This research is aimed at examining whether MBAT can reduce the anxiety being experienced by CKD patients who are required hemodialysis. Six (6) adult patients participated in this quasi-experimental research, using one group pre- post test design. The MBAT intervention consists of 8 sessions with the interval of 1-2 sessions per week. The result indicates that MBAT reduces the anxiety of the all six participants.

Keywords: Mindfulness Based Art Therapy, Anxiety, Adult

iafor

The International Academic Forum
www.iafor.org

Introduction

Chronic Kidney Disease is a long-term kidney disease that causes kidney failure in a person. Chronic Kidney Disease (CKD) is ranked 12th as the disease with the highest mortality in the world. The Center for Data & Information of the Indonesian Hospital Association said that the number of patients with terminal kidney failure in Indonesia is around 50 people per one million population. CKD patients who reach the stage of terminal kidney failure needs therapy so that the kidney function can be maintained. One form of therapy is called hemodialysis (Baradero, Dayrit, & Siswadi, 2005). In Indonesia there are around 1.5 million Chronic Kidney Disease patients whose lives must depend on hemodialysis therapy. Hemodialysis is a procedure in which blood is released from the body and circulates in a machine outside the body called a dialyser. The frequency of HD therapy varies depending on the amount of kidney function remaining, the average patient undergoes three times a week, while the duration of hemodialysis is at least three to four hours at a time every therapeutic action (Brunner and Suddath, 2002; Yang et al., 2011). Chronic kidney disease and hemodialysis (HD) are events that could cause negative emotions called stressors. A stressors that could responded properly, makes an individual more mature. Conversely, stressors that are not responded properly can trigger psychological responses in the form of anxiety, depression, anger, fear, feeling guilty, even death (DeLaune & Ladner, 2011; Caninsti, 2007; Farida, 2010; Kimmel, 2001).

Anxiety is a subjective experience of an individual that cannot be directly observed and is an emotional state without a specific object. Anxiety is different from fear, the characteristic of fear is the existence of specific objects or sources that can be identified and can be explained by individuals. Taylor (quoted in Hasanat, 2010) said that anxiety is a subjective experience of anxious mental tension as a general reaction and inability to deal with problems or lack of security. These unpleasant feelings can generally cause physiological symptoms such as (trembling, sweating, increased heart rate etc.) and psychological symptoms (such as panic, tension, confusion, unable to concentrate and so on). Anxiety is a mental condition that is full of worries and fears about what might happen, both related to limited problems and strange things. The general description of anxiety is "feeling depressed and uneasy and having chaotic thoughts accompanied by many regrets". Anxiety can be very influential to the body, until the body feels shivering, causing a lot of sweat, the heart beats fast, the stomach feels nauseous, the body feels weak, the ability to produce is reduced until many humans escape to the imagination as a form of temporary therapy (Hasanat 2010).

The reaction of some people who suffer from chronic kidney disease varies greatly, for example shock, fear, anxiety, feelings of grief, anger, sadness, and the worst, withdraws (Gale, Hasanat, 2010). The reaction is a reality that must be faced by everyone who experiences it. Anxiety in patients with chronic kidney disease appears because they are afraid of the effects that might occur, for example changes in body image and death (Hasanat, 2010). In a study conducted by Sopha and Wardani (2016), it was found that there was a relationship between anxiety levels in patients with chronic kidney failure who were determined to follow hemodialysis therapy with age, sex, marital status and work status.

Older patients ideally have a more mature personality (Lutfu & Maliya, 2008).

However, age is not the only factor affecting personality maturity. There are other influential variables, such as experience, understanding, and spiritual conditions. Some elderly people may not be able to adapt well to the aging process they face. Research also shows that there is a relationship between gender and anxiety levels. Women are said to have greater emotional reactions that lead to differences in women's temperament in dealing with stressors and have an impact in their anxiety levels. Chronic kidney disease and hemodialysis therapy have an effect on the body both physically and psychologically. From a physical perspective, CKD patients look weak, pale, and not oftenly, their faces get blackened due to accumulation of metabolic waste in the body. This can affect body image, especially for women who tend to pay more attention to appearance. From a biological point of view, women who undergo HD have difficulty conceiving and having children. Feelings of nausea, vomiting, and lack of energy that are felt by patients can cause disruption of sexuality. Fear of losing the role and beauty of women triggers anxiety. The number of severe to very severe anxiety is found in patients who are married. PGK patients who are single can have stressors related to the desire to get married, worrying about not being able to feel the role of husband / wife and father / mother. Divorced CKD patients can have anxiety caused by the lack of places to share stories or the loss of people who have been close to their past.

The majority of patients who work are in mild to moderate anxiety levels, while the majority of patients who are not working are in severe to very severe anxiety levels. Patients who are still working, have the opportunity to get more social support than patients who are not working. In addition, according to researchers up to now social status is still assessed from someone's employment status. CKD patients who are not working may feel that the public has a bad stigma about themselves. Patients who do not work are considered as useless people in the social environment. This can exacerbate feelings of helplessness that patients have.

In an effort to reduce anxiety, can be done some various methods of intervention, one of them called Mindfulness Based Art Therapy. Mindfulness Based Art Therapy (MBAT) is a method that combines the philosophies of mindfulness with the existing background of art therapy (Rappaport, 2009). When Mindfulness Based Stress Reduction (MBSR) is widely used to help clients understand themselves and the world around them with an open and accepting mind as well as being aware of the environment that enables them to reflect on what is found in the world, this can help clients understand emotions and themselves. Meanwhile, MBAT aims to include the creative process of making art / art in self-exploration. MBAT is an art therapy exercise combined with mindfulness training and MBSR. MBAT research to assist individuals in regulating emotions, depression, and anxiety had been done by Kabat-Zinn and Kramer (cited in Paterson, 2014). In a study conducted by Monti, Peterson, Shakin, Peguignot, Rhodes and Brainard (2006) which aims to observe changes in blood circulation in the brain and anxiety in women with breast cancer, found a decrease in stress and anxiety. In mindfulness based art therapy, patients with chronic kidney disease can express their anxiety in an art form. The purpose of these activities is to increase awareness and understanding of anxiety and behavior that arises due to anxiety, as well as how other people can influence the behavior. The process of making works of art gives a nuance of relaxation and channeling negative emotions more subtly (Breiner, Tuomisto, Bouyea, Gussak, & Aufderheide, 2011). In this

study, mindfulness based art therapy is used as an intervention to reduce anxiety in patients with chronic kidney disease who require hemodialysis therapy.

Methods

Participants

Participants in this study were 6 adults patients with chronic kidney failure aged 21 to 60 years, who were requiring hemodialysis therapy and score high in anxiety. The sampling method used is non-probability convenience sampling.

Instruments

In mindfulness based art therapy interventions, meditation and art activities are designed to help patients to reduce their levels of anxiety. First, meditation and self picture assessment are carried out as an initial introduction, rapport building, and adaptation to mindfulness based art therapy activities. Researchers will also explain to participants about anxiety, mindfulness and mindfulness based art therapy. Second, after doing meditation, free drawing activities are carried out. The third session will be conducted only by meditation.

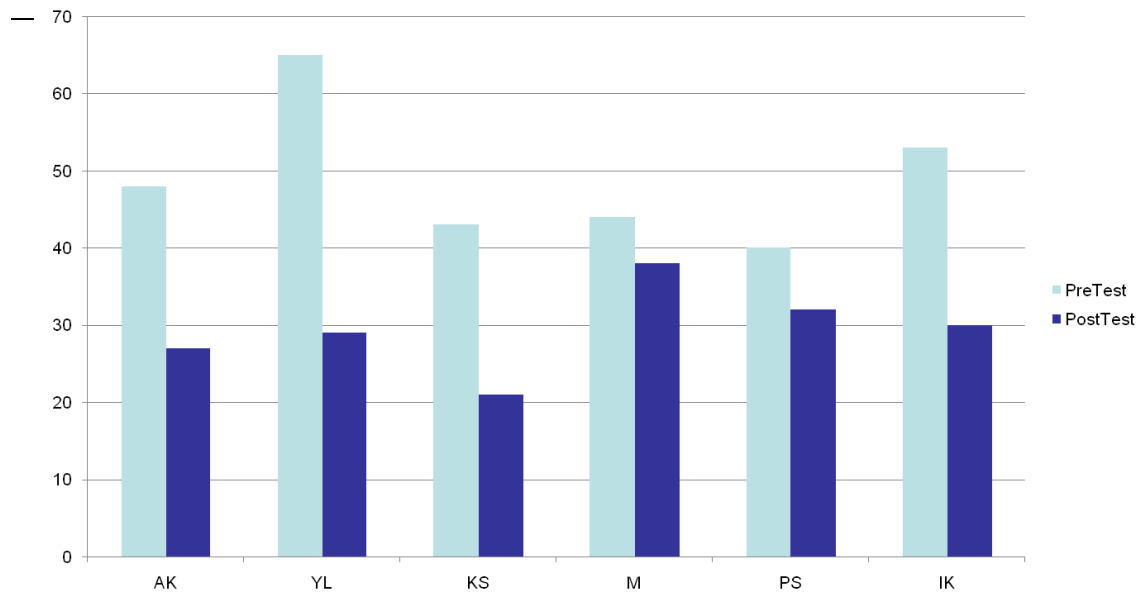
Fourth, participants describe the things that they feared the most or make them anxious, then participants are asked to do meditation. Then participants describe what can be done to reduce or eliminate anxiety according to the picture drawn in the previous session. This increases awareness and understanding of oneself, and knowing the location of the problem will be more likely to solve it. Fifth, participants meditate and show gratitude. Sixth, participants were asked to make a collage picture. In the seventh session, participants were asked to do walking meditation. Eighth, participants imagine a place as a healing place during meditation and then are asked to describe the place and where it is. It also aims to express a new self (feeling), free from anxiety and become a new self. This aims to get insights about themselves and their potential (Ganim, 1999).

State-Trait Anxiety Inventory (STAI) is a 20 point statement to measure the level of anxiety state and 20 statements to measure trait anxiety developed by Spielberger, Gorsuch, Lushene, Vagg, and Jacob (1983). This questionnaire is used in clinical settings to measure anxiety levels and distinguish them from depression syndrome. This scale was developed by rating each item on 4 answer scales from 1 (almost never / almost never) to 4 (almost always / almost always). This measuring device consists of items such as 'I am tense (I feel tense) 'and' I worry to much over something that really doesn't matter (I worry about unnecessary things excessively). A high score indicates a high level of anxiety while a low score indicates a low level of anxiety.

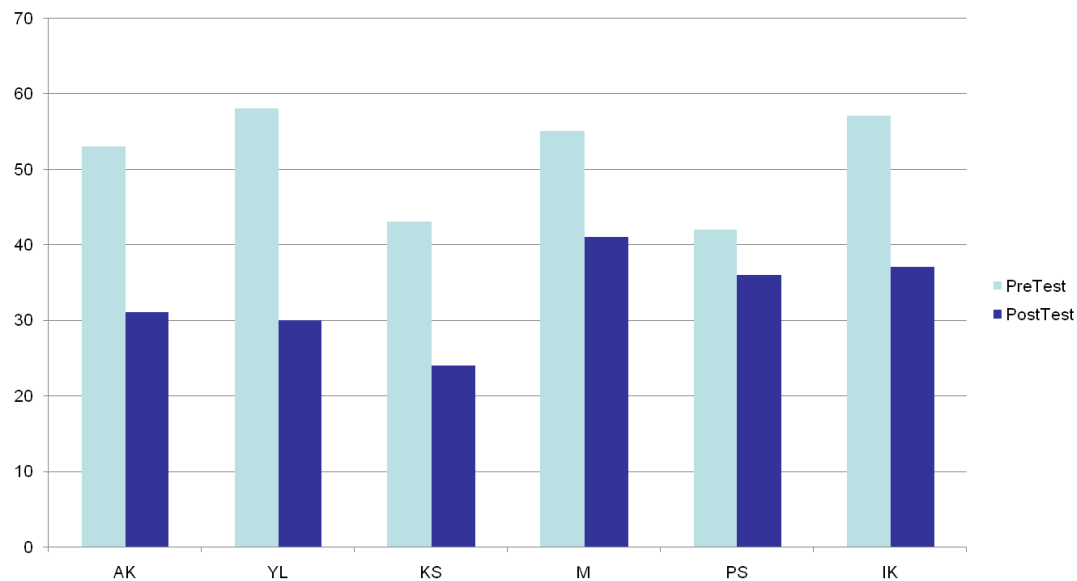
Results

Based on data from the interventions carried out for approximately 2 months (divided into 8 sessions each) to six adult individuals with chronic kidney disease patients who follow hemodialysis, it can be concluded that MBAT (mindfulness-based art therapy) is effective in reducing anxiety.

Tabel 1 State Anxiety



Tabel 2 Trait Anxiety



Conclusions

The results of the study showed a decrease in anxiety in chronic kidney disease patients who followed hemodialysis after an art therapy intervention session. Mindfulness Based Art Therapy (MBAT) is a therapy that can be used for individuals who have anxiety. This study supported by research conducted by Monti and friends (2006). The results of this study conclude that MBAT interventions can reduce negative emotions (such as stress, anxiety and depression) and improve the quality of life in cancer patients. This is because the main key of MBAT, namely awareness of the present. Then, through art media patients who have anxiety can express their feelings by making various illustrations. Through art media, feeling stimuli and

awareness can also be trained to become more focused. Drawing activities are also said to be a stress reliever and help individuals to be better prepared to face conflict and know themselves (Malchiodi, 2003).

In patients with chronic kidney disease who undergo hemodialysis, patients experience anxiety, both mild and low to high anxiety. Patients tend to have a "stuck" mindset both in the past or in the future. Concern makes patients unable to focus on the problem at hand and find a way out of the problem at hand. MBAT on this intervention will train and help participants to be able to express feelings that are difficult to verbally express. Then through art therapy a person can also release his unconsciousness such as fear, pressure, things that cannot be consciously accepted (Kalmanowitz & Rainbow 2016).

The diverse results obtained from the six participants can be caused by internal factors such as age, sex, length of time following hemodialysis, social status, employment status, and marital status because each participant experiences different individual experiences. Another thing that supports the success of this intervention is the formation of good report cards so that participants can enjoy and cooperate fully in carrying out the interventions carried out. From the process of meditation to bring the focus of participants into the present, expressing feelings through art media, to form a positive mindset to face the future that will succeed when participants are able to provide totality in participating in each therapy session.

MBAT is effective in reducing anxiety among six patients with chronic kidney failure who follow hemodialysis, so it can be concluded that MBAT has benefits for chronic kidney failure patients who follow hemodialysis. The final note from this discussion is that you need to be aware that chronic kidney failure is a terminal illness so that MBAT is not to heal physically but to deal with emotional symptoms that arise as a result of the treatment process in this case is hemodialysis.

Further Research Questions

Based on the results obtained from this study, with all the advantages and disadvantages, is expected to be useful for further research. Such as taking a sample of participants from other terminal illness patients such as patients with HIV / AIDS, diabetes, heart disease, stroke, and others. Researchers can also add more number of participants to clarify the effectiveness of MBAT. Researchers can also add more various art activities and media used in drawing so that participants can more explore art media and express their emotions in various art activities. Keep in mind, MBAT must be done by professionals who have attended special training and cannot be done without supervision to avoid undesirable effects.

For chronic kidney patients who follow hemodialysis, through this research, it can be concluded that MBAT has benefits for chronic kidney failure patients who follow hemodialysis so that in the future, MBAT can be one of the means to reduce the anxiety of chronic kidney failure patients who follow hemodialysis. For the participants, the researchers also suggested that participants continue to practice mindfulness meditation and express themselves through art. Researchers also hope that participants can maintain the positive mindset that has been developed during the

therapy process. Suggestions are also given to family members of patients to provide support and understanding given the patient's psychological condition due to the illness and the treatment process that must be undertaken.

As for the institution, which is the Hemodialysis Clinic, the advice that can be given to institutions is that the institution can provide facilities for patients. Institutions can also consider providing experts or experts in handling the psychological condition of the patient in addition to the physical condition of the patient.

References

- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D., & Williams, M. G. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and non-meditating samples. *Assessment*, Volume 15, No 3. September 2008, 392-342. DOI:10.1177/1073191107313003 by Sage Publications. Diunduh dari : <http://www.oxfordmindfulness.org/wp-content/uploads/Baer-et-al-FFMQ.081.pdf>.
- Baradero, M., Dayrit, M.W., & Siswadi, Y. (2005). *Klien gangguan ginjal: Seri asuhan keperawatan*. Jakarta: EGC.
- Brunner & Suddarth. 2002. *Buku Ajar Keperawatan Medikal Bedah*, Ed 8. Jakarta: EGC
- Dolgova, V. I. & Kormushina, N. G. (2009). *Correction of the death fear in adolescents*. Chelyabinsk : REKPOL.
- Forsyth, J. P., Eifert G. H. (2007). *The mindfulness & acceptance workbook for anxiety*. Oakland, CA : New Harbinger Publications.
- Ganim, B. (1999). *Art and Healing : Using Expressive Art to Heal Your Body, Mind and Spirit*. New York, NY : Three Rivers Press.
- Hooley, J. M., Butcher, J. N., Nock, M. K., & Mineka, S. (2017). *Abnormal Psychology* (17th Ed.). Boston, Ma: Pearson Answers.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York, NY : Hyperion.
- Malchiodi, C. A. (2001). *Using drawing as intervention with traumatized children. Trauma and Loss: Research and Intervention*, 1 (1).
- Rappaport, L. (2014). *Mindfulness and the Arts Therapies*. Philadelphia, PA : Jessica Kingsley Publisher.
- Rubin, J. A. (2010). *Introduction to Art Therapy : Source and Resources*. New York : Taylor and Francis Group.
- Videbeck, L. (2008). *Buku Ajar Keperawatan Jiwa*. Jakarta : EG.
- Yang, L., Lin, Y., Ye, C., Mao, Z., Rong, S., Zhao, X. and Mei, C. 2011. Effects of Peritoneal Dialysis and Hemodialysis on Arterial Stiffness Compared with Predialysis Patients. *Clinical Nephrology*, 75 (3): 188-194.

***In Search of Wellness in Hong Kong:
The Evolution of Delusive Public Space in the Metropolis***

Judy Chu, Independent Scholar, Hong Kong

The Asian Conference on Psychology & the Behavioral Science 2020
Official Conference Proceedings

Abstract

Growing from a fishing village with a small population to one of the most densely populated city and globally recognized economic body — Hong Kong has transformed into a world-renowned city with a unique history and vivid lifestyle, which has deemed her many mysteries that yet to be unfolded. However, with minimal effort spent in city planning since the colonial period, Hong Kong has never had an accessible urban lung that allows its citizens to destress. The lack of urban planning aided real estate developers to almost abuse public space as a standard practice, which further encouraged the culture of materialistic living in a subtle way. It somewhat suggested that diversified, convenient and efficient vertical living might have become the counter-argument for wellness living. During the recent social movement in Hong Kong, the notion of public and private space was being further challenged, where streets were taken over and infrastructures were organically re-programmed as exhibition galleries organically. The complexity of urbanization makes Hong Kong an ideal pedagogy to explore the tension between space use and mental health. This paper studies the evolution in the perception and cognition of public space in Hong Kong and focuses on privately owned public spaces that exist in the form of shopping malls. This mall-orientated development approach manipulates the way of living and impacts the mental health of the population, challenging both their understanding of public space and its importance to our everyday urban life.

Keywords: Heterotopia, Juxtaposition, Junkspace, Hong Kong, Shopping mall, Real Estate Development, Urban Planning, Architecture, Cognitive Mapping, Kinesthetic learning of spaces

iafor

The International Academic Forum
www.iafor.org

Introduction



(Figure 1: Top-down image of a high-end shopping mall, Festival Walk, that was built on top of a mass-transit railway station with office towers on top of it. It is a typical scene in Hong Kong's shopping malls where escalators are flying over the atrium space as connectors)

Hong Kong is a world-class city that is a geopolitical actor in all dimensions in the world today— both sectional and intersectional. This Southeast-Asian city carries the legacy of being a British colony and is now best known for its hybridized culture of both the East and West. With a dynamic cityscape and people there enjoying vibrant lifestyles, Hong Kong also bears the fame of being a shopper's paradise. While 2020 is a hard year for any city in the world because of the global epidemic of COVID-19, Hong Kong is suffering to another degree due to its social movement that has started since mid-2019 and its political status still remains unclear due to its dual-identity as a post-colonial capitalist city and a “special administrative region” under the communist People Republic of China (PRC).

With Hong Kong's unique history, it has a profound complexity in its politics and a sense of insecurity of its very own identity. While the city has decided to carry on the legacy of focusing on economic growth after the decolonization, the city renders a cyberpunk image of homogeneous skyscrapers when it comes to the discussion of how the social and cultural context cultivate the built environment and the use of space.

Without any extra effort in urban planning and adequate attention in encouraging or enforcing the design of physical space beyond the minimum per building code from the government, the built environment has magnified the urban stress through the years. It is evident that Hong Kong lacks openness and urban lungs to resilient, and it also lacks incentive to build space that celebrates wellness and humanity on the policy level.

Hong Kong's super-high dense vertical living environment and its social inequality has already attracted attention in the psychology field. Under the same context, this

essay aims to address the cultural by-product the shopper's paradise has brought to the city, and how it spatially constructs a unique way of living that is deemed to be less holistic.

Heterotopia



(Figure 2: Drone shot of a shopping mall in the appearance of a cruise surrounded by private housing estate in Hong Kong, by an Australian photographer Junaid Hassan, 2019)

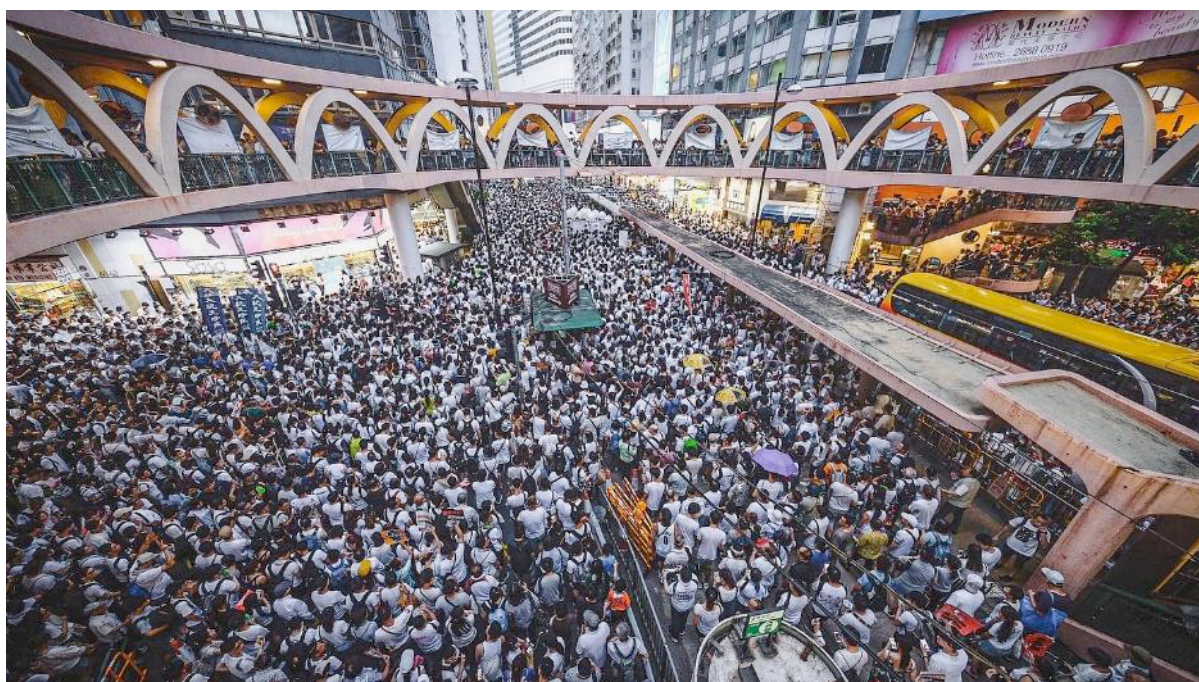
Despite the fact that exploitations exist in colonies (Foucault, 1986), Hong Kong has benefited economically, institutionally and somewhat spatially as a British outpost from its colonial years.

The British government imposed an outline zoning plan to put urban spaces in order and categorize neighbourhood and land use by function in the 1950s, followed by plans of building infrastructures such as tunnels, bridges and public housing in the following decades. The effort in structuring urban spaces to create an opportunity to build private housing can be shown in the above drone shot in Figure 2, which also included a unique appearance of a shopping mall that acts as amenities for the cluster of eighty-eight towers of residential high rise.

In contrast to the physical construction of space, the decolonization which is translated as “returning” to China developed a profound sense of social insecurity in

Hong Kong. Transitioning from auto-governance to allegiance and now to, arguably, a sovereign nation-state, the tension accumulates over time and has slowly transformed the psychological composition of HongKonger through environmental and social structures. Even though Hong Kong was known as “a borrowed space on borrowed time”, the discrepancy of attempting to align a Capitalist free market to Communist China seems to be a schizophrenic concept in nature (Choy, 2007). The use of “return” simplified the complexity of emotion and institutional hardship as it commercialized the city and its people as a commodity that could simply be “returned” after a certain duration of time. The conflict in executing “One-Country Two-Systems” is slowly becoming evident (Choy, 2007).

To “rectify” this, the Hong Kong government attempted to implement “Moral and National Education” to local school curriculum in 2010, in which “National” refers to China. If the protest activities for this proposal were understood as the first sign of resistance for being “returned” to China, The Umbrella Revolution in 2014 that made multiple international headlines could be interpreted as a society-wide objection. The occupation of public grounds and reclamation of civic space by massive street take-overs was a strong expression demanding for self-autonomy and freedom in response to such “recolonization” (Choy, 2007).



(Figure 3: Hong Kong Streetscape during the march for Hong Kong's Anti Extradition Bill in June 2019, by Terrance Ho, 2019)

With the accumulation of unsettling emotion and continuous distrust towards the pro-China government in the past two decades, the Anti Extradition Bill protest started a year ago (in March 2019) has a record-high participation headcount of two million in one of the marching in June — the biggest “fight” in Hong Kong’s history. Though the bill itself was withdrawn in late 2019 due to strong opposition by HongKongers, the demand(s) has transformed from withdrawing the bill to inquiring for transparent investigations for the overuse of tear-gas and abuse of violence. Not that it only injured protestors, medical staffs, and media crew during incidents, people were also

being traumatised of using public space after the events. In addition to tearing the city in parts, the tension between government authorities and the general public has also gone worse over time, with escalated distrust towards the police force. With one in every three adults in Hong Kong reported syndrome of PTSD after the prolong social event in January 2020 (Ni MY et al., 2020), the question is no longer how can one overcome the fear of another person or party, but the fear of being in public space.

Junkspace

“If space-junk is the human debris that litters the universe, junk-space is the residue mankind leaves on the planet.” (Koolhaas, 2002) – Dutch Architect Rem Koolhaas’s critique on the design and production of modernized shopping malls is very applicable to cities like Hong Kong today.

This essay aims to provide a new perspective to see shopping malls as a by-product of Hong Kong’s development, in which people are already feeling fatigue from sites for consumerism, yet they could not avoid it. The four sub-sections will discuss the existence of shopping mall – which is widely referred as Junkspace (Koolhaas, 2002). From learning spaces through sense to interoperating space from scale, “*Façade Visuals*” and “*Bigness in Scale*” set the bases to discuss “*(Junk)Space and Discomfort*”. The ideas will then be carried into “*Stacking Spaces*”- a brief critique for a newly opened shopping mall in Hong Kong, K11 Musea.

Façade Visuals

The dual identity of Hong Kong and the complicated politics that it naturally inherits can be translated to a juxtaposed impression of the urbanscape that is also very unique – First, the discomfiting repetitiveness of densely populated façades that arrayed along the tower that are not permeable; then the out of scale mega “air-conditioned box” podium that is stack in between the ground and high rise which is impossible to avoid in daily life.



(Figure 4: Repetitiveness in residential building captured by international photographer Michael Wolf, from the collection “Architecture of Density”, 2009)

The disconnection with nature in urban environment is one of the reasons causing discomfort in the Hong Kong. Façade design is one of the elements that directly impact a citizen’s emotion and spiritual health as they are the direct interface one will encounter in everyday life. Dull and repetitive façade design are some everyday hard

realities that kills creativity and drains one out. (Ellard, 2019) Although these might be hard fascination that foreigners are curious to seek for, it might also only be a type of tourist attraction – Hong Kong was identified “a city of workers, not for citizens” (Ng & Hill, 2002) as early as two decades ago.

While the colonial legacy brought economic opportunity and financial value to the city, in contrast to becoming a global city that could set stage for international trade, it also planted a seed for becoming a cyberpunk as the city grew and expanded.

In 1975, large-scale development took off. The local government created the metro railway network via the Mass Transit Railway Corporation (MTRC). In addition, this company also functions as land developer. Hong Kong adapts “Comprehensive Development Area” (CDA) which stands for a planning control mechanism that streamlined large mixed-use Transit Orientated Development (TOD). While it might be slightly vague and deceiving, it can very well be translated and explained as “Mall-Orientated Complex” (Al, 2016).

While Macao, a small city that was colonized by the Portuguese, became the “Asian Las Vegas” that stresses on Family Orientated Development over the years. It is to brand and design destinations to create experience within structures to favour tourism that ultimately support its core business of gambling. In contrast, the development model of Hong Kong projects an impression of celebrating consumerism and materialistic living. This way of living was introduced by the British when Hong Kong was under colonization. As the government did not change the vision of development but aim to sustain the economic growth in an aggressive way, it did help Hong Kong in earning and maintaining the attractive brand of shopping paradise as envisioned. However, it also creates a built environment that puts strain on its population, both geographically and politically, and this is the cost of prioritising economic growth over other aspects.

On an institutional level, it recognises the centrality of the mall and the importance of integrating it with other elements of daily life. However, from a local perspective, “The built product of modernization is not modern architecture but junkspace.” (Koolhaas, 2002). It has slowly made the city inaccessible at certain extremes, especially when the developer maxes out the Gross Floor Area (GFA) by extruding the envelop of the mall from the buildable plot. As a result, from the width of walkway on the street to the distance of crossing, everything seemed to prioritise vehicles rather than pedestrians. It is almost that the newer the development is, the less walkable the area is.

Bigness in Scale

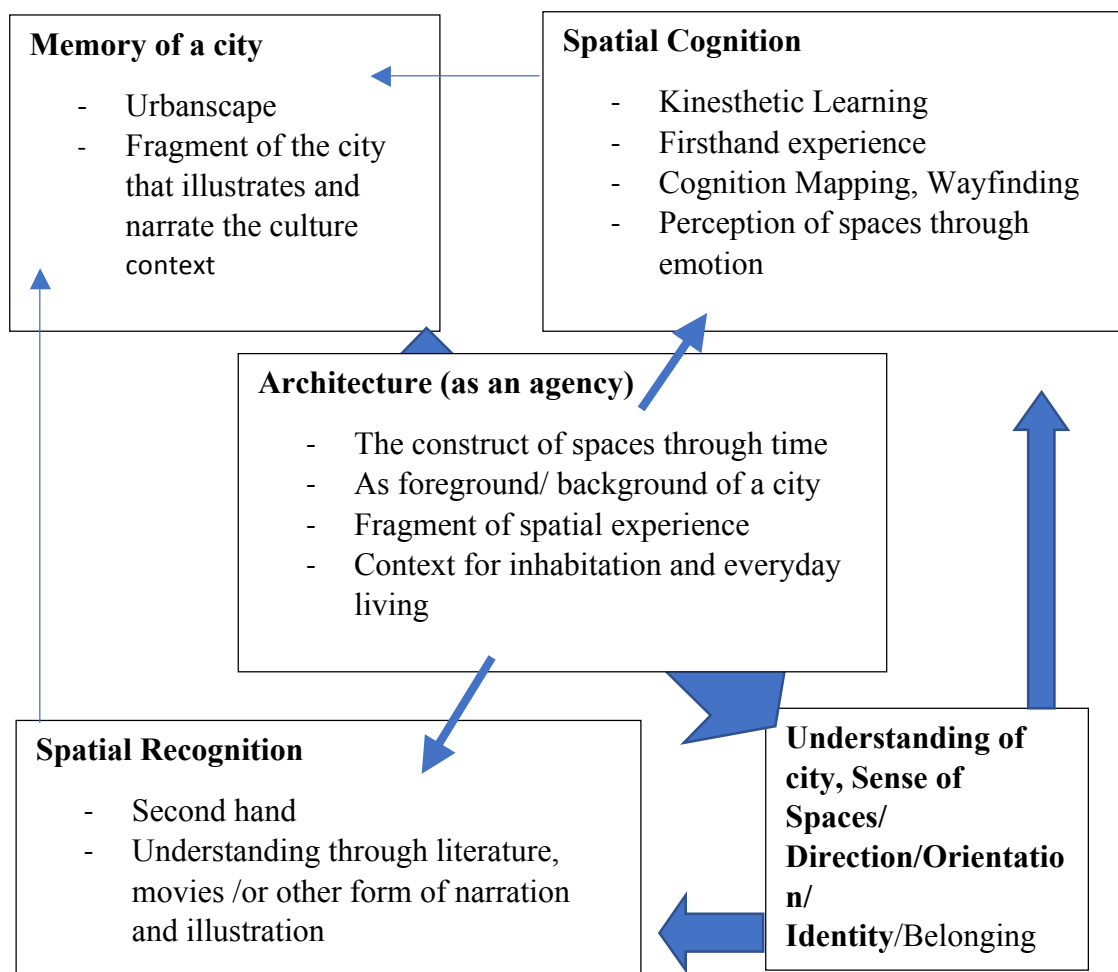


(Figure 5: Google Earth Rendering of the Union Square Development, Hong Kong, 2020)

Hong Kong's Union Square in West Kowloon is an iconic mega-structure project that has grown disproportionally out of scale. Its podium deck was played up as it is one without streets, blocks or buildings separated from each other (Al, 2016). This gigantic-scale project includes seven phases of development, comprising 18 residential towers, with 2 towers of office, hotel and service apartment mix-use, all built on a single podium mall that sits on top of the underground train station. The scale of development is almost as great as Canary Wharf in London, and such 35 acres represented a new concept of urban living, with a narration of "self-sufficient city within a city" (Al, 2016). This is a great example of how architecture design changes our way of living and the cognitive mapping of city space.

As all experience of space is a time-structured process, and all experience of time is a space-structured process (Nitschke, 1966), it is indeed scary to realize how the existence of shopping malls actually manipulate our everyday lifestyle by attempting to "normalize a culture of consumerism". Hong Kong's apartment could almost be described as micro. Therefore, the mall that is right below the apartment tower takes on the role of the public square and become the most convenient set to "play out [everyday life] on the its terrain" (Al, 2016). Especially when street-level appears to be less welcoming, or when summer becomes humid and hot – the shopping atrium, or privately owned public space, with plenty of space and free air-conditioning, becomes a default gathering place.

According to Stefan Al from the book "Mall City – Hong Kong's Dreamworlds of Consumption", "In this respect, Hong Kong's mall cities achieve the maximum potential of "Gruen Transfer", a term refers to the moment when the mall's undulating corridors lead them to simply shop for shopping's sake, rather than approaching shopping with a plan to buy a specific product." As shopping malls are stacked between everyday commutes between work and home, a large portion of the population is forced to get through commercialized zones, not by means of personal choice. In other words, "cities of production and consumption grow to reach the climax of modernism, leaving the inhabitants no chance of escape". (Al, 2016)

(Junk) Space and Discomfort

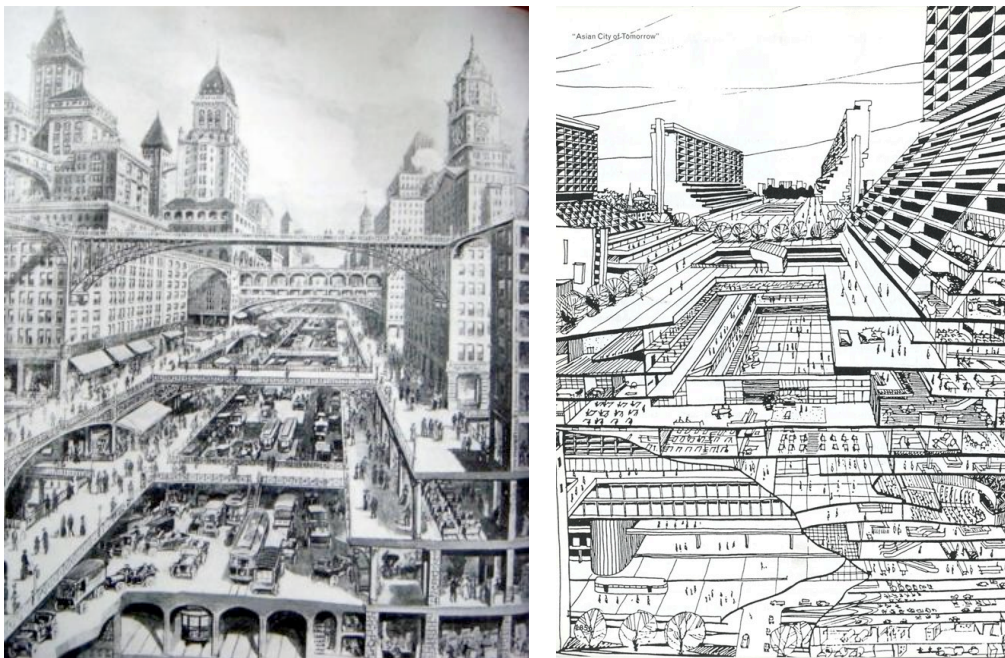
(Figure 6: Diagram to show the relationship of learning spatial experience.)

The physics equation of $s=d/t$ explains the relationship between speed, distance and time. While mass transit railway transfers bodies from one space to another at a fast pace in exchange of gaining the time through convenience, one loses the opportunity to perceive the physical distance through a biological means (Chan, 2020). Not to even mention, most of the journey takes place in an artificially constructed interior, which has no sense of orientation within the city or time through the day. Imagine if one is able to commute to work by simply going through a vertical journey of going underground from a tower (through a shopping mall), commute, and arriving underground of the workplace before escalating up through another mall's atrium – to what extent is this person able to learn the sense of space in the larger context in respect to the city?

For instance, the experience of a person leaving residential tower, and commute by bus, this person gets a sense of the contextual environment; throughout the journey, this person experiences the sense of distance and space (through time). Disorientation causes confusion, which blurs one's cognition mapping of a space. It might not necessarily cause the fading of memory of a place, but it certainly impacts the cognitive perception of spaces and sense of "being".

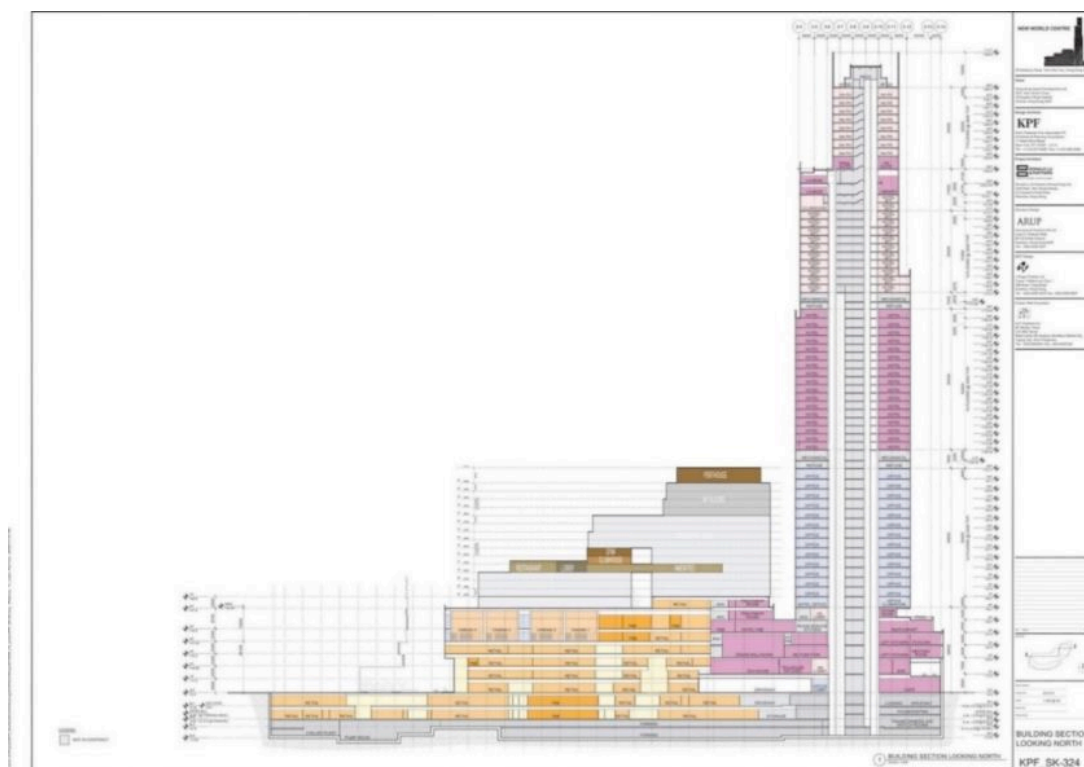
Since we construct the environment and the environment construct us, over relying on vertical mapping in daily routine will make one lack the ability to perceive a sense of distance. That is also perhaps a modern disability a proportion of Hong Kong's population share today. If Architecture can be understood as an agency for one to learn about spatial cognition and recognise a certain sense of familiarity, it built the memory of a city by fragments. This memory will become a background of the emotion and experience one associates with the structure and form (of Architecture), in which creates an understanding of the city that include a sense of orientation and identity.

Stacking Spaces



(Figure 7: The comparison of visions for future city (Corbett, 1931; Koolhaas, 1995))

From “City of Future” (left of Figure 7) by Harvey Wiley Corbett in 1931, to Rem Koolhaas’s vision on “Asian City of Tomorrow” (right of Figure 7) in 1995, these urbanists share a vision on a sectional complexity in an urban environment. While this concept of development with embedding multi-level of transportation flow is highly practiced in “mall-city” such as Hong Kong, its sense of space never feels proportional to its scale.



(Figure 8: Sectional diagram that shows the programming and space use of the complex. It capture the height of each levels and major openings of the design. With orange colour representing shopping mall spaces, pink highlighted area that is dedicated for hotel-use. In addition, light purple and light pink represents the office-space and service apartment floors. Architectural Record Drawing Document, 2019)

“According to the new gospel of ugliness, there is already more junksapce under construction in 21st century than survived from the 20th ...” (Koolhaas, 2002)- Hong Kong already has more than three-hundred malls, which can be understood as a “monopolised” infiltration of everyday life.

As recent as less than a year ago, Hong Kong has opened a new mall that sits in a prime location of the waterfront of Victoria Harbour. According to “K11 Musea” (2019), it describes itself as *“sparkling new global Cultural-Retail destination and aspires to enrich your daily life ...this world-class experiential landmark brings in immersive experiences in retail, art, culture, entertainment and gastronomy, all under one roof”*. It can be seen in the sectional diagram above (Figure 8), even though this shopping mall design (shown in orange) does not directly link to the mass transit railway system, it also falls into the typical typology of acting as deluxe amenities to the luxurious tower of mix-use.



(Figure 9: Exterior Photo of K11 Musea, over-looking the iconic Victoria Harbour, 2019)

“Continuity” is the essence of junkspace: *it exploits any invention that enable expansion, deploys the infrastructure of seamlessness: escalator, air conditioning...Junkspace is sealed, held together not by structure, but by skin, like a bubble.* (Koolhaas, 2002) This *junkspace*, K11 Musea, was opened eight months ago, and it is also the 12th shopping mall that resides in this area. Regurgitation is the new creativity; instead of creation, which we honour, cherish and embrace manipulation (Koolhaas, 2002). The “over-designed” and “over-branded” new mall, is very disappointing.

With great location on a prime site, the design could have been more generous in sharing the context with its user or showing more appreciation to it. Not only that this design did not show any interaction with the precious waterfront in front of it, the forceful act of directing street level circulation back into the *Junkspace* made it into another homogenous development, leaving pedestrian no chance to escape from commercialized areas.

The impermeable façade, again, solidify the street level visual towards this mega-structure. The “bigness” of it magnifies the distance between the core and envelop that increased to the façade can no longer reveal what is happening inside. The connection between interior and exterior were cut off and *the humanist expectation of “honesty” is lost* (Koolhaas, 1995). The super-high ceiling on the ground level that was revealed from the storefront also create an exceptionally out of human scale feeling. In short, *Junksapce thrives on design, but designs die in junkspace* (Koolhaas, 2002).



(Figure 10: Interior Photo of K11 Musea featuring its iconic ceiling, 2019)

The extreme disconnection between the exterior and interior design creates a sense of discomfort when one looks up to its iconic futuristic interior atrium. The over-articulated ceiling, choice of colour palette, interior use of material, preference of lighting design is not cohesive at all and if anything, they have made it more awkward. If Architecture is about creating an environment of comfort for euphoria, this interior design overall causes schizophrenia. Although there might be great design incentives to start with, or some thoughtful intellectual elements in the process of design, *“all materialization is provisional: cutting, bending, tearing, coating: construction has acquired a new softness, like tailoring...The joint is no longer a problem, an intellectual issue: transitional moments are defined by stapling and taping, wrinkly brown bands...”* (Koolhaas, 2001) – K11 Musea’s dimmed interior clearly set it aside to its competitor, but in weird way that translated the cyberpunk of high-tech yet low life to reality. With a lot of marketing effort that stressed on the unique shopping experience with the enhancement of art and culture, even the design was highly praised by some local, is it only a *“potential utopia clogged by its users”* (Koolhaas, 2001).

Re-learning Architecture

The importance of Architecture that cultivates a city is under-recognized by government in Hong Kong. It might as well be underappreciated, as there were no

effort in conservation until the recent decade. From the amount of resources used in promoting and educating the citizens in architecture from a cultural perspective, it reflects a weak government in envisioning this city's future. When top-down approach did not work in this situation, it requires the real estate market and design professional to take a more proactive role. If the market desire higher quality spaces, there will be new design needs requested by real estate developer. This will open up new opportunities for architects to react to the problem with a more proactive role to improve a city through design. In simple words, spaces of quality are luxurious goods in Hong Kong. Only if the market force were pushed to real estate developer, it is hard to depend on the building design and construction industry to create new way of living.

Redefine Efficiency

What does efficiency really means when people are cramped in micro units that barely fulfil the basic requirement of having adequate daylight and natural ventilation? Although it is quite impressive to house 7.4 million people on limited buildable land in Hong Kong, the urban typology only reflects its "efficient" way of living by quantitative numbers. Living in a densely populated city does not necessarily means livable.

Using a workplace design as example, the design approach can drastically change the result. Efficiency could be define as "this floor plate size can fit 250 work stations, therefore the design can accommodate 250 employees working in their cubicle"; while efficiency could also be understand as "this floor plate design can fit 120 employee, in which it provide a harmonious environment for them to excel their the maximum potential at work". If space design is to favor people, the measures has to be human-centered as well.

Architecture in Hong Kong is practical. "Efficiency" is not only a priority, but desire, or even benchmark of measuring the end goal of a development. If Architecture could be understood in a more romantic manner, the quality of space would be the most important out of everything. If only Architecture could be understood as giving medicine to a sick body, it could also be a solution to improve city space by fragments – HongKongers are very much capable of reinventing themselves in a positive way. To make this analogy work in a practical city like Hong Kong, it needs a strong market force with the incentive from the government to justify the paradigm shift.

Government Intervention

Architecture itself is a very powerful tool of invention for everyday experience, but the high land price, developer-driven market in Hong Kong has almost distort the understanding and education of the art of Architecture. With countless shopping mall in Hong Kong, they become sites to support economic growth and attract tourism. It played a role in maintaining Hong Kong's economic growth and status of a world city for the last two decades. However, the mall-orientated development model has also "chronically killed" the city by providing space of consumption that is not something its people need.

In contrast, some other Asian cities like Singapore, had great incentive in the promotion of green building. The proactive approach in creating incentive on a policy level, has allow new spaces to excel their biggest potential in healing the sick urbanscape. While Singapore's new addition to the Jewel Changi Airport could also be described as having a jungle within the airport, it managed to re-introduce nature to the urban environment, and put it at high priority. The implementation of soft fascination of nature, plays an essential role as site to release urban tension. As there are sites to slow down and de-stress, adding a touch of human sense to the environment and make it more livable.



(Figure 11: Iconic atrium within the new addition of Jewel Changi Airport in Singapore. It is a mixed-use development by architect Moshie Safdie including gardens, a hotel, aviation facilities, a shopping mall and a 40 meter indoor waterfall – current the world's largest. Photographed by John Seton Callahan, Getty Images, 2019)

It is not the past projections of the future that governs the potential of a city, but the extent of a government's desire in making it a more human-centered place. Hong Kong lack great policy that governs building design and construction, as the government had not been proactive enough in solving problems through space design. Perhaps the city must design and expand in reference to the Mass Transit Railway network, but would there be any chance that what we get on top of the mass transit is no longer a deck of shopping mall that has impermeable façade? Could there be some accessible real "public space" and "open space" in this respect?

Towards Resilience

This essay unpacked how the real estate development trend eventually turn Hong Kong to be a mall city and reflected on how they now become "Junkspace": The materialistic way of living under modernization that created a distorted need for the production of the construction of shopping malls. "*Façade Visuals*" and "*Bigness in Scale*" discussed a design culture that is unique to Hong Kong. "*(Junk)Space and*

Discomfort” attempt to address the inter-related element of emotion, feelings and space, that suggest potential affects “*Stacking Spaces*” have to our daily life.

Shopping malls in Hong Kong are owned by real estate developer while public space should be publicly owned. This is an obvious by-product of mall-orientated development, which suggests that the root of the problem could be the way of development – even if it happened through private-public partnership or joint-ventures. The sense of heterotopia in “privately owned public space” is very strong due to the sense of surveillance. When private developer has their own set of regulations, the level of restriction on top of a “public space” is high enough to deem it no longer “public” in a physical sense.

On the industrial level, the building design and construction industry should also reflect the need of incorporating other professions in the process of building design and construction. For instance, “Sustainable design”, “Green building”, “energy efficiency”, “net-zero” are concepts around how a building perform instead of how can built environment encourage people for healthier choices and social behaviors. How is a building being managed that restrict or inform behavior is also a topic within the scope that worth to explore. This is not something geographically unique to Hong Kong but a new sandbox that all cities should try to explore.

Conclusion

Under the backdrop of social unrest cause by COVID-19 on top of the unsettling emotion from the prolong protest from last year, the concepts in Hong Kong’s future urban planning and design must need to change. Today’s Hong Kong is in urgent need for developments to push back, and more importantly the government should set an explicit framework to lead the industry to create a future city that is both healthier and more holistic. With all these questions about the future design of Hong Kong, this city is still full of potential to explore that opens up great opportunity to experiment with a more innovative, yet humane ways of city living.

References

- Al, S. "Introduction," *Mall City*, 2016, 1-15
- Archdaily, K11 Musea Photo Album, 2019
<https://www.archdaily.com/927244/k11-musea-hong-kong-kpf-plus-rlp>
- Chan, J. "我們在城市患上「距感殘障」" 明報世紀版, 2020
- Choy, H.Y.F "Schizophrenic Hong Kong: Postcolonial Identity Crisis in the *Infernal Affairs* Trilogy", *Transtext(e)s Transcultures 跨文本跨文化*, 3 | 2007, 52-66
- Ellard, C. "Testing, Testing! – A Psychological Study On City Spaces And How They Affect Our Bodies and Minds" BMW Guggenheim Lab, 2013
<http://www.bmwguggenheimlab.org/testing-testing-mumbai>
- Foucault, M. "Of Other Spaces," *Diacritics* 16 (Spring 1986), 22-27
- Ng, M. K. and Hills, P. "Hong Kong: World City or Great City of the World?" *HKU Press*, 2000
- Ni, MY, Yao X, Leung KSM, Yau C, Leung CMC, Lun P, Flores FP, Chang WCC, Cowling BJ, Leung GM. Volume 385, Issue 10220 "Depression and post-traumatic stress during major social unrest in Hong Kong: a 10-year prospective cohort study" *The Lancet*, 2020 273-284
- Nitschke, G. "MA — The Japanese Sense of Place," *Architectural Design*, 1966
- Koolhaas, R. "Asian City of Tomorrow," *SMLXL*, 1995
- Koolhaas, R. "Junkspace" *October, Vol. 100, Obsolescence. (Spring, 2002)*, 175-190
- Koolhaas, R., Mau, B., "Bigness or the problem of Large," *SMLXL*, 1995 pp. 499-500

Chinese Permanent Residents in Japan
A Qualitative Study on Acculturation Strategies and Mental Health

ShiZhe Zhao, Aichishukutoku University, Japan
Tomoko Tanaka, Okayama University, Japan

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

The aim of this study is to analyze the relationship between mental health and acculturation strategies of Chinese who have Permanent Resident visas in Japan. In this study, we used Berry's Acculturation Strategies Model and conducted semi-structured interviews with 10 Chinese people who had Permanent Resident visas. This qualitative inquiry examined the acculturation strategies they preferred, how they get along with Chinese and Japanese friends, their familiarity with the two cultures, and their mental health conditions. Using the KJ method, we found that the same participants who exhibited "assimilationist" characteristics at the workplace also preferred "separationist" strategies in their private lives. This phenomenon, which is most likely unique to Japan, has been called "switching". It also exists when they are with Japanese or Chinese friends. In this study, we borrowed the concept of a "superordinate identity", an identity not constrained by a fixed ethnic or host identity, from a study on Zainichi Koreans living in Japan. We conclude that the "superordinate identity" also exists in Chinese permanent residents of Japan. However, from the explanations the participants gave, we found that their thoughts on their identity were different from Zainichi Koreans. The differences are discussed in the ways they deal with the two cultures. There was no clear relationship found between mental health conditions and acculturation strategies. The similarities between Chinese culture and Japanese culture most likely make it easier to adapt to Japanese society. Participants' extended time in Japan may have familiarized them with Japanese culture and social rules.

Keywords: Acculturation Strategies, Chinese, Japan, Permanent Resident, Mental Health

iafor

The International Academic Forum
www.iafor.org

Introduction

1.1 Background

As the number of foreigners in Japan has begun to increase, issues regarding their intercultural adaptation conditions have become increasingly pronounced, and thus these issues have become increasingly important to pay attention to.

Most of the research on intercultural adaptation has focused on international students (Tanaka, 1998; Tanaka & Fujiwara, 1992). Since long-term residents are apt to seem as though they have already adapted to Japanese society, there is little research on long-term residents of foreigners living in Japan, and the real condition of their adaptation situation still has not been investigated.

In 2006 the Japanese government revised the “Guidelines for Permission for Permanent Residence”. Before this revision, people living in Japan for at least 10 years were eligible to apply for a permanent resident visa. However, after the revision, some special cases were accepted to apply for a permanent resident visa, even though the applicants had not been living in Japan for 10 years. Due to this revision, it became easier for foreign residents to apply for a permanent resident visa. From 2006 to June 2019, the number of people increased by about 390,000 (Ministry of justice, 2020).

Chinese have been the largest ethnic group in Japan since 2007. As of June 2019, the Chinese population in Japan exceeded 780,000, and about 270,000 of them had permanent resident visas, which means that one third of Chinese in Japan could live in Japan for an extended period. However, most research on Chinese also focuses on international students. Although the number of long-term residents in Japan has been increasing, the vast majority of research on these residents has been based in sociology, not psychology.

1.2 Literature Review

Acculturation strategies can be considered as one factor that influences intercultural adaptation. Acculturation strategies are the methods people use to deal with acculturation. According to Berry (2019), acculturation is the process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members. It is considered that in the process of acculturation, acculturation strategies influence acculturative stress, behavioral shifts and adaptation to society.

Berry et. al. (1989) used two essential questions, “Is it considered to be of value to maintain cultural identity and characteristics?” and “Is it considered to be of value to maintain relationships with other groups?” to examine acculturation strategies. For conceptual purposes, “yes” or “no” were used as answers. A fourfold model was created by four types of combinations of the answers. The four options are assimilation, integration, separation, and marginalization (Berry et. al., 1989).

Adaptation is a concept which refers to how well individuals succeed in daily life in their own group as well as in the larger society (Berry, 2019), many scholars pay

attention to the relationship between acculturation strategies and condition of adaptation. In most research on acculturation, the integration strategy has been found to lead to better adaptation than other strategies (Berry, 1997). Although considerable research has been done on the relationship between acculturation strategies and the condition of adaptation, Chinese in Japan are rarely investigated as subjects in acculturation research itself. Before finding out which acculturation strategy leads to better adaptation, it is necessary to clarify what an acculturation strategy is to Chinese long-term residents.

As a result of reviewing research focusing on acculturation strategies of Chinese overseas in other countries and their mental health, it was found that not all research which supports “integration” is connected to better mental health (Zhao & Tanaka, 2019). Only a small portion of research on acculturation strategies has been done on foreigners living in Japan.

According to a study on Chinese international students in Japan, among the four acculturation strategies, only marginalization was positively related to GHQ (Sun, 2013). This result suggests that marginalization may be more risky than the other three acculturation strategies. Besides this result, Sun (2013) also mentioned that marginalization was the second most preferred acculturation strategy after integration. In the other words, there are many Chinese international students in Japan who are classified as marginalizationist, the riskiest acculturation strategy. However, it is still unclear how long-term Chinese residents in Japan are classified to the 4 acculturation strategies, or which acculturation strategy is better to adapt to. More research should be conducted on this topic.

Several sociological studies found that Koreans in Japan want to eliminate fixed categories such as Japanese or Korean. They prefer to call themselves human beings, individuals, or cosmopolitans. Some studies on psychology found that the categories defined by Berry could not effectively categorize all of their subjects in their own study and included an additional categorization: “citizens of the earth”, referring to their superordinate identity (Lee & Tanaka, 2010; Lee & Tanaka, 2019). It has not been confirmed if this phenomenon is the same as diaspora in western countries. Most likely it is unique to Japanese society. Since the superordinate identity has not been confirmed among Chinese in Japan, the existence of this concept and how to explain this concept should be explored first. It is considered necessary to do more research in Japan on other ethnic groups. In order to explain superordinate identity, looking into how people connect to two cultures cannot be avoided, in other words, how well they are maintaining their cultural identity and characteristics, and how well they are maintaining their relationships with Japanese society.

Assuming that acculturation strategies are important factors that influence adaptation (Berry, 1992), the question of how acculturation strategies affect adaptation situations of long-term Chinese residents in Japan should be investigated. Using one item, “subjective happiness”, to test positive aspects and using another, “whether subjects feel stress due to cultural differences”, to test negative aspects seemed appropriate for a first step in research.

1.3 Research Plan

The goal of this study is to examine the present day acculturation strategies among Chinese long-term residents in Japan, as well as to confirm if a superordinate identity exists; that is, assuming that Chinese permanent residents may be classified into 4 categories. Furthermore, will explore how Chinese permanent residents express their superordinate identity, the extent to which they accept Japanese culture, and the extent to which they maintain Chinese culture. Last, in order to examine the relationship between acculturation strategies and mental health, questions about happiness and acculturative stress will be asked.

2. Purpose

The four research questions for this study are as follows: 1) How do long-term Chinese residents choose their identity category? 2) Can the superordinate identity be found among them? 3) How do their attitudes on the two cultures connect with their choice? 4) What is the relationship between their mental health and acculturation strategy?

3. Method

A semi-structured interview was chosen as the method for collecting data. 10 Chinese living in the Chubu region in Japan participated in this study. Two of the ten participants had permanent resident visas (P. R.). One had a business manager visa (B.M.), and one had a highly skilled professional visa (H.S.P.). The latter two kinds of visa are equivalent to permanent resident visa status, for all intensive purposes within this study, since they are allowed to live in Japan for an extended period. Interviews were conducted one-on-one with the first author of this study, between the dates of October 2019 and February of 2020. Interviews averaged 90 minutes in length. They were tape-recorded and then transcribed. The interviews were conducted in Mandarin Chinese and Japanese.

Anonymity was promised in order to ensure ethical conduct. Participants were told the goals of the study and ensured of their privacy. After obtaining their consent, basic information was asked. This information can be seen in table 1.

No.	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	NO.9	NO.10
Sex	F	F	F	F	F	F	M	M	F	M
Age	46	34	36	38	42	39	50	42	40	43
Years of staying in Japan	28	8	14	19	24	9	26	22	16	19
Visa	P. R.	P. R.	P. R.	P. R.	P. R.	P. R.	P. R.	P. R.	H.S.P.	B.M.
Occupation	Part-time lecturer	Language school lecture	College lecturer	Self-employed (travel agency)	Self-employed (Chinese restaurant)	Part-time company employee	Self-employed (construction company)	Self-employed (IT company)	College lecturer	Self-employed (travel agency)
Spouse	Japanese	Japanese	Chinese	Single	Japanese	Japanese	Naturalized Japanese	Chinese	Chinese	Chinese
Number of children	1	0	2	1	3	2	3	3	2	3

Table 1: Basic Information

After receiving participants' answers on the two questions designed by Berry et.al. (1989), the concept of integration was explained. In order to understand the participants' reasoning for their answers, 7 questions were prepared, as below. The answers can be seen on table 2. 1) Do you have more Japanese friends or Chinese friends? Do you experience any differences when you are with Japanese people as opposed to Chinese people? 2) Do you want to maintain your Chinese culture? 3) On a scale of 1 to 10 how Japanese or Chinese do you feel you are? 4) On a scale of 1 to 10 how integrationist do you feel you may be? 5) After explaining the superordinate identity participants were asked, "Do you want to be regarded as a citizen of the earth?" 6) which category (Chinese, Japanese, Integrationist and superordinate identity) do you believe you could fit in the best? Why do you think so? 7) Do you feel happy currently? 8) Do you experience any stress in your life due to the differences between the Chinese and Japanese cultures? The interview questions used were based upon a review of the literature (Lee & Tanaka, 2010, 2019; Li & Sano, 2009).

We analyzed how their attitudes on the two cultures connected to their choice of categories, using the KJ method (Kawakita, 1967). 446 cards were made in total, 45 cards per participant. 4 figures and 1 table were created by comparing these cards, by putting the similar cards together in groups, finally, groups were assigned titles. Details can be seen on figure 1, figure 2, figure 3, figure 4, and table 3.

4. Findings and Discussion

4.1 Results of Acculturation Strategies

We asked our participants which category they believed they fit in best. Out of the 10 participants, 7 answered that they identified themselves as being Chinese, 2 identified themselves as being integrationist, 1 identified themselves as a citizen of the earth, and none identified themselves as being Japanese (Table 2).

Number Question	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10
Number of friends	Currently, more Chinese friends	Currently, more Chinese friends	More Japanese friends	More Japanese friends	Doesn't have contact with Chinese people very often.	Have some Japanese friends from work and children's friends' parents.	Has 2 Japanese friends.	More Japanese friends. Doesn't have contact with Chinese people very often.	Got more support from Japanese than from Chinese	Have 5 or 6 Japanese friends.
Socialize differently	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Desire to maintain Chinese culture	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Feeling of being Chinese : Japanese	8:2	5.5:6.5	9:7	10:1	5:3	4:7	6:5	9:6.5	3:5	9:7.5
Feeling of being integrationist	10	7.5	8.5	Unable to understand	6	8	Unable to understand	Not being integration	8	8
Willingness to be regarded as superordinate	No	No	Yes, a citizen of the earth	No	No	Yes, cosmopolitans	No	Unconcerned with the title	Yes, a citizen of the earth	No
Category choice	integrationist	integrationist	Chinese	Chinese	Chinese	Chinese	Chinese	Chinese	A citizen of the earth	Chinese
Subjective happiness	Happy	Relatively happy	Not very happy but not unhappy	Not ideal life not miserable	Far from happy, but basically happy	Depends on children	Happier than living in China	Not unhappy	Relatively happy	Happy
Stress due to cultural difference	No	No	No	No	No	No	No	No	No	No

Table 2: Answers of the 7 Prepared Questions

Participants who chose Chinese as their self-described category also included reasons for why. They attached the greatest importance to a person's lineage, they emphasized their early education in China, and they believed their roots were in China.

Participants who chose integrationist as their self-described category, believed that living in Japan for many years was a significant event in their life. They also felt confident in their ability to blend Chinese and Japanese cultures into one. For example:

I would like to describe myself as Chinese, but integrationist is more suitable for me. Integrationist refers to the person who has not only mastered Chinese culture and

Japanese culture, but also has the ability to blend multiple cultures into one or effectively finds a balance in different cultures. If everyone could have these kinds of abilities, the world would have no problems. (No.1)

If I had never lived abroad, I would have described myself as Chinese without any hesitation. I was born and brought up in China; however, I have been in Japan for a long while and I have a Japanese family. So, I cannot call myself one hundred percent Chinese now. (No.2)

One of the two participants who chose integrationist as their self-described category, showed a negative attitude towards superordinate identity.

People who want to be called citizens of the earth want to be called so because they have no sense of belonging. People who have a sense of belonging don't emphasize freedom. Because they have no place to belong to, they probably want to feel free of any categorizations. (No. 1)

The only participant who chose superordinate identity as her self-described category, called herself “a citizen of the earth”, in daily life. She did not want to be limited to only two cultures and used this self-described category as a tool to resolve problems. This participant stated:

At work or in daily life, I am sometimes regarded as or requested to behave as a foreigner or as Chinese, by Japanese people. When I face this kind of situation, I like to make jokes and tell them I am a citizen of the earth. Behaving in this kind of way, I can resolve some awkward situations. I like to refer to myself this way. Sometimes people disagree with each other because of their different nationalities. If that is true, why don't we avoid the risk in advance? (No. 9)

Participant 9 also gave comments on the integrationist identity.

I think citizens of the earth are on a higher level than integrationists. Integrationists probably think that they have no business with me. They may think that I'm outside of the situation, I don't need to be concerned with the situation. However, “citizen of the earth” is different. One needs to be involved in the situation. (No. 9)

She emphasized that one must first become an integrationist before becoming “a citizen of the earth”.

4.2 The Explanation of the Superordinate and Integrationist Identity

One of the purposes of this study was to find out if the superordinate identity could be found among Chinese in Japan. Because three out of the ten participants showed positive attitudes towards a superordinate identity (No.3, No.6, No.9), and just one of them (No.9) chose a superordinate identity as her self-described identification, it can be concluded that superordinate identities exist among Chinese.

All of us are members of the earth, I like to pay more attention to the common traits all of us have. The feeling that I come from the earth, just as the feeling that I come

*from China or that I come from ** province... Everyone is a person on the earth. (No.3)*

I'd like to call myself "cosmopolitan". I think "either Japanese, or Chinese" is not a good way to think...If I were a cosmopolitan, I don't need to worry about my children's identities in the future. (No.6)

The explanations from No.3, No.6 and No.9 were categorized as positive, negative, and neutral attitudes. Participants' attitudes and behaviors towards superordinate identity can be seen in figure 1.

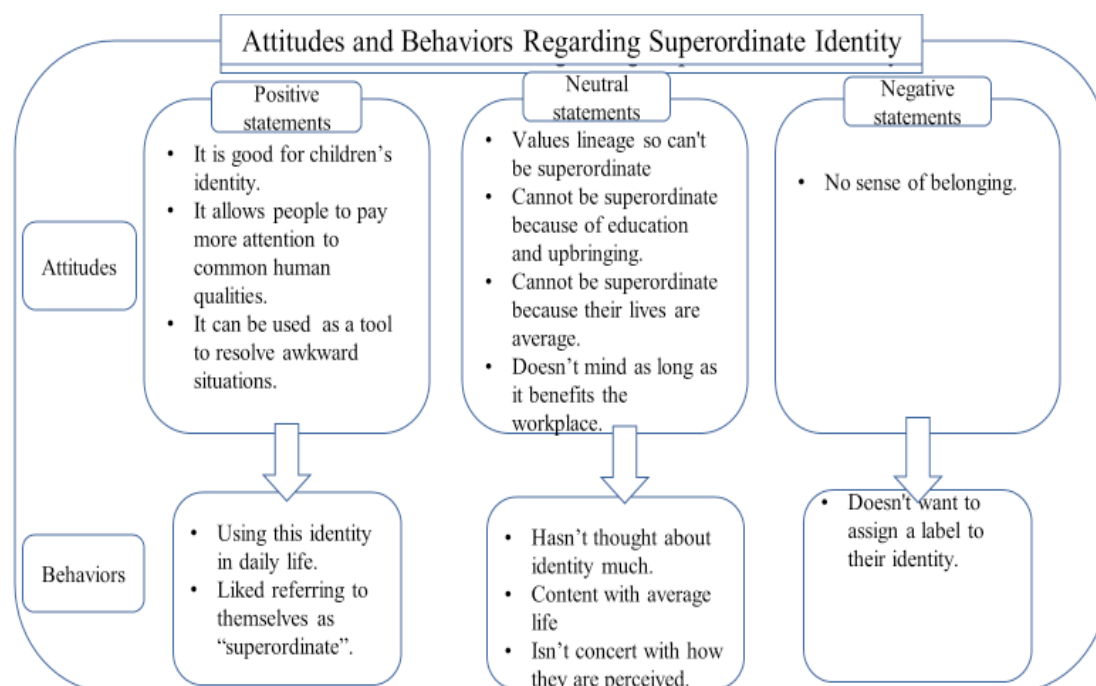


Figure 1: Attitudes and Behaviors Regarding Superordinate Identity

Besides the superordinate identity, a few participants showed they could not understand the concept of integrationist.

Being honest, I don't understand the meaning of integrationist. I don't like to identify others or myself using this word. I can understand "Chinese overseas" though. (No.4)

Since I haven't heard this word before, I can't understand. I can't understand what I should integrate. As myself, I think I separate the two cultures. I don't think I can treat Chinese people in the same way I treat Japanese people. I must change my mannerisms when I am with Chinese people or Japanese people. (No.8)

One of the participants did not answer how much he feels about being an integrationist.

Since I have already been in Japan for a long time, I must adapt to Japan. However, from the point of view of my work, it's true that I don't get along well with Japanese. I think they are more or less exclusive. (No. 7)

Participants who could understand integrationist also mentioned several of what they thought the qualities of being an integrationist were. It seems as though people need these kinds of abilities in order to be an integrationist. In figure 2, the reasons for not understanding the concept of integrationist or alternative ideas from the participants, the explanations of integrationist, and necessary qualifications of being integrationist can be seen.

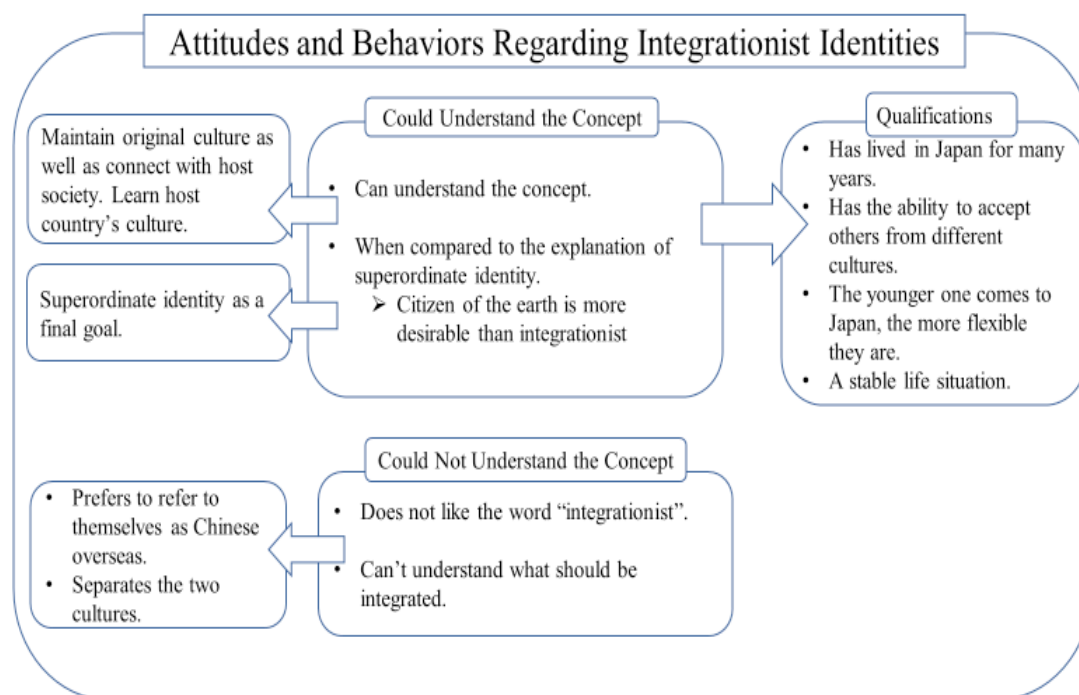


Figure 2: Attitudes and Behaviors Regarding Integrationist Identities

4.3 Reasons for Choosing a Superordinate or Integrationist Identity

In this study, the reason for choosing the superordinate or integrationist identity will be examined from a cultural perspective.

4.3.1 Relations to Two Cultures

The participants were asked, "On a scale of 1 to 10 how Japanese or Chinese do you feel you are?" Two participants identified with the integrationist identity. While one participant rated her degree of feeling Chinese higher than her feeling of being Japanese, the other rated her feeling of being Japanese higher than her feeling of being Chinese. The participant that identified herself as a citizen of the earth, rated her feeling of being Japanese higher than her feeling of being Chinese. Even in those who identified themselves as Chinese, one rated their degree of feeling Japanese higher than their feeling of being Chinese.

Although some of the participants did not agree with Chinese culture, all ten participants answered that they would like to maintain their Chinese culture (figure 3). However, feeling distant to Chinese culture when going back to China was also mentioned.

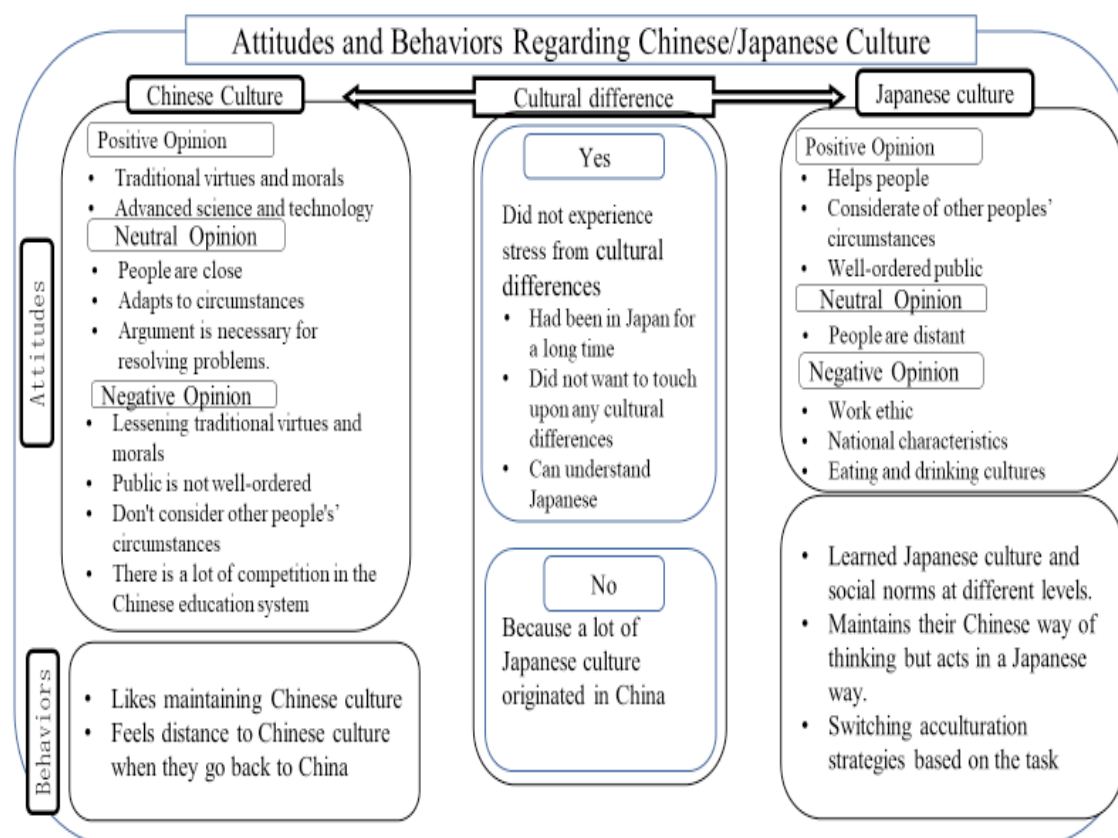


Figure 3: Attitudes and Behaviors Regarding Chinese/ Japanese Culture

Although the participants did not always have the same views of Japanese culture, they mentioned that they learned Japanese culture and social norms at different levels. For example, on an outer layer, imitating facial expressions and gestures of Japanese may protect oneself from being excluded.

For example, always bow, keep bowing when you exit a room. Angling my head in such a way made me appear more Japanese to my Chinese friends... If you can behave like this, you may merge into the host society, you won't be separated out. (No.4)

As a result of staying in Japan for an extended period, participants began to understand Japanese mannerisms and began to acquire their social rules.

I agree with the saying "when in Rome, do as the Romans do". For example, when I go outside, I like to make sure my manners and etiquette appear Japanese. (No.2)

I think I have already gotten used to Japanese customs... I grew up in China, I still maintain a Chinese way of thinking. But, since I often deal with Japanese, I can understand the way they are talking and the way they are thinking. Sometimes I copy their way when I do my job... it is necessary to follow their way if you stay in Japan for a long time. (No.7)

Furthermore, some participants reported that they had learned some values from Japanese.

When I had been living in Japan for a long time, I realized that I should be attentive to others. For example, when I want to take a day off, I need to ask other colleges whether they want to have a rest on the same day or not... In China it is very normal to ask parents to take care of one's children. I think I've been influenced by Japanese and I'm relatively independent. I began to consider situations from others' positions.

Even though they learned some Japanese values, sometimes they still thought in a Chinese way., Nonetheless they took actions in a Japanese way.

I obey the social rules but sometimes I don't think it should be that serious. For example, I put garbage in the bags specified by the city, but I don't think it is necessary. All we need to do is to put out the garbage at the trash station on a specified day. This kind of thinking is still different from the Japanese way of thinking. I respect the social rules, I understand them, however, in some places in my heart, I wish they could be more flexible.

From the statement above, it can be supposed that sometimes participants' behavior and their thinking are different. They obeyed the social rules and behaved in a Japanese way, however much they kept their Chinese way of thinking (No.3, No.4, No.5, No.7, No.9). Participants who identified themselves as integrationist or superordinate, were often told by the Japanese people in their lives that they are remarkably similar to Japanese people. If unable to adapt to the host society, it is increasingly difficult to develop identities like citizens of the earth or integrationist identities.

4.3.2 Switching Acculturation Strategies

In consideration of the findings of this study thus far, different acculturation strategies were given to participants based on the activity they were engaged in. On the job, assimilation strategies often prevailed, while activities involving food often fostered more separationist strategies.

No matter how long I've been in Japan, I can't accept their habit of drinking cold water. I like normal room temperature water or hot water as before. (No.3)

These kinds of changes of acculturation strategies based on task, not only showed in daily life but also in how they made friends.

4.3.3 Differences in Socialization Based on Cultural Background

All the participants mentioned they socialize differently depending on whether they were socializing with Japanese or Chinese people. Differences in time until friendships were made, frequency of meeting, degree of emotional distance, mutual understanding of how money is used, and conversation topics were some of the traits that the participants identified they had to change depending on the cultural background of the person they were socializing with. The details can be seen on table 3.

Aspects of Socialization	Socializing with Chinese	Socializing with Japanese
Number of friends	many	many (No.3, No.4, No.8, No.10)
Place of acquaintance	workplace, school	workplace, gym, neighborhood
Time until friendship	short	long
Frequency of meeting	often	2 or 3 times a year
Nature of speech	relaxed, does not need to be attentive when talking	needs to pay attention to speech uses euphemistic speech does not express one's opinion.
Degree of emotional distance	close	far
Understanding of how money is used	common to pay for each other	common to pay for themselves
Conversation topics	can express true feelings, topics are deeper	topics are limited, topics are surface level

Table 3: Differences in Socialization Based on Cultural Background

According to their statements, it seems that they socialized differently when they were with Japanese or Chinese people, and some mentioned that it was easier to be with Chinese than to be with Japanese.

4.4 Different Results Due to Different Measurements

In this study, before asking participants 7 prepared questions, the two questions designed by Berry et.al. (1989) were asked. All participants answered affirmatively to both questions, which suggests that they are all integrationists. When asked to select a particular category, only 2 identified themselves as integrationist, which suggests that different results can be obtained from different measurements.

4.5 Self-Scored Cultural Degree and Self-Described Identity

For question 3, participants evaluated how well they learned Japanese culture and how well they maintained Chinese culture. A fourfold model was created by using the mean score, based on a study conducted by Berry et. al. (1989). Details can be seen in figure 4.

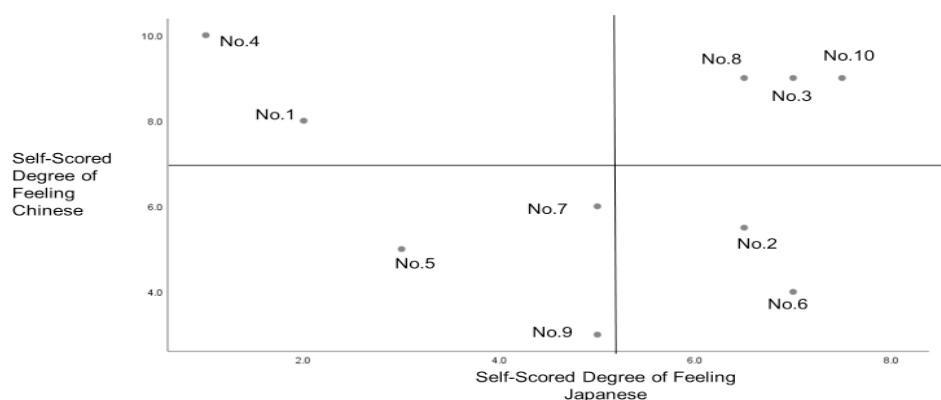


Figure 4: A Fourfold Model by Self-Scored Cultural Degree

Applying Berry's model, individuals who rated both self-scored cultural degrees higher are integrationist (upper right cell); individuals who rated both self-scored cultural degrees lower are marginalizationist (lower left cell); individuals who only rated their original culture highly are separationist (upper left cell); and individuals who rated only the host culture highly are assimilationist (lower right cell).

In this study, two participants who identified themselves as integrationist, No.1 and No. 2 were categorized as separationist and assimilationist respectively by their scores. Participant No. 9, who chose the superordinate identity as her identity, was categorized as marginalizationist. Not all the seven participants who identified themselves as Chinese were categorized into the same groups. One was classified as assimilationist, one was classified as separationist, three were classified as integrationist, and two were classified as marginalizationist. A corresponding relationship could not be found between self-scored cultural degrees and self-described identifications. None of the three participants (No. 3, No. 8, No. 10) who were classified as integrationist based on their scores identified themselves as integrationist. On the other hand, those who called themselves integrationists (No. 1, No. 2) could not be classified into the integrationist category cell.

4.6 Self-Described Identity and Mental Health

4.6.1 Subjective Happiness

No big differences in subjective happiness could be found among different self-described identities. As this is a qualitative study, the differences among explanations on happiness were made apparent. Some of the participants answered directly they were happy, however some of the participants gave their answers indirectly. For example, they stated that they do not ordinarily experience unfortunate events, that they were happy. Thus all participants responded that they were happy.

4.6.2 Cultural stress

Even though differences between the Chinese and Japanese cultures were recognized, all of the participants answered that they did not feel stress due to the cultural differences. The reasons can be seen in figure 3.

One of the participant's answers was particularly interesting as it claimed that there were no cultural differences between China and Japan.

A lot of Japanese culture originated in China. I don't think there is a big difference between the two cultures. It seems that there is some difference between the two cultures because Chinese people were unable to maintain their own traditional cultural values while Japan was able to maintain these original cultural values which originated in China. (No.1)

One, out of the ten participants, as stated above, responded that there is no difference between the two cultures.

5. General Discussion

5.1 Regarding Superordinate Identity

In this study, we assume that the concept of superordinate identity also exists for Chinese living in Japan, since there were participants who identified themselves as citizens of the earth. However, according to the different explanations about superordinate identity given in figure 1, those explanations differ from the research on Zainichi Koreans (Korean residents living in Japan), which had a relatively consistent explanation about the superordinate identity, such as “cosmopolitans”(Harajiri, 1989) or “individuals” (Kim, 1999). The different explanations of the superordinate identity from Zainichi Koreans and Chinese suggests that the concept of the superordinate identity is changeable among Chinese living in Japan. This study found that permanent Chinese residents interpreted the concept of superordinate identity as “above integrationist”. The permanent Chinese residents’ new interpretations of the superordinate identity is different from previous research (Lee & Tanaka, 2010), which states that the superordinate identity comes from wanting to be free from Korean culture or Japanese culture.

5.2 Regarding Self-Described Category

Since there was no clear corresponding relationship between the self-scored cultural degree and self-described category, the standard for Chinese permanent residents identifying themselves seems doubtful. According to Guo (1999), Chinese people value their lineage highly. It can be suggested that when they asked to choose a category to describe themselves, they did not choose it by how well they connect to both cultures. The self-described category probably is only what they desire. Since in this study the meaning of the score depends on the participant, a more refined scale should be used in future studies.

5.3 Regarding Relationship with Two Culture

In this study, participants reported they prefer using Japanese mannerisms when they are at work. However, international students may feel stress when they try to learn a lot of social norms in a short period (Anderson & Guan, 2018). Compared to international students, it can be presumed that Chinese permanent residents who have adapted well to living in Japan, have also learned Japanese culture and social norms. Furthermore, the participants mentioned that they switch acculturation strategies based on task, this phenomenon of switching socialization mannerisms was also reported in the research of Koreans in Japan (Fukuoka, 1993; Lee & Tanaka, 2017). If the phenomenon of switching is unique in Japan, it should be studied more.

5.4 Regarding Mental Health

Since this study is a first step study on acculturation strategies for Chinese in Japan, only two items were used to test mental health. Clear relationships could not be found between acculturation strategies and mental health; a bias in sampling can be considered as a reason. Moreover, all participants answered that they did not feel stress due to the cultural differences. Zhu (2003) states that in aspects of race, religion, culture, there are no big differences between Japan and China, which may

help Chinese assimilate better in Japan. The presence of this attitude suggests that the cultural distance is close between China and Japan. Consequently, the reasons why participants did not feel stress from cultural differences could be due to this cultural proximity.

5.5 Limitation and Further Studies

In this study, all the participants had completed some degree of higher education, and many worked in the field of education. In the future, the sample should be expanded to include subjects with a wider variety of educational level and a wider occupational variety. Studies with more refined examinations of the relationships between acculturation strategies and mental health should be conducted in the future.

Acknowledgement

The authors would like to thank Aichishukutoku University for a grant that made it possible to complete this study.

Reference

Anderson, J. R., & Guan, Y. (2018). Implicit acculturation and the academic adjustment of Chinese student sojourners in Australia. *Australian Psychologist*, 53(5), 444-453.

Berry, J. W. (1992). Acculturation and adaptation in a new society. *International migration*, 30, 69-85.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied psychology*, 46(1), 5-34.

Berry, J. W. (2019). *Acculturation: A personal journey across cultures*. New York, NY: Cambridge University Press.

Berry, J. W., et al. (1989). Acculturation attitudes in plural societies. *Applied psychology*, 38(2), 185-206.

Fukuoka, Y. (1993). *Zainichi Koreans: Identities of the young generation*. Tokyo: Chuo Koron Sha (in Japanese).

Guo, F. (1999). *The Changing Identity of Chinese in Japan: Their Multidimensional Acculturation*. Tokyo: Touseido (in Japanese).

Harajiri, H. (1989). *The world of lifestyles with Zainichi Koreans*. Tokyo: Koubundou (in Japanese).

Kawakita, J. (1967). Hassouhou. Chukoushinsyo (in Japanese).

Kim, T. (1999). *Identity Politics wo Koete: Zainichi Chosenjin no ethnicity*. Kyoto: Seikaishiso Seminar (in Japanese).

Lee, J., & Tanaka, T. (2010). Attitudes toward a bicultural environment and mental health among second- and third-generation Korean-Japanese (1): Self-cognition of cultural identity from an interview survey. *Journal of Humanities and Social Sciences Okayama University*, 30, 177–196 (in Japanese).

Lee, J., & Tanaka, T. (2017). Identity perceptions, behavioral tendencies as determinants of mental health for Zainichi Koreans. *Japanese Journal of Applied Psychology*, 42, 265–266.

Lee, J., & Tanaka, T. (2019). Acculturation Attitudes among Zainichi Koreans Living in Japan. *Japanese Journal of Applied Psychology*, 44(3), 162-170.

Li, Y., & Sano, H. (2009). A Review on Minority's Academic Achievement, Acculturation and Counseling: Through the Key Words of their Adjustment and Support. *Bulletin of Tokyo Gakugei University. Educational sciences*, 60, 193-202. (in Japanese)

Ministry of Justice. (2020). *Zairyu Gaikokujin Tokei*. Retrieved from <https://www.e-stat.go.jp/>

Sun, Y. (2013). Chinese students in Japan: The mediator and the moderator between their personality and mental health. *International Journal of Psychology*, 48(3), 215-223.

Tanaka, T. (1998). A review of cross-cultural adjustment of international students in Japan: from the perspective of social network. *The Annual Report of Education Psychology in Japan*, 37, 143-152.

Tanaka, T., & Fujiwara, T. (1992). Difficulty in interpersonal behavior of International students in Japan: Implications of Japanese social skill learning toward cross-cultural adjustment. *Japanese Journal of Social Psychology*, 7(2), 92-101.

Zhao, S., & Tanaka, T. (2019). A Review of Research Trends Concerning Study of Acculturation Strategies and Mental Health in Chinese Overseas. *The Japan Society for the Studies of Chinese Overseas 2019 Conference. program* p10. (in Japanese)

Zhu, H. (2003). *Nihon Kakyō Kajiin Shakai No Hensen*. Tokyo: Nihon kyoho Sha. (in Japanese)

Contact email: zhaoshizhe58@gmail.com

Do Extroverted and Lonely Junior High Students Prefer Interacting through Social Media? Analysis of Social Media Time Using Diaries

Shiroh Ohno, University of Tokyo, Japan

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Concerns for young people's mental health have been raised regarding their excessive use of social media on smartphones. This study examined the relationship between extroversion and loneliness and the time spent using social media on smartphones. To accurately measure usage time, a diary-style questionnaire was conducted; responses were obtained from 701 junior high school students across Japan. Multiple regression analyses controlling for gender and free time at home showed that extraversion, loneliness, and interaction terms were all significant. Analysis of the interaction term showed that loneliness was not related to social networking time in the low extroversion case (27.7 minutes of social networking time in the low loneliness case and 28.4 minutes in the high loneliness case). In the high extroversion case, there was an association between loneliness and social networking time (34.9 minutes in the low loneliness case and 49.2 minutes in the high loneliness case), and significantly longer social media time was found for the high extroversion and loneliness case. These results show that young people who enjoy socializing but are actually lonely may prefer to interact through social media.

Keywords: Extroversion, Loneliness, Social Media Time

iafor

The International Academic Forum
www.iafor.org

Introduction

Social media use, especially by young people, is growing all over the world, and concerns have been raised about how this use affects their well-being. In a large US cohort study (Riehm et al., 2019), it was reported that young people with more than 3 hours of social media use per day had a particularly significant increase in mental health problems. According to a survey in Japan by the Ministry of Internal Affairs and Communications (2019), the average time spent on social media on weekdays was 121 minutes for teenagers and 81 minutes for those in their 20s, with teenagers spending significantly more time on social media. The link between Internet use and psychological health, such as depression and loneliness, has been discussed in the Internet Paradox studies by Kraut et al. (1998). In a recent study, a meta-analysis of Facebook use and loneliness found a causal relationship between Facebook use and loneliness, with people who are lonely using Facebook to try to avoid feelings of loneliness (Song et al., 2014).

Using the perspective of the uses and gratifications theory and the social compensation hypothesis, lonely people are motivated to use social media for longer periods of time, so it seems that the higher the loneliness, the longer they use social media. Applying the rich get richer hypothesis (Kraut et al., 2002) to social networking services, it is hypothesized that the more extroverted people are, the more deep interactions they have with social networking services and the more successful they are at reducing loneliness. On the other hand, introverts fail to reduce their loneliness by using social networking services, and they try to use social networking services for a longer time because they maintain a high sense of loneliness. However, according to a meta-analysis by Song et al. (2014), social network use may not contribute to the reduction of loneliness, so it is assumed that a high level of loneliness may be maintained whether a social network user is extroverted or introverted. This study examined the relationship between extroversion and loneliness and the time spent using social media on smartphones.

Method

A survey was conducted online in November 2019 among 701 Japanese junior high school students between the ages of 15 and 18 with parental consent and 800 working adults between the ages of 23 and 25 from an online panel. To measure the media time more accurately, the diary method with a smartphone was used. Respondents chose certain actions every 30 minutes at the end of the day. The average time spent using social media with a smartphone after returning home (5 p.m.–2 a.m.) on two weekdays was used for analysis. The analysis was performed using SPSS Statistics Version 22 and SPSS Amos Version 22. The significance level was set at $p < .05$.

Instruments

Extroversion. Three items from the extroversion factor of the Five Factor Personality Questionnaire (FFPQ; Kenkyukai, 2002) were used: “I hate to stay still,” “I like making a lot of noise in great numbers,” “I am glad when I attract attention from a person.” Respondents rated items using a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). The Cronbach’s alpha coefficient, mean,

and standard deviation were 0.64 and 4.80 ± 2.00 for junior high school students and 0.64 and 4.30 ± 2.04 for working adults, respectively.

Loneliness. Three items from the Japanese version of the Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980) were used: “No one really knows me well,” “People are around me but not with me,” “There is no one I can turn to.” Respondents rated items using a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). The Cronbach’s alpha coefficient, mean and standard deviation were 0.83 and 2.46 ± 1.89 for junior high school students and 0.81 and 3.02 ± 2.13 for working adults, respectively.

Social media time. This measured time spent using social media with a smartphone between 5 p.m. and 2 a.m. (unit: minutes). The mean and standard deviation were 34.49 ± 41.79 (junior high school students) and 50.26 ± 47.91 (working adults), respectively.

Home free time. This measured free time at home from 5 p.m. to 2 a.m. (unit: minutes). The mean and standard deviation were 305.48 ± 37.32 (junior high school students) and 274.11 ± 95.71 (working adults), respectively.

Gender. Among junior high school students, 50.8% were male, and 49.2% were female. Among working adults, 37.9% were male, and 62.1% were female. Dummy variables were created with 1 for male and 2 for female.

Conclusion

The t-test results showed that there was a significant difference ($t = 4.64$, $df = 684.40$, $p < .001$) in the time spent on social media by gender for junior high students, with men spending 27.38 minutes and women spending 41.83 minutes on social media. There was also a significant difference ($t = 6.98$, $df = 749.32$, $p < .001$) between the two groups of working adults, with men using smartphones for 36.35 minutes and women for 58.75 minutes.

The results of the correlation analysis between each variable are shown in Table 1. Only in junior high school students were extroversion and loneliness significantly associated with social networking time.

Table 1. *Correlation Analysis*

	Junior high school student	Working adults (23–25 years old)
Extroversion	.14***	.06
Loneliness	.10*	-.04
Home free time	.30***	.30***

Pearson correlation. * $p < .05$, *** $p < .001$

The results of the multiple regression analysis with social media time among junior high school students as the objective variable are shown in Table 2.

Table 2. *Multiple Regression Analysis (junior high school students)*

junior high school students' social media time					
	β		95%CI		VIF
Extroversion	.167 **		0.10	0.24	1.02
Loneliness	.090 *		0.02	0.16	1.03
Extroversion * loneliness	.089 *		0.02	0.16	1.01
Gender(men:1,women:2)	.163 **		0.09	0.23	1.00
Home free time	.287 **		0.22	0.36	1.01
R^2 (adjust R^2)	.156 **	(.150)			

* $p < .05$, ** $p < .01$

Extraversion, loneliness, and the interaction term were all significant. Figure 1 shows the result of the analysis of the interaction.

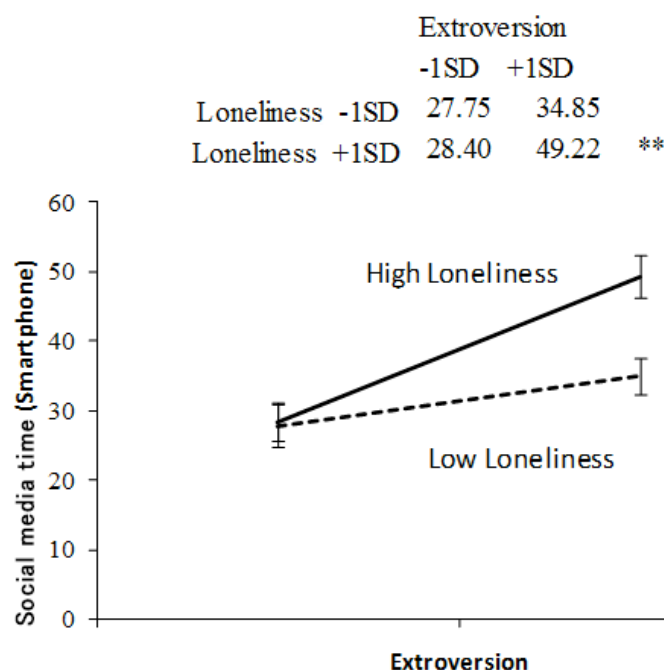


Figure 1: Analysis of the interaction (junior high school students)

When extroversion was low, it was unrelated to loneliness and social media use time, while when extroversion was high, it was related to loneliness and social media use time. The a high level of loneliness corresponded to 49 minutes of social media use time, which is a significantly large value. Namely, a participant who had high levels of extroversion and loneliness used social media nearly twice as much in comparison with a participant with low levels of extroversion and loneliness.

The results of the multiple regression analysis with social media time among working adults as the objective variable are shown in Table 3. Extraversion and the interaction term were significant.

Table 3. *Multiple Regression Analysis (working adults)*
working adults' social media time

	β		95%CI		VIF
Extroversion	.099	**	0.03	0.17	1.05
Loneliness	-.026	n.s.	-0.09	0.04	1.04
Extroversion * loneliness	.074	*	0.01	0.14	1.01
Gender (men:1, women:2)	.204	**	0.14	0.27	1.04
Home free time	.285	**	0.22	0.35	1.02
R^2 (adjust R^2)	.156	**	(.150)		

* $p < .05$, ** $p < .01$

Figure 2 shows the results of the analysis of the interaction. Social media time was significantly shorter for high levels of introversion and loneliness.

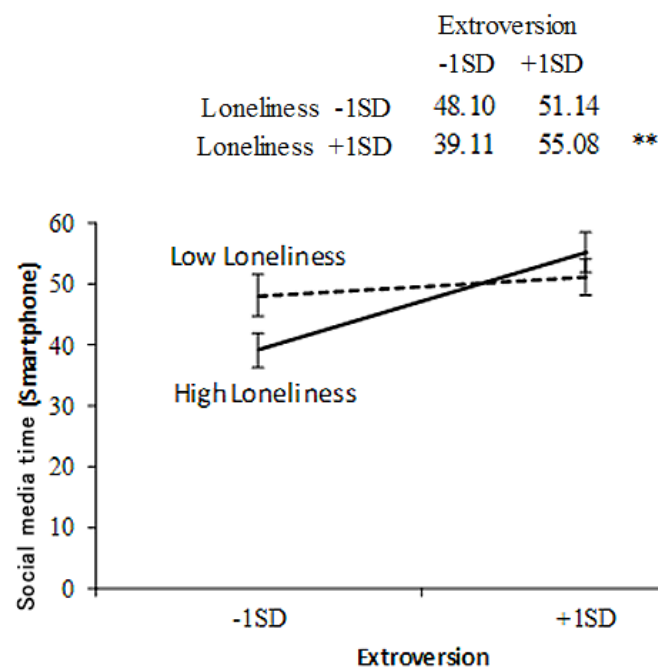


Figure 2: Analysis of the interaction (working adults)

Thus, the results indicate that neither working adults nor junior high school students who are introverted and lonely use social media for long periods of time, while junior high school students who are extroverted and lonely use social media for long periods of time. In the junior high school environment, where friendships are important, it was shown that despite being outgoing, not being able to make friends as one would like may lead to prolonged use of social networking services using smartphones, which are readily available.

Acknowledgements

This online survey was conducted by Dentsu Media Innovation Research Department, Yoshiaki Hashimoto (the University of Tokyo) and Shiroh Ohno (the University of Tokyo). The analyses are the sole responsibility of the author.

References

FFPQ Kenkyukai [FFPQ Study Group] (2002). *Kaitei FFPQ (5 inshi seikaku kensa) manual [FFPQ (Five-factor personality test) manual]*, Kitaohji shobo.

Kraut, R. E., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., and Crawford, A. (2002). Internet Paradox Revisited. *Journal of Social Issues*, 58(1), 49-74.

Kraut, R. E., Patterson, M., Lundmark, V., Kiesler, S., Mukhopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological wellbeing? *American Psychologist*, 53(9), 1017-1032.

Ministry of Internal Affairs and Communications. (2019). *Survey Report on Information and Communication Media Use Time and Information Behavior, FY2019*, Retrieved June 21, 2020, from https://www.soumu.go.jp/main_content/000644168.pdf

Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A., Green, K. M.,...Mojtabai, R.(2019). Associations between time spent using social media and internalizing and externalizing problems among US youth. *JAMA Psychiatry*, Sep 11:1-9. doi: 10.1001/jamapsychiatry.2019.2325.

Russell, D, Peplau, L. A.,& Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminate validity evidence. *Journal of Personality and Social Psychology*, 39, 472-480.

Song, H., Zmyslinski-Seelig, A., Kim, J., Drent, A., Victor, A., Omori, K., & Allen, M. (2014). Does Facebook make you lonely?: A meta analysis. *Computers in Human Behavior*, 36, 446-452. <https://doi.org/10.1016/j.chb.2014.04.011>

Contact email: siro.ono@gmail.com

***Factors in Teachers' Help-Seeking Preferences from the Viewpoint of Teachers
with New Appointment Terms***

Yutaka Konuma, Hokkaido University, Japan

Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

This research examines the factors that influence teachers' help-seeking preferences using a structural equation model. Teachers with new appointment terms often face difficulties in their work and tend to ask other teachers or administrators for help. To identify the various factors in teachers' help-seeking preferences, an investigation using a questionnaire was administered to teachers who held new appointments at elementary schools; 91 teachers responded to this questionnaire. A statistical analysis was performed using SPSS 19.0 and AMOS 19.0. The structural equation model based on both factor and path analyses, revealed that head teachers' leadership (educational leadership) affected the workplace culture as well as teachers' feelings of self-respect and help-seeking preferences. The organizational control and workplace culture, which can influence each other, are important in teachers' everyday experiences. and head teachers' (educational leadership) also had a large influence there. Since teachers engage directly with children while teaching and head teachers affect teachers' feelings of self-respect and help-seeking preferences, it is necessary to foster a climate of collaboration between these professionals to develop effective educational practices.

Keywords: Teachers' Help-Seeking Preferences, New Appointments At Elementary Schools

iafor

The International Academic Forum
www.iafor.org

Introduction

A teacher who takes leave for an illness does not want to burden his or her coworkers. I work in education, and I observed that when teachers are overburdened with tasks, it is important that they seek help. A “help-seeking preferences” is “a cognitive framework of whether those who faced difficulty of some kind ask the others (a managerial post and coworker) for assistance positively,” and help-seeking is an “action which actually asks the others for assistance.” This research aims to increase recognition of teachers’ help-seeking preferences and explore methods for reducing stress regarding help-seeking in workplaces.

Method

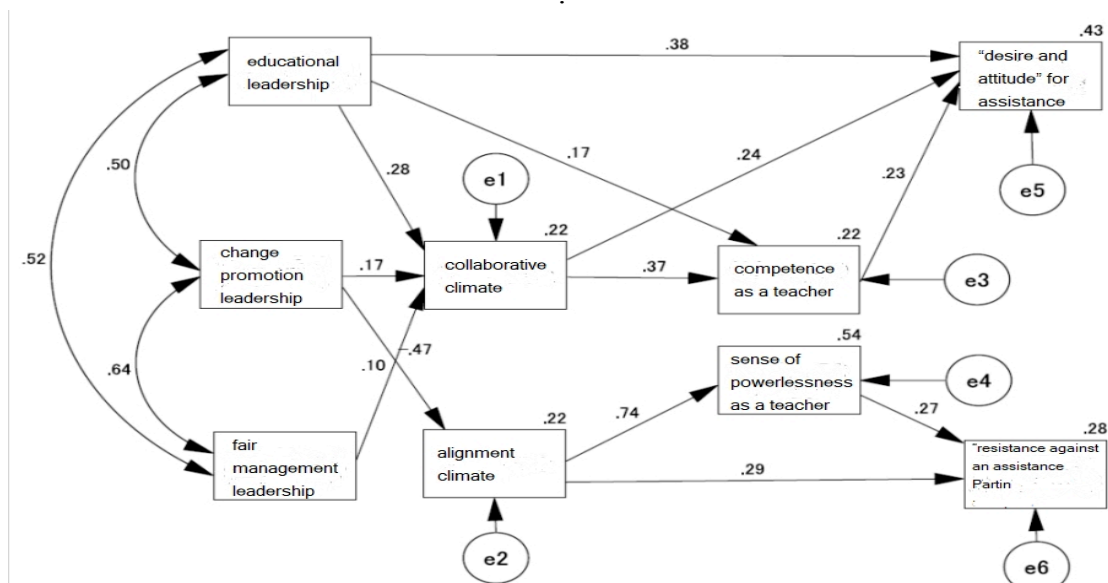
The investigation were targeted 92 teachers in a new appointment term (1st–6th years) among 268 persons who distributed question paper to 382 teachers who belong to public elementary schools. The schools were located in prefecture B in the city.

The survey investigated 26 items suggested by heads of school (Tsuyuguchi, 2003). The responses used a scale from 1–5, 1 meaning “I am not applied at all” and 5 meaning “I am very applied.” The second question explored six organizational climate cognitive measure items (Fuchigami, Kobayagawa, Shimotsu, Tanaue and Nishiyama, 2004).

The responses used a scale from 1–5, 1 meaning “I do not agree at all” and 5 meaning “I strongly agree.” Ten items regarding self-sense-of-competence measures (Yamauchi and Kobayashi, 2000) were used for the third item, using a scale of from 1–5, 1 meaning “I am not applied at all” and 5 meaning “I am very applied.” Eleven items regarding a teacher’s help-seeking-preferences measure (Tamura and Ishikuma, 2001) were used for item 4. These responses fell on a scale from 1, “I do fit in at all,” to 5, “I am molto applied.”

Conclusion

I asked the deed for interiority consistency (alpha coefficient) for factor analysis of each measure. Three factors were identified as regards the teacher’s evaluation. They were educational leadership (7itemalpha = .926), change promotion leadership (7itemalpha = .904), and fair management leadership (4itemalpha = .864). Two factors were extracted from the organizational climate cognitive measure item. These were self-sense-of-competence (5itemalpha = .858) and sense of powerlessness (3itemalpha = .758). As for the help-seeking-preferences measure, two factors were extracted: resistance (7itemalpha = .861) and the desire and attitude (4itemalpha = .810). As a result of path analysis (Figure 1), the goodness of fit of a model was confirmed by GFI = .953, AGFI = .899, CFI = .999, and RMSEA = .014. The results suggest that combining help-seeking preferences with strong leadership creates a sense of competence in teachers. Organization in the workplace and a positive workplace culture that includes the free flow of information are significant factors in teacher comfort; a strong head of school contributes greatly to this culture.



GFI=.953 AGFI=.899 CFI=.999 RMSEA=.014

Figure 1: teachers' help-seeking preferences model

A teacher's sense of competence and help-seeking preferences improve as she works with students in a collaborative and consistent climate. The leadership shown by a head of school is the strongest influence on the existence of a collaborative climate, creating "a sense of competence as a teacher" and the "desire and attitude" for assistance. Furthermore, the path of an "alignment climate" and "the resistance against an assistance Partin" was not accepted. In particular, "change promotion leadership" is an "alignment climate" and a negative Partin, and the "alignment climate" is participating in "the resistance against an assistance Partin" through "a sense of powerlessness as a teacher."

References

- Kobayakawa, Y., Shimotsu, M., Tanakami, N., & Nishiyama, H. (2004). Relationship of teacher's perceptions of their group climate with teachers' evaluation of effectiveness of their educational activity and role expectation, assertive communication, and acceptance of principals' influence. *Bulletin of Faculty Education, Okayama University*, 126, 43-51.
- Tamura, S., & Ishikuma, T. (2001). Help-seeking preference and burnout. *Japanese Journal of Educational Psychology*, 49, 438-448.
- Tsuyuguchi, K. (2003). Leadership of the principal who aims to build trust: Relationship between leadership, trust and school improvement. *Study Hall of Educational Administration, Graduate School of Kyushu University*, NO.6, 21-27.
- Yamauchi, K., & Kobayashi, Y. (2000). Self-Recognition on the part of primary, lower, and upper secondary school teachers in relation to their perception of teaching: For effective school consultation to teachers. *Osaka University of Education Bulletin No. IV*, 48, 215-232.

***Mindfulness and Depression:
The Mediating Role of Psychological Flexibility***

Thanpitcha Sannarin, Chiang Mai University, Thailand
Chaiyun Sakulsriprasert, Chiang Mai University, Thailand

Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Objective: The aim of the current study was to examine the mediating role of psychological flexibility on the relationship between mindfulness and depression. **Method:** The participants were 312 high-school students in Thailand. The sampling method was multistage cluster sampling. Research instruments used in this study include Psychological Flexibility Scale for Adolescents (PFSA-Thai), Center for Epidemiological Studies-Depression Scale (CES-D-Thai) and Philadelphia Mindfulness Scale (PHLMS-Thai). Data were analyzed using percentage, mean, standard deviation and path analysis. **Result:** The findings suggested that the relationship between mindfulness and depression was fully mediated by psychological flexibility. **Conclusion:** The findings support that depression can be alleviated by mindfulness through psychological flexibility. Psychologists and mental health professionals may utilize this framework to develop an intervention for depression reduction in high schools.

Keywords: Mindfulness, Depression in Adolescent, Psychological Flexibility for Adolescents, Acceptance and Commitment Therapy (ACT)

iafor

The International Academic Forum
www.iafor.org

Introduction

Depression in adolescents is one of the mental health problems that is prevalent in various countries around the world and tends to increase continuously (Duangjai Vatanasin, 2016). In Thailand, it is reported that the prevalence of depression among adolescents in 2008 was of 11.5% and increased to 13.3% in 2015 (Palisara Augsusingha & Sirichai Hongsaungsang, 2015). Accordingly, as reported by the Mental Health Service Hotline 1323, in fiscal year 2018, teenagers called in to seek advice for 10,298 times, and in the first two quarters of the fiscal year 2019, the numbers of calls increased to 13,658 times—of which, depression was one of the five issues that teenagers sought advice the most. This problematic issue apparently has been rising, and it is in consistence with the increasing rate of successful suicides in adolescents aged between 20-24 years, which were 4.94% and 5.33% per 100,000 people in 2017 and 2018 respectively. (Department of Mental Health, 2019)

Depression impacts greatly on the adolescents themselves, their family, and the society they live in. The effects on themselves include insomnia, weight loss, mood swings, and lack of interest in activities (Mahon & Yarcheski, 2001, as cited in Duangjai Vatanasin, 2016) which lead to conflicts in family and personal relationships (Titawee Kaewpornsawan & Benjaporn Tuntasood, 2012; Sunun Seangsanaoh et al., 2017), more drug abuse (Elizabeth Kim et al., 2019; Anand et al., 2019), and decreased level of abilities in adaptation, concentration, learning skills, and increased problems in school (Malas et al., 2019; Joshi et al., 2019). And if the symptoms occur in their youth, there is a higher risk for them than regular people that the symptoms will reoccur in their adulthood (Shanahan et al, 2011 as cited in Brent & Maalouf, 2015; Proithip Suntaphun et al., 2019). Moreover, depression causes teenagers low self-esteem, arouses self harms, and eventually leads to suicide attempts (Raj et al., 2019; Sararud Vuthiarpa, 2012; Wongdyan Pandi, 2015). As for the impact on the economy and society, for instance, the government has to allocate a large amount of budget on solutions for mental health issues (Government Fiscal Management Information System (GFMIS), 2018, as cited in Wanabuth Yuphakaset, 2019). Therefore, in order to prevent, solve, and reduce the severity of mental health issues in Thailand, it is very crucial to offer help to the teenagers who suffer depression.

After reviewing literatures, the researchers had found out that many theories concerning psychological therapy have been applied in treating adolescence depression. A lot of studies suggest that Cognitive Behavior Therapy (CBT) is an effective remedy for depression (Evans et al., 2005, as cited in Brent & Maalouf, 2015). However, over the past 30 years, the traditional CBT has been developed into new treatments, which, at present, are considered the third wave of behavioral therapy. The spiritual approaches of the East and the concepts of the West were combined and were focused on the idea of acceptance as well as applying the concept of mindfulness into the treatment called *mindfulness-based psychotherapy*. The principles that had been improved, accepted widely, and scientifically reliable are Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), Acceptance and Commitment Therapy (ACT), and Dialectic Behavior Therapy (DBT).

There are many empirical evidences stating that Mindfulness-Based Therapy can be used to treat various mental health problems such as depression, bipolar disorder,

anxiety disorder, eating disorders, drug or alcohol abuse, borderline personality disorders, and other physical disorders related to mental conditions such as high or low blood pressure, chronic pain, and so forth (Daochompu Nakawiro & Sirijit Suttajit, 2013; Shapiro & Carlson, 2009). Nonetheless, scholars agree that the concept of mindfulness is very effective in depression treatment as it helps reduce residual symptoms and prevents the relapse (Shapiro & Carlson, 2009; Williams, 2008; Ramel et al., 2004; Chiesa & Serretti, 2011; Britton et al., 2010).

Although there are many studies on the effectiveness of the mindfulness concept, there are, however, quite few studies on the inner mechanism of mindfulness that affects depression and those studies described about it differently (Desrosiers et al., 2013; Long & Hayes, 2014). Moreover, up to the present, there have not been any studies on the mechanism of mindfulness that affects depression in Thai adolescents. Therefore, this limitation could result in ineffective treatments for adolescent depression. Thence, in this study, the researchers aim to determine the mechanism of mindfulness under the paradigm of ACT that was developed by Steven C. Hayes in 1990, as the ACT is the theory that has been acknowledged and adopted in treating mental pathology widely nowadays (Hayes et al., 2012; Harris, 2008; Hayes et al., 2006 as cited in Hayes & Ciarrochi, 2015; Blackledge, 2015). Hayes et al. (2012) explained that ACT is a mindfulness-based therapy and its goal is to improve psychological flexibility which is figured metaphorically as a protection shield for mental health and an essential key that leads to psychological well-being (Hayes et al., 2012). In addition, it was proved that psychological flexibility brings good outcomes for adolescent depression treatments (Halliburton & Cooper, 2015; Livheim et al., 2015; Levin et al., 2014; Jessica Swan et al., 2015). So, this study aims to understand the psychological flexibility as a mediator variable between mindfulness and depression in adolescents, which, hopefully, would expand the knowledge on the treatments for adolescent depression in Thailand.

Method

This research was focused on examining the role of psychological flexibility as a mediator variable between mindfulness and depression in adolescents. The researchers collected data from 312 high-school students in Phayao Province where the participants were randomly selected by the multistage cluster sampling technique.

Next, research instruments used in this study include Psychological Flexibility Scale for Adolescents (PFSA-Thai) (Thanpitcha Sannarin, 2019), Center for Epidemiological Studies-Depression Scale (CES-D-Thai) (Umaporn Trangkasombat et al., 1997) and Philadelphia Mindfulness Scale (PHLMS-Thai). (Chatchawan Silpakit et al., 2011)

Finally, the collected data were calculated and analyzed with computer software to find percentage, average, standard deviation, and the model of influence paths. The influence of the psychological flexibility as a mediator variable between mindfulness and depression in adolescents was analyzed based on the concept of Maximum Likelihood (ML), and Robust Maximum Likelihood (RML) for the estimated coefficient of the influence paths.

Results

The findings were summarized into two parts: 1) the demographic information of the participants, and 2) the structural relationship of psychological flexibility as a mediating factor between mindfulness and depression in adolescents.

Part 1 Demographic of the participants

Details		Number	Percentage
Gender	Male	104	33.30
	Female	208	66.70
	Total	312	100.00
Age (years old)	15	13	4.20
	16	108	34.60
	17	191	61.20
	Total	312	100.00
Education Level	Grade 12	14	4.50
	Grade 11	178	57.10
	Grade 10	120	38.50
	Total	312	100.00
Programs	Science	204	65.40
	Arts	105	33.60
	Not specified	3	1.00
	Total	312	100.00
GPA	< 2.5	26	8.20
	2.5-2.99	56	17.90
	3-3.49	128	41.00
	3.5-4	98	31.40
	Not specified	4	1.30
	Total	312	100.00
Hometown	Phayao Province	282	90.40
	Other provinces	30	9.60
	Total	312	100.00
Average Monthly Allowance (Thai baht)	≤1,500	183	58.60
	1,501-3,000	92	29.50
	3,001-4,500	15	4.80
	>4,501-10,500	17	5.30
	Not specified	7	2.20
	Total	312	100.00

Table 1 Demographic of the participants

The results in Table 1 shows that most of the participants were female (66.70%), aged between 16 and 17 years old (34.60% and 61.20% respectively), studying in Grade 10 and 11 (38.50% and 58.10% respectively), enrolled in Science program and Arts program (65.40% and 33.60% respectively), their GPA were in the range of 3.00-3.49 and 3.50-4.00 (41.00% and 31.40% respectively). The hometown of most of the participants is Phayao Province (90.40%), and the average of their monthly allowance was not exceeding 1,500 Thai baht.

Part 2 The structural relationship of psychological flexibility as a mediating factor between mindfulness and depression

The structural relationship between variables are presented as Table 2, There is no statistical significance for the relationship between mindfulness and depression (Figure 1).

Paired Variables	Estimated Coefficient	Standard Coefficient (β)	S.E>	Est./ S.E.	Two-Tailed P-Value
PFSA on Mindful Depression	0.840	0.588	0.052	11.240	0.000***
PFSA	-0.618	-0.762	0.037	-20.658	0.000***
Mindful	-0.083	-0.072	0.042	-1.557	0.120

Remarks * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2 Path coefficients among mindfulness, psychological flexibility, and depression

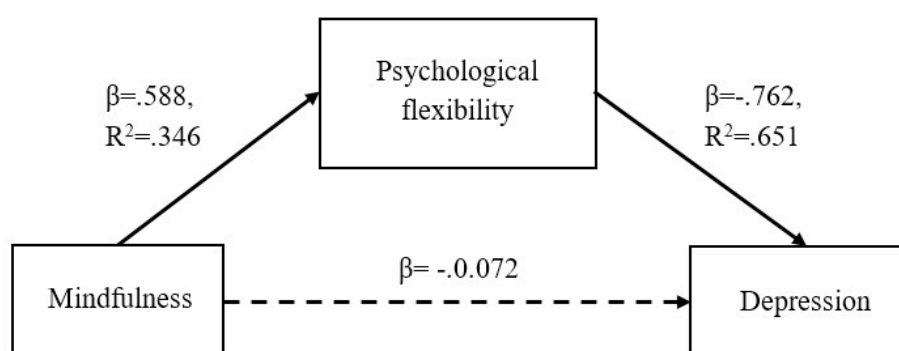


Figure 1 Structural model of relationships between the variables in this study

The researchers then re-specify the structural model by eliminating the pathway from mindfulness to depression. It was found that modified structural model showed the better model fit indices, which are as follows: 2.542 for the χ^2_{df} , 0.996 for the CFI, 0.071 for the RMSEA, and 0.016 for the SRMR. These fit indices demonstrated that the modified hypothesized model was good fitted with the empirical data (Hair et al., 2014) (Table 3).

Criteria	Model
Chi-square	
Chi-square (χ^2)	2.542; $p < .001$
Degree of freedom	1
χ^2_{df}	2.542
Absolute fit measure	
Comparative Fit Index (CFI)	0.996
Root Mean Square Error of Approximation (RMSEA)	0.071
Standardized Root Mean Square Residual (SRMR)	0.016

Table 3 Criteria and the results of the analysis of the consistency of the theoretical model and empirical data (measures of the model fit)

The result of the estimated coefficient (STDYX standardization) after model adjustment is appropriate and in accordance with the theoretical expectations. The results are as follows: 1) Mindfulness and psychological flexibility in adolescents: $\beta = .588$, $R^2 = .346$; and 2) psychological flexibility in adolescents and depression in

adolescents: $\beta = -.805$, $R^2=.648$ (as in Table 4 and Figure 2). Therefore, it can be summarized that psychological flexibility is a full mediation.

Paired Variables	Estimated Coefficient	Standard Coefficient (β)	S.E>	Est./ S.E.	Two-Tailed P-Value
PFSA on Mindful	0.840	0.588	0.052	11.240	0.000***
Depress on PFSA	-0.652	-0.805	0.024	-33.155	0.000***

Remarks * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 4 The result of STDYX standardization after model adjustment

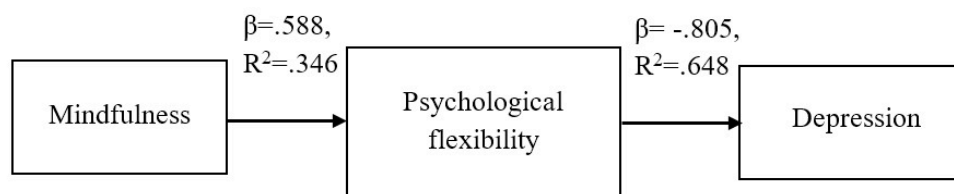


Figure 2 The model of the realigned paths of relationships between each variable

Conclusion

The model of causal relationships presented above is good fitted with the empirical data as for the following reasons: Firstly, the mindfulness influences directly and positively on the psychological flexibility of adolescents. In accordance with the ACT Theory which Hayes et al. (2012) had adopted the concept of mindfulness into the treatment as a basis following the ACT approach, it is explained that the therapy process is focused on observing and understanding the nature of thoughts, emotions, and physical reactions of a person. It is stated that when one is fully conscious, one will see his own thoughts that occur at that moment. Once the person observed himself mindfully, the person will understand the nature of mind (also called “Defusion”) instead of putting oneself under pressure or tension. Also, the person will accept the inner experience in each moment happening (process of “Acceptance”). Therefore, it can be concluded that mindfulness can help a person in developing psychological flexibility (Harris, 2008; Halliburton and Cooper, 2015; Puolakanaho et al., 2018). Additionally, according to the study of Berghoff et al. (2018), it is found that low level of mindfulness is related to the Experiential Avoidance (EA) and Cognitive Fusion (CF), and, on the other hand, high level of mindfulness is related to value-guide behavior. Second, psychological flexibility in adolescents influences directly and negatively on the depression in adolescents. This fact is supported by the result of an experiment where the ACT approach was applied in treating adolescents who suffered depression. The outcome showed that psychological flexibility is effective in healing depression (Livheim et al., 2015; Halliburton and Cooper, 2015; Petts et al., 2017; Long and Hayes, 2014; Jessica Swan, 2015).

The findings of this study give supportive evidence that adolescents who are suffering depression can feel better by adopting the concept of mindfulness and psychological flexibility. Plus, psychologists and mental health professionals can also adapt and improve the conceptual idea in this study to improve the treatment procedure in order to reduce the depression of the students in schools. However, this study is considered

an initial step. The researchers still have not probed into each element of psychological flexibility due to the limited timeframe. Moreover, the data was collected from a group of regular adolescents, not specifically the depressed ones. Therefore, should there be any opportunity to extend this study, it is suggested that the data is collected from the depressed adolescents, too, for comparison, and the mechanism or the process of each element of the psychological flexibility should also be studied in order to expand the knowledge and gain further understandings.

Acknowledgements

My deep gratitude goes to the Department of Psychology—of the Faculty of Humanities of the Chiang Mai University—for supporting the budget on this research, and my great appreciation goes to all participants involved in this study. My work would not have been complete without their great cooperation.

References

Anand, D., Paquette, C., Bartuska, A., & Daughters, S. B. (2019). Substance type moderates the longitudinal association between depression and substance use from pre-treatment through a 1-year follow-up. *Drug and Alcohol Dependence*, 197, 87-94. <https://doi.org/10.1016/j.drugalcdep.2019.01.002>

Augsusingha, P., & Hongsanguansri, S. (2015). Child and adolescent psychiatry. In Lotrakul, M., & Sukanich, P. (Eds.), *Ramathibodi Psychiatry* (pp. 507-508). Bangkok: Mahidol University.

Berghoff, C. R., Ritzert, T. R., & Forsyth, J. P. (2018). Value-guided action: Within-day and lagged relations of experiential avoidance, mindful awareness, and cognitive fusion in a non-clinical sample. *Journal of Contextual Behavioural Science*, 10, 19-23.

Blackledge, J. T. (2015). *Cognitive defusion in practice: A clinician's guide to assessing, observing, & supporting change in your client* (Context press mastering ACT series). Oakland, CA: Context Press.

Brent, D., & Maalouf, F. (2015). Depressive disorders in childhood and adolescence. In Thapar, A., Pine, D. S. (Eds.), *Rutter's Child and Adolescent Psychiatry*. (pp. 887-892) (6th ed.). NY: Wiley Blackwell.

Britton, W. B., Haynes, P. L., Fridel, K. W., MA, RPSGT, & Bootzin, R. R. (2010). Polysomnographic and Subjective Profiles of Sleep Continuity Before and After Mindfulness-Based Cognitive Therapy in Partially Remitted Depression. *Psychosomatic Medicine*, 72, 1-10. DOI: 0033-3174/10/7205-0001

Chiesa, A., & Serretti, A. (2011). Mindfulness based cognitive therapy for psychiatric disorder a systematic and meta-analysis. *Psychiatry Research*, 187, 441-453. DOI:10.1016/j.psychres.2010.08.011

Department of Mental Health. (2019, December 18). *Depression causing injury. Check the list of causes and symptoms*. <https://www.dmh.go.th/news-dmh/view.asp?id=30114>

Desrosiers, A., Vine, V., Klemanski, D. H., & Nolen-Hoeksema, S. (2013). Mindfulness and Emotion regulation in Depression and Anxiety: common and distinct mechanisms of action. *Depression and Anxiety*, 30, 654-661. DOI: 10.1002/da.22124

Elizabeth Kim, B. K., Gilman, A. B., Kosterman, R., & Hill, K. G. (2019). Longitudinal associations among depression, substance abuse, and crime: A test of competing hypotheses for driving mechanisms. *Journal of Criminal Justice*, 62, 50-57. <https://doi.org/10.1016/j.jcrimjus.2018.08.005>

Hair, J. F., Jr, Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (7th ed.). Edinburg: Pearson.

Halliburton, A. E., & Cooper, L. D. (2015). Applications and adaptations of acceptance and commitment therapy (ACT) for adolescents. *Journal of Contextual Behavioral Science*, 4(1), 1-11. DOI:10.1016/j.jcbs.2015.01.002

Harris, R. (2008). *The Happiness Trap: How to stop struggling and start living*. Boston, MA: Trumpeter.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed.). New York: Guilford Press.

Hayes, L. L., & Ciarrochi, J. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. Oakland, CA: Context Press, an imprint of New Harbinger Publications.

Joshi, S. V., Jassim, N., & Mani, N. (2019). Youth Depression in school Settings Assessment, Intervention, and Prevention. *Child Adolescent Psychiatric Clinics of North America*. 28. 349-362. <https://doi.org/10.1016/j.chc.2019.02.017>

Kaewpornasawan, T., & Tuntasood, B. (2012). The Prevalence of Depression in 2nd Year High School Students in Bangkok. *Journal of the Psychiatric Association of Thailand*, 57, 395-402.

Levin, M. E., MacLane, C., Daflos, S., Seeley, J. R., Hayes, S. C., Biglan, A., & Pistorello, J. (2014). Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *Journal of Contextual Behavioral Science*, 3(3), 155-163. DOI:10.1016/j.jcbs.2014.06.003

Livheim, F., Hayes, L., Ghaderi, A., Magnusdottir, T., Hogfeldt, A. Rowse, A., Turner, S., Hayes, S. C., & Tengstrom. (2015). The effectiveness of acceptance and commitment therapy for adolescent mental health: Swedish and Australian pilot outcomes. *Child and Family Studies*, 24(4), 1016-1030. DOI:10.1007/s10826-014-9912-9

Long, D. M., & Hayes, S. C. (2014). Acceptance, mindfulness, and cognitive reappraisal as longitudinal predictors of depression and quality of life in educators. *Journal of Contextual Behavioral Science*. 3. 38-44. <http://dx.doi.org/10.1016/j.jcbs.2013.10.004>

Malas, N., Plioplys, S., & Pao, M. (2019). Depression in Medically III Children and Adolescents. *Child Adolescent Psychiatric Clinics of North America*. 28. 421-445. <https://doi.org/10.1016/j.chc.2019.02.005>

Nakawiro, D. & Suttajit, S. (2013). History of psychotherapy and Mindfulness-based Psychotherapy. In Nakawiro, D. (Eds.), *Mindfulness-based Psychotherapy*, (pp. 1-10). Chiang Mai: Chiang Mai University.

- Pandi, W. (2015). Prevalence of Depression and its Association in Late Adolescence: a Case Study in Sisaket Technical College. *Journal of Public Health*, 45(3), 298-309.
- Petts, R. A., Duenas, J. A., & Gaynor, S. T. (2017). Acceptance and Commitment Therapy for adolescent depression: Application with a diverse and predominantly socioeconomically disadvantaged sample. *Journal of Contextual Behavioural Science*, 6, 134-144.
- Puolakanaho, A., Tolvanen, A., Kinnunen, S. M., & Lappalainen, R. (2018). Burnout-related ill-being at work: Associations between mindfulness and acceptance skills, worksite factors, and experienced well-being in life. *Journal of Contextual Behavioral Science*, 10, 92-102. <https://doi.org/10.1016/j.jcbs.2018.09.003>
- Raj, S., Sachdeva, S. A., Jha, R., Sharad, S., Singh, T., Arya, Y, K., & Verma, S. K. (2019). Effectiveness of mindfulness based cognitive behavior therapy on life satisfaction, and life orientation of adolescents with depression and suicidal ideation. *Asian Journal of Psychiatry*. 39. 58-62. <https://doi.org/10.1016/j.ajp.2018.12.001>
- Ramel, W., Goldin, P. R., Carmona, P. E., & McQuaid, J. R. (2004). The Effects of Mindfulness Meditation on Cognitive Processes and Affect in Patients With Past Depression. *Cognitive Therapy and Research*. 28(4). 433-455. DOI: 0147-5916/04/0800-0433/0
- Sannarin, T. (2019). Development and psychometric evaluation of the Psychological Flexibility Scale for Adolescents: A pilot study. *Thai journal of clinical psychology*, 1-10.
- Seangsanaoh, S., Vatanasin, D., Hengudomsab, P. & Pratoomsri, W. (2017). The influence of interpersonal factors on Depression among late adolescents. *Journal of Boromarajonani College of Nursing*, 33(3), 59-68.
- Shapiro, S. L., & Carlson, L. E. (2009). *The Art and Science of Mindfulness Integrating Mindfulness Into Psychology and the Helping Professions*. Washington, DC: APA.
- Silpakit, C., Silpakit, O., & Wisajun, P. (2011). The validity of Philadelphia Mindfulness Scale Thai version. *Journal of mental Health of Thailand*, 19, 140-147.
- Suntaphun, P., Bussahong, S., & Srisoem, C. (2019). Adolescent Depression: Nursing Roles. *Kuakarun Journal of Nursing*, 26(1), 187-199.
- Swan, J., Hancock, K., Dixon, A., & Bowman, J. (2015). Acceptance and Commitment Therapy for children: a systematic review of intervention studies. *Journal of Contextual Behavioral Science*. 4. 73-85. <https://doi.org/10.1016/j.jcbs.2015.02.001>.
- Trangkasombat, U., Lapboonsap & Hawanon, P. (1997). Using CES-D (Thai version) for screening depression in adolescents. *Journal of the psychiatric Association of Thailand*, 42, 2-13.

Vatanasin, D. (2016). Prevention of Adolescent Depression: From Evidence to Practice. *The journal of Faculty of Nursing Burapha University*, 24(1), 1-12.

Vuthiarpa, S. (2012). Cognitive Behavioral Therapy for Adolescents with Depression and Suicidality. *Thai Science and Technology journal*, 20(5), 457-467.

Williams, J. M. G. (2008). Mindfulness, Depression and Modes of Mind. *Cognitive Therapy and Research*. 32. 721-733. DOI: 10.1007/s10608-008-9204-z

Yuphakaset, W. (2019, December 2). Government Fiscal Management Information System (GFMIS) 2018. <https://hr.tcdc.or.th/th/Articles/>

Contact email: Thanpitcha2535@gmail.com

Comparative Interpretation of Tree Painting between People on Different Loneliness Levels

Mario Albert, Tarumanagara University, Indonesia
Lia Hervika, Tarumanagara University, Indonesia
Novita Liesera, Tarumanagara University, Indonesia

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Tree drawing is a form of projective test used to assess one's development (Koch, 1952). In Jungian psychology, tree(s) are often used as a symbol of development; representing a mirror on a person's inner and outer situation (Isaksson et al., 2009). The metaphorical interpretation of tree(s) can be symbolized as how a person relates to other people (Englund, 2004). Dissatisfaction with the quality of relationship increases the likeliness of one to feel lonely (Hawkey, et al., 2008). In this study, the UCLA Loneliness Scale (Version 3) was used to screen the loneliness of 110 young adults. Twenty young adults were selected and grouped into high and low levels of loneliness. Participants were briefly interviewed about their social life and asked paint tree(s) on an A3 sized paper. Further inquiries were made after completion of the painting. The result shows that people with a high level of loneliness tends to draw a single tree. Furthermore, most of the tree drawing gave an impression of emptiness and had a proportionately larger trunk. This implies the need for attention and a projection of loneliness. Further probing supports the claim that socially the lonely participants feel a need for having a quality relationship but were not willing to engage deeply with people around them. This research is a preliminary study. Further studies may take into account variation in population background and size.

Keywords: Projective Test, Tree, Loneliness, Art

iafor

The International Academic Forum
www.iafor.org

Introduction

Loneliness and Young Adults

In Erikson's theory, young adults, ageing between 20 – 40 years old, are faced with the intimacy vs isolation crisis. The primary challenge of this phase is intimacy, i.e. the search for a meaningful relationship. Young adults who are successful in forming a meaningful relationship would have a higher feeling of social connectedness and belongingness, hence attaining intimacy and the virtue of love. They would be ready to form a long term committed, reciprocal relationship (Hawkley, 2015; Papalia & Martorell, 2014). On the other hand, those who failed to attain intimacy would develop a sense of isolation. The relationship lacked trust and social connectedness and was perceived as meaningless. Dissatisfaction with the quality of relationship increases the likeliness of one to feel lonely (Hawkley et al., 2008).

Weiss (1973) defines loneliness as perceived social isolation. Loneliness occurs not only when there is no social relationship, but also when the relationship does not meet the person's ideal (Cacioppo & Cacioppo, 2012). A study by Hawkley (2015) shows that 15 – 30% of the general population suffer from chronic loneliness. Loneliness impacts both the human's physical and psychological health. Physically, lonely people are more likely to have poorer health through problems like lower immunity and fragmented sleep.

Psychologically, a lonely person is more sensitive to perceived social threats. Loneliness is also highly related to depressive symptoms in both a clinical and non-clinical population (Hawkley, 2015; Cacioppo & Cacioppo, 2012).

Various questionnaires are developed in an attempt to measure one's level of loneliness. Questionnaires may provide statistical results about loneliness. Combining questionnaires with the projective test will help in understanding what a person feels about the self (Issakson et al., 2009). This research aims to explore the projection of loneliness through tree painting media.

Tree Drawing Related Activity

Tree Drawing Test (TDT) known as the Tree test or Baum test is a projective test used mainly in psychology as a means of analyzing an individual's personality and development (Stevens & Wedding, 2005). Developed by Charles Koch in 1952, Koch believes that a human psyche follows the law of the tree. Hence, when drawing a tree, a human would project their psyche into the tree they are making. Tree, as a form, represents the human body. The vertical orientation with roots as feet on the ground, trunk with arms reaching out to the external surrounding and the nervous system inside are the cycle of a human body (Biedermann, 1995). The trunk of a tree could be a reflection of one's experience to the self. The symbolization of branches reaching out to the world is a reflection of a person relating to other people (England, 2004).

In psychotherapy, a different form of tree drawing related activity used known as Tree Theme Method (TTM). The activity includes the patient to paint a symbolic tree and narrate their life on it; focusing on the activity and routines in their everyday life. The therapy is based on art therapy knowledge, storytelling, and value (Gunnarsson,

Wagman, Hakansson, & Hedin, 2015). This therapy aims to provide insight for the patient and to increase the individual's ability to develop strategies to improve their life (Gunnarsson, Jansson, Eklund, 2006).

Used as both assessment and therapy, both activities provide insight to the participant in order to improve their overall life. As young adulthood is a period that focuses more on an individual's intimacy and quality of the relationship, social life is a substantial contributing factor to determine the success of this phase. Loneliness would be the undesirable feeling to the specified adult; that would lead to a lot of unwanted disorders. In this study, the aim is to look for a specific aspect of tree painting that would indicate or identify people who feel lonely.

Method

Participants

The target participants of this study are adults between 20 - 40 years old. The initial screening was participated by 105 adults, with 51 males and 54 females. After the initial screening, 20 voluntary participants, 10 with high levels of loneliness and 10 with low levels of loneliness, are selected at random for a brief interview and tree painting.

Measurement and Tools

UCLA Loneliness Scale (Version 3). Russell (1996) developed the UCLA Loneliness Scale (Version 3) to assess subjective loneliness and social isolation. The 20-item unidimensional scale is assessed by a 4-rating scale from 'never' to 'always'. Previous studies show that the scale has proven to have high internal consistency, test-retest reliability, convergent validity, and construct validity (Russell, 1996). The participant filled the Bahasa Indonesia adapted version of the scale. The Indonesian adapted version of the scale has excellent reliability and validity ($\alpha = 0.91$, $r_{it} > 0.2$)

Brief Interview. The interview aims to explore the participant's feelings of loneliness through daily activities, perception of the quality of social relations, perceived support, and what makes them feel lonely. Participants are further inquired on how they respond to the feeling of loneliness and whether or not there are prior attempts to break through their loneliness. The interviews are conducted in Indonesian language.

Tree Painting. Participants are provided with an A3 sized paper, watercolour, five sizes paintbrush and other supporting materials. The instruction is to 'draw tree in any way you want'. Tree painting serves as a reflection of the painter's self-image (Isaksson, Norlén, & Englund, 2009). In this study, the focus is the projection of loneliness in the painter's tree painting. The aim is to explore and compare the projection of the participants with a high and low level of loneliness. There is no time limit for the painting activity. The participants would further be asked to paint the background if they have not done so. After completion of the painting, researchers inquire participants to explore their painting further. All instructions and inquiries are conducted in Indonesian language.

Results

High UCLA Score CK (Female, 24 years)



Figure 1. CK's tree painting

CK describes her painting as a girl having a hot drink under a tree. She is alone on a starry night. In the interview, she gave a statement regarding her difficulty in developing a deep connection with other people due to her anxiety about getting 'backstabbed' by other people. CK has an impression of the girl sitting alone outside with the distant family member inside the house.

A (Female, 27 years)



Figure 2. A's tree painting

The cut-off part (crown and branch) symbolize her feeling of incapability/helplessness to 'reach out' and interact with her social surrounding effectively. Based on the interview, A stated her feeling of being emotionally distant to other people in her environment right now. A also had a longing for her old friend she used to keep contact with; which caused her to feel lonely.

VT (Female, 20 years)

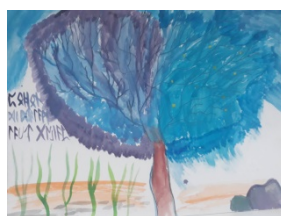


Figure 3. VT's tree painting

VT portrayed her loneliness as the theme of her painting 'An underwater tree'. Her expression of a breathless tree in deep water symbolizes her desire to be 'saved and understood'. VT draws an excessive amount of branches. VT confirmed her feeling of loneliness in the interview, yet she perceives that people who befriend her always

have ulterior motives and up to no good.

AS (Male, 23 years)



Figure 4. AS's tree painting

A visible root usually indicates emotional dependence and instability. AS associates a tree with a park and swing for someone (him) to play with. In the interview, AS expressed his fear of being judged by other people. He would rather talk with a stranger than someone he knows personally. His feeling of loneliness stems from his fear of being judged.

D (Female, 27 years)

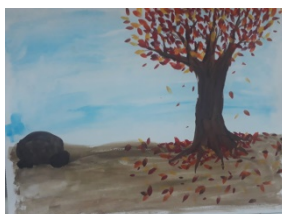


Figure 5. D's tree painting

D claims to be independent and used to do everything alone. The tree was meant only to be watched by sitting on a rock beside it. The impression of her tree painting and interview symbolizes that she distanced herself from other people to avoid the vulnerability of a relationship.

WS (Female, 25 years)



Figure 6. WS's tree painting

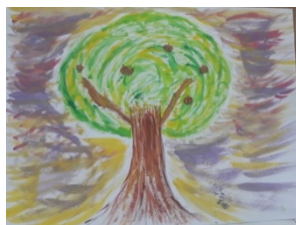
The murky and misty atmosphere gave out the feeling of emptiness on the painting. WS described her painting as a tree near a lake. The faint yellow line indicates light from far away. WS said in her interview that she had relationships with others, yet she would be independent and not cling herself to the relationship.

L (Male, 28 years)*Figure 7. L's tree painting*

L described his painting as a tree on a high hill near a meadow. He portrays himself as the big tree around the flowers. Concerning his feeling of loneliness, L denied that he felt lonely and used to do everything alone. He stated himself to “just be professional” and decide to not connect to anyone on a personal level.

MM (Female, 24 years)*Figure 8. MM's tree painting*

MM described her painting as a tree in a park with many people in it. The tree uses a heavy outline of different color which indicates an emphasis on the defense mechanism. In her interview, she stated that she does not have anyone to connect on an intimate level. She felt that in daily activity, she was surrounded by many, yet still felt lonely. The projection of her painting could be interpreted as the feeling of loneliness due to the non-visible people in the picture.

JW (Male, 29)*Figure 9. JW's tree painting*

JW portrays himself as a tree with a strong trunk. The two branches described by JW as his plans and goals. He also gave out his meaning of color used as the background, creating a random order of color, symbolizing chaos in his external life. In the interview, JW stated that he limits his trust to other people and has a fear of being abandoned by other people. This was projected by the orderly tree (self) and the

chaotic background (environment).

V (Female, 30 years)



Figure 10. V's tree painting

V paints an ideal park according to her with everything she likes; flower, butterfly, and apple tree. V also described the park as cool and breezy. V felt unsatisfied with the butterfly she painted ended up too dark for her. In the interview, she admitted that she has a high standard for a friend on how they should treat each other like a family. If the criteria are not met, she would feel a shallow relationship and feel lonely despite being with other people. V's painting projected her ideal relationship with others while being deeply rooted in her standard.

Low UCLA Score

R (Male, 23 years)



Figure 11. R's tree painting

R describes his painting as a growing tree in a park. He stated that the tree has no specific name or type. R specifically points out the leaves color that differs for each branch. In the interview, R stated that he has a satisfying relationship with his surroundings because he does not expect anything from others. He felt that he had family, friends, and a wife to describe the excellent quality of his social life.

LM (Female, 34 years)



Figure 12. LM's tree painting

LM narrates a story about her painting about a lover under a tree. She pointed out the

tree as a special place for the lover with the beautiful scenery around it; thatches, flowing river, and green grass. In the interview, she found her relationship with family and friends as good. She felt she had a home and friends to share her story.

WD (Male, 29 years)



Figure 13. WD's tree painting

WD described that the tree is a reflection of him with not much explanation afterwards. WD was a meticulous person and took him hours to paint the picture. In the interview, WD said that he was bullied and got no support whatsoever from his parents; hence he learned to depend on himself. WD stated that he does not find his social life satisfactory, yet the reason for him not to feel lonely was more to his viewpoint that he does not feel anything lacking.

HW (Male, 30 years)

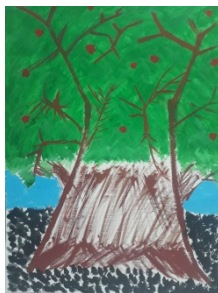


Figure 14. HW's tree painting

HW describes his painting as a giant tree on top of a mountain surrounded by smaller trees. HW projected himself as the big tree that was surrounded by others. Supported by the interview, HW stated that he always feels that he has people to talk to, yet he claimed himself as his own best friend. HW described his relationship with others as satisfying and being a problem-solver to all his friends.

R (Male, 30 years)



Figure 15. R's tree painting

R describes his painting as a mango tree in a forest at noon. R stated that he himself and several animals were there watching the tree. R chose a rather dark color for a noon sky and a spiky tone on the tree crown. In the interview, R stated that he is his own friend. In a bad situation, R stated that he has an old friend that he could depend on. R also said that he enjoyed his own company, while also likes to help people and listen to their problems.

CS (Male, 27 years)



Figure 16. CS's tree painting

CS describes his painting as an apple tree in the backyard. The people in the house would sometimes go out and enjoy an apple from the tree. CS stated that he values his relationship with others to give each other positive energy. CS would rather be himself regardless of the environmental difference in opinion; he would stand on his principle.

CM (Female, 24)



Figure 17. CM's tree painting

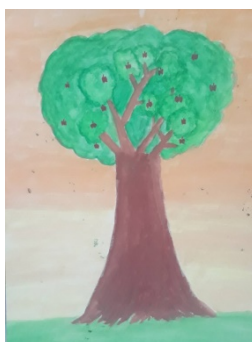
CM describes her painting as a mango tree at night near a village. CM presents herself as a tough-looking individual. She valued a good relationship as excellent open communication and keeping in contact once in a while. In the interview, CM stated that she is used to being independent. In time, there were several times she would feel lonely, but overall, she felt satisfied with her relationship with friends and had someone to talk to whenever she felt low.

CC (Female, 28 years)*Figure 18. CC's tree painting*

The paint mixture used for this paint was rather thick. CC started with dark color, slowly adding layers to a brighter and brighter shade later on. CC does not name the place, and she refers to it by the adjective 'peaceful'. CC described her relationship with people as never lacking people to talk to. There would always be people that she could rely on so that she would never feel lonely.

NJ (Female, 23)*Figure 19. NJ's tree painting*

NJ described herself as the front most trees on the bunch, with her friends being the other trees in the background. The single tree seemed to be further than the rest, but, being visible to the main tree, NJ stated that the lone tree would not feel lonely because of the presence of the other trees. In the interview, she got an insight regarding her painting as an accurate representation of her social life.

AN (Female, 25 years)*Figure 20. AN's tree painting*

AN projected herself as an apple tree during sunset. AN would carefully paint the branches and apples one by one thoroughly focusing on the small detail. In the interview, she stated that her relationship with friends and boyfriend made her feel satisfied with her social life. The choice of conflicting color between the sky and the

tree implies a sign of longing.

Discussion

Tree Drawing Test (TDT) and Tree Theme Method (TTM) have been used as an assessment and therapy method, respectively. TDT focuses more on the projection and more subtle (Koch, 1952), while TTM narrates out the story behind one's tree (Alexi & Gunnarsson, 1995). Tree drawings are symbolized as an inner development being projected outwards in order to understand oneself in a more conscious manner (Hark, 1995). Tree as a whole interacts with the environmental aspect surrounding it. Every segment of the tree represents a different conscious response to the inner (self) and outer (relation) experience that symbolizes how a person would relate to others (Englund, 2004).

This research orients more on the relational aspect of tree drawing to assess loneliness on a young adult. The paintings of participants with a low level of loneliness vary more than those with a high level of loneliness. The findings in participants with high loneliness level have several recurring patterns; overemphasizing on branches or branchless (except participant D [Figure 5] and participant JW [Figure 9]). While most participants draw a single tree, some participants who draw several more trees belong to the low loneliness group. The prompting and interview on the finished painting gave further insight to participants with a high level of loneliness. They would pour in their story and correlate it with their painting to match the situation they feel. The participant would then tell more stories which were uncovered in the brief interview before the painting activity to match their painting. Participants with a low level of loneliness gave more description regarding the physical product they made with comparably fewer insight than those with higher loneliness level.

The following theories are to explain the findings of this research. Weiss (1973) suggested that the second phenotype of loneliness termed social loneliness is the perceived presence/absence of quality friendship or family connections. People with more frequent contact with friends or family have a lower level of social isolation (Hawkley, Browne, & Cacioppo, 2005). Ogdon (1996) and Koch (1952) suggested that branches reflect the ability or desire to develop psychologically and socially; in a literal sense, it reaches out to the environment. People with a high loneliness group would tend to paint lack or too many branches on their painting, while the result on the low loneliness group would be diverse in terms of the branch area. The finding shows that people with high loneliness would reflect themselves in the tree painting as isolating themselves or obsessed from social interaction. Also, Kaplan's (1991) study found that a certain level of artistic skill would have a significant impact on drawing analysis; which would explain participant D's [Figure 5] painting reflected as normal.

Conclusion

This study is conducted to explore differences between people with loneliness levels among young adults. The result shows that people with high loneliness levels would draw a single tree. Most of the painting would have no or an excessive amount (participant VT [Figure 3]) of branches (excluding participant D [Figure 5] and JW [Figure 9]). Most participants would paint a single tree, yet some people with a low level of loneliness would add more (participant HW [Figure 14], CC [Figure 18], NJ

[Figure 19]). The brief interview also reflects the participants' view on their social life. People with a higher level of loneliness would gain more insight from their painting and would correlate it deeply with the situation they feel. Result of this study confirms the theory of branch(es) on tree-drawing/painting would correlate to one's view on social/external life. However, due to the limited number of participants, the result of this study could not be generalized across the populations.

Acknowledgement

We would like to thank Monty P. Satiadarma for his help on the finding and as a teacher who taught us the projective test. We would also like to extend our gratitude to Edward S. Gani for providing insight regarding loneliness. This research would not be possible without volunteering participants and endless supports from friends and family.

References

Alexi, S., & Gunnarsson, B. (1995). The tree as image and life symbol. Department of Occupational Therapy. Lund University. (in Swedish).

Biedermann, H. (1995). A dictionary of symbols. Borås: Forum.

Cacioppo, J. T. & Cacioppo, S. (2012). The phenotype of loneliness. *European Journal of Developmental Psychology*, 9(4), 446 - 452.
doi:10.1080/17405629.2012.690510

Englund, B. (Ed.). (2004). Creative and bodily-based complementary therapies. Lund: Studentlitteratur (in Swedish).

Gunnarsson, A. B., Jansson, J. A., & Elkmund, M. (2006). The tree theme method in psychosocial occupational therapy: a case study. *Scandinavian Journal of Occupational Therapy*. 13(4). pp. 229-240.

Gunnarsson, A. B., Wagman, P., Hakansson, C. & Hedin, K. (2015). The tree theme method (TTM), an occupational therapy intervention for treating depression and anxiety: study protocol of a randomized controlled trial. *BMC Psychology*. 9(3). doi: 10.1186/s40359-015-0097-9.

Hark, H. (1995). Dream imagery: Tree. Solna: Centrum för Jungiansk Psykologi AB. (in Swedish).

Hawley, L. C., Browne, M. W., & Cacioppo, J. T. (2005). How can I connect with thee?: let me count the ways. *Psychological Science*. 16 (10),
<https://doi.org/10.1111/j.1467-9280.2005.01617.x>

Isaksson, C., Norlén, A-K., & Englund, B. (2009). Changes in self-image as seen in tree paintings. *The Arts in Psychotherapy*, 36, 304-312.

Kaplan, F. F. (1991). Drawing assessment and artistic skill. *The Arts in Psychotherapy*, 18. pp. 347-352.

Koch, C. (1952). *The Tree Test: The Three Test As an Aid in Psychodiagnosis*. New York, NY: Hans Huber

Papalia, D. E. & Feldman, R. D. (2012). *Experience Human Development*, 12th ed. New York, NY: McGraw-Hill

Russell, W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20 - 40.

Stevens, M. J., & Wedding, D. (2004). *The handbook of international psychology* (1st ed.). Routledge. ISBN 9780415946124

Weiss, R. S. (1973). *The experience of emotional and social isolation*. Cambridge: MA: MIT Press

Clients' Experiences of Counseling Engagement in Thailand

Natawan Paoon, Chulalongkorn University, Thailand
Panita Suavansri, Chulalongkorn University, Thailand
Nattasuda Taephant, Chulalongkorn University, Thailand

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

This qualitative study aimed to explore clients' lived experiences of counseling engagement, which is regarded as the common factor contributing to successful counseling outcome. The study examined clients' counseling engagement in Thailand where counseling is not commonly known while seeking mental help tends to be stigmatized. It also attended to how sociocultural aspects influence clients' counseling engagement. Participants were six clients who had completed face-to-face individual counseling and had changed positively as the result. Data were collected via semi-structured in-depth interviews and were analyzed using Interpretative Phenomenological Analysis (IPA). The study resulted in the three main themes which were 1) Attending and Disclosing, consisting of Perceived Benefits of Counseling, Readiness to Disclose and Listen, Positive Client Image, and Confidentiality 2) Working Together, consisting of Problem and Solution Exploration, Acceptance, Equality, and Boundary 3) Working By Oneself, consisting of Responsibility for Change, Contemplation, Behavior Change, and Counseling Evaluation. The findings revealed that with the determination to change, despite some uncertainties, clients willingly and actively engaged in the counseling tasks and in applying what they had learned from counseling in real life. Sociocultural aspects, such as language, the social image, and the relational power structure shaped the way clients perceived and engaged in the counseling process. Implications for counseling practice and future research include sensitivity to context. For example, counselors may openly discuss with their clients how their relationships may be affected by the social norms in their societies, while researchers may pursue studies on clients' counseling engagement in various sociocultural contexts.

Keywords: Client's Counseling Experience, Client's Counseling Engagement, Counseling In Thailand, Interpretative Phenomenological Analysis

iafor

The International Academic Forum
www.iafor.org

Introduction

Counseling engagement can be defined as all efforts clients make throughout counseling, both within and between sessions, toward the achievement of changes (Holdsworth, Bowen, Brown, & Howat, 2014). It is regarded as a common factor that contributes to successful counseling outcomes, regardless of counseling approaches (Bohart & Tallman, 2010). While clients' experiences of counseling, including clients' experiences of counseling engagement, have been extensively researched within the western contexts (Levitt, Pomerville, & Surace, 2016), Thai clients' experiences of counseling engagement may be different than previously suggested as seeking professional mental health services tends to be stigmatized in Thailand (Tuicomepee, Romano, & Pokaeo, 2012). Moreover, counseling services are largely invisible and inaccessible to the general public, and instead of counseling, Thai people usually seek psychological help from others sources such as family, friends, Buddhist monks, psychiatrists, fortune tellers or folk healers (Ægisdóttir, Leach, Romano, Tomlinson-Clarke, & Canel-Çınarbaş, 2019). This is partly due to the lack of the national licensure system for professional counselors in Thailand (Sangganjanavanich & Nolrajsuwat, 2015). Moreover, how Thai clients engage in counseling may be influenced by the hierarchical, collectivist, and patronage nature of the Thai social structure (Iwasaki & Horie, 2000). For the reasons that clients' counseling engagement can be pivotal to clients' positive changes as well as the possibility that Thai clients' experiences of counseling engagement may be different than previously suggested by the existing literature, the research objective was to explore clients' lived experiences of counseling engagement in Thailand.

Method

Participants

The study received ethical approval from Chulalongkorn University Ethics Committee before the commencement of the study. Prospective participants were recruited via purposive sampling. Inclusion criteria were as follows: (a) aged 20 years and above, (b) attended face-to-face individual counseling, (c) experienced positive changes as a result, and (d) acknowledged their counseling engagement. The study's advertisement posters were distributed via social media platforms, counseling centers, and counselors.

A total of six counseling clients participated in the study. All participants were Thai female, aged between 26 and 37 years (mean 31 years). Four participants had a bachelor's degree, one had a master's degree, and one had a doctoral degree. All participants voluntarily chose to attend counseling. The number of counseling sessions ranged from 1 to 12 sessions (mean 5 sessions). The identities of the participants, as well as the people and places mentioned by the participants, were kept anonymous.

Data Collection

One-on-one semi-structured in-depth interviews were used for data collection. All interviews were audio-recorded with the participants' written informed consent and were later transcribed verbatim. The interviews were conducted by the first author,

while the second and third authors assisted in developing the interview outline which included: (a) Please describe your experience of deciding to attend counseling; (b) Throughout the counseling process, how was your experience of counseling engagement?; (c) What were the factors contributing to your counseling engagement?; and (d) Did you experience any difficulty in engaging? If so, please describe the experience. The interview outline was used flexibly to allow the participants to tell and elaborate on their experiences. Each interview was conducted in a private location around 70 – 110 minutes each. Five participants were interviewed once except for one participant who was interviewed twice for more information and clarification.

Data Analysis

The transcribed interviews were analyzed by the first author using Interpretative Phenomenological Analysis or IPA (Smith, Flowers, & Larkin, 2009). Following the IPA guideline by Smith et al. (2009), the analysis was as follows: (a) Starting with the first participant, the first author immersed herself with the recorded interview by repetitively reading the transcript as well as listening to the audio recording; (b) The first author produced a comprehensive and detailed set of notes, identifying ways the participant talked, understood and thought about the issues. The notes consisted of descriptive, conceptual, and linguistic notes. Descriptive noting had a phenomenological focus, staying close to the participant's explicit meanings. Conceptual noting had an interpretative focus, looking for implicit meanings in the participant's account. And linguistic noting explored the participant's specific uses of language; (c) Emergent themes were developed. Emergent themes were concise statements of what was crucial in the various notes and reflected a synergistic process of description and interpretation; (d) Emergent themes were organized in categories that allowed a structure of the most interesting and important aspects of the participant's account to emerge; (e) Step (a) through (d) were repeated until all transcribed interviews of each participant were analyzed; and (f) Table of themes and subthemes were produced as patterns across cases emerged. The first author regularly consulted with the second author to ensure that the final table of themes represented a good fit to the data.

Results

Themes	Subthemes	Number of Participants Representing each Subtheme
1. Attending and Disclosing	1.1 Perceived Benefits of Counseling	All
	1.2 Readiness to Disclose and Listen	All
	1.3 Positive Client Image	3
	1.4 Confidentiality	4
	2.1 Problem and Solution	All
2. Working Together	Exploration	All
	2.2 Acceptance	3
	2.3 Equality	3
	2.4 Boundary	3
3. Working By	3.1 Responsibility for Change	4

Oneself	3.2 Contemplation	3
	3.3 Behavior Change	5
	3.4 Counseling Evaluation	3

Table 1: Themes, Subthemes, and Number of Participants Representing each Subtheme

1. Attending and Disclosing

1.1 *Perceived Benefits of Counseling*

All clients expected that counseling would help in solving the problems that they could not handle or solve by themselves, as illustrated by what Participant 5 said, “I had hopes that I would feel better. At the time, I decided to attend counseling with the feeling that the counselor would be able to help me with the decision, I thought. It was like I would finally know what to do.”

Three clients also considered meeting a psychiatrist, but ultimately decided to meet a counselor as they saw that counseling would be a better fit for their problems. For example, Participant 2 stated, “I thought only taking medicine was not the best solution. I realized that many [of my problems] were because of my attitudes, my actions, or how I perceived them.”

In other words, clients considered counseling as the best current solution to their problems in comparison to other solutions, such as trying to solve the problems by themselves, asking for help from close ones, or meeting a psychiatrist.

1.2 *Readiness to Disclose and Listen*

All clients hoped to rely on the counselors’ expertise. They were open to follow the counselors’ guidance or suggestions. Participant 4 reported, “I was quite open to attend counseling and take [the counselor’s] advice. I was open to [the counselor] from the very beginning. It was like because I had decided to depend on this person.”

Four clients also described being ready to disclose their personal experiences in detail, even if it was something they normally did not want to disclose to other people. They saw open disclosure as a way to assist the counselors in helping them. For example, Participant 3 explained, “Some stuff I never told anyone, but I felt like I ought to tell [my counselor] in case [the counselor] would have any idea that could help me.”

1.3 *Positive Client Image*

Three clients attributed their counseling engagement to the ability to normalize being a client. Two clients perceived stigma from others regarding psychological problems and seeking mental health services. However, they were not self-stigmatized as they normalized their problems and their decisions to seek counseling. For example, Participant 6 stated, “My sister perceives this kind of treatment as something for abnormal people [...] but I disagree because I learned about this in college and I know that [psychological problems and professional help] are normal and can happen.”

Participant 6's positive attitude towards mental health services was due to her being well-informed on the issue.

Meanwhile, Participant 4 was disappointed with herself for seeking counseling as she believed that it meant she was a failure, but her counselor helped her to normalize seeking counseling during the first session, as illustrated by her account, "[The counselor said] at some points, we all need to seek help sometimes." As a result, Participant 4 decided to regularly and continuously attend the sessions.

1.4 Confidentiality

Four clients felt safe to attend counseling and disclose their personal experiences due to their trust in counseling confidentiality. Three clients trusted that their counselors would maintain their ethical standards of nondisclosures. Participant 6 stated, "I knew that [the counselor's work] involved nondisclosure of their clients' private information."

Additionally, two clients built their confidence in confidentiality as they began their sessions. Participant 2 directly asked her counselor if she could be sure that her personal stories would not be leaked, while also covertly checked the surroundings of the counseling room, as illustrated by Participant 2's account, "I checked if there was a video recording or any sort of recording. When I saw that there was none, I was more at ease."

2. Working Together

2.1 Problem and Solution Exploration

All clients soon learned that their counseling engagement was not only to disclose sufficient information and wait to follow their counselors' guidance but also to collaboratively explore their problems and possible solutions. For example, Participant 1 reported, "Whenever [my counselor] said or suggested something, he would always ask for my inputs, or if I had anything in mind. He always invited me to engage in the process. It was not like he just told me that I should do this, I should do that, and then moved on to the next problem without checking with me if I felt like I would be able to do what he told me."

Counselors helped clients to expand their perspectives with various counseling techniques, while clients openly examined themselves or their problems. These led clients to gain new insights about themselves, their problems, possible solutions, or new options for the future. Participant 3 explained, "[The counselor said] 'But you are proud of yourself, right?' Then, I told [the counselor] that was right. [The counselor said] 'This has made you who you are today right?' I told [the counselor] that was right. I forgot. I forgot to be proud of myself. [The counselor] encouraged me to be very proud of myself. I overlooked what gave me strength. I overlooked it."

2.2 Acceptance

All clients were non-judgmentally understood and accepted by their counselors, which then allowed them to openly explore their problems and possible solutions with

their counselors without having to conceal or being defensive. For instance, Participant 5 described, “Deep down, I knew that my counselor would never disapprove of me, and I could talk about everything.”

2.3 Equality

Three clients described the psychological distance with their counselors who held a higher status in their relationships due to being an expert. The psychological distance was further enhanced as the clients felt socially obligated to use proper sets of words that showed humble respect to their counselors who held a higher status. For example, Participant 2 reported, “If I were to call anyone an ‘Ajarn’ (meaning a teacher), then I would behave like I am lower. And I would not be overly friendly with that person, because that person is an ‘Ajarn’.” Participant 2 felt like she needed to properly address the counselor with respect as an ‘Ajarn’, which at the same time reinforced her feeling of being at a lower status and needing to keep her distance.

However, when counselors chose to use informal words that represented a more equal status between them, clients were able to relax and straightforwardly express themselves without having to censor or carefully choose their words. For example, Participant 2 said, “[The counselor] called herself a ‘Phee’ (meaning an older sibling), so I felt like I talked to someone who was a ‘Phee’.” Participant 2’s counselor addressed herself as a ‘Phee’, making her more comfortable to express herself in a way that she would not be if she were talking to an ‘Ajarn’.

It should also be noted that in Thailand, a person may be called a ‘Phee’ or a ‘Nong’ (meaning a younger sibling) even if that person is not a blood relative. Even though calling someone a ‘Phee’ still suggests that the person holds a higher status in a relationship, it also suggests a more patronage relationship as well as more psychological closeness than calling someone an ‘Ajarn’.

2.4 Boundary

Three clients felt secure and comfortable to work on their problems within the appropriate professional boundaries that were limited to that of a helper and a help-seeker. Participant 5 also suggested that she deliberately maintained these boundaries with her counselor by only talking about her problems unless the counselor brought up other topics, as illustrated by her account, “I tried not to ask [the counselor] something personal, even though sometimes she brought them up herself. I tried not to talk about things that were not related to my problems.”

3. Working By Oneself

3.1 Responsibility for Change

Four clients realized their responsibilities to apply what they had learned from counseling to continuously change themselves or solve their problems in everyday lives. For example, Participant 1 stated, “If I did not use [what I had learned from counseling] to change my perspectives, I felt like [counseling] would be for nothing.”

3.2 Contemplation

Three clients continuously contemplated themselves, possible solutions, or what they had learned from counseling in everyday lives. For instance, Participant 4 reported, “[What I learned from counseling] was like a piece of new information that I stored. [...] Then after the session, I began to process the information and consider the various options of what I could do.” The continuous contemplation led the clients to gain new insights or new solutions that did not arise within counseling sessions.

3.3 Behavior Change

Five clients tried new behaviors learned from counseling that they hoped would lead to positive changes. For example, Participant 6 did not want to keep being depressed, so she tried forcing herself to get up whenever she was lying in bed. Participant 6 explained, “After my [counseling] sessions, as I was by myself, on the days that I was lying in bed, I would recall what the counselor said, ‘If my [loved one] could see me right now, would she want to see me lying in bed like this?’ That made me felt like I needed to get up.”

Two clients were initially reluctant to try new behaviors as they feared that they would lead to negative consequences but eventually decided to risk it. Participant 1 decided to test new behaviors after thinking that the possible negative consequences could not be worse than what she was feeling. Participant 1 stated, “I was tired. I was tired of being sad. I was tired of being down. I had nothing to lose.”

After testing and attaining positive results, clients felt affirmation that the new behaviors worked. They were then encouraged to continue these new behaviors.

3.4 Counseling Evaluation

Three clients evaluated their counseling outcomes and decided whether to continue or terminate their counseling process. Participant 3 decided to terminate counseling after she experienced positive changes, as illustrated by her account, “I felt more secure with life. I felt happy. I felt relieved from [what I had gained as the result of counseling].”

Discussion

The clients’ accounts reflected the socio-cultural context they lived in. The invisibility of counseling services in Thailand (Sangganjanavanich & Nolrajsuwat, 2015) was reflected in the interviews as four clients were not aware of the counseling services before and only came across them while looking for an alternative solution to their problems. After they learned of counseling, three clients also considered meeting a psychiatrist as another alternative, suggesting that meeting a psychiatrist was a more common and well-known professional mental health service used by Thais (Ægisdóttir et al., 2019). Moreover, two clients also perceived stigma from others around them regarding seeking professional mental health services (Tuicomepee et al., 2012).

In some ways, the clients in the study were found to experience counseling engagement similar to what has been suggested by the existing literature. Clients voluntarily attended counseling because they believed that counseling would help in solving the problems that they could not handle or solve by themselves (Cooper & Cooper, 1991; Goldfried, 1991). By ultimately deciding that counseling would be a better fit for their problems in comparison to meeting a psychiatrist, clients' ability to choose the best current solution to their problems was also demonstrated (Bohart & Tallman, 1999). Moreover, the ability to normalize psychological help-seeking despite the perceived social stigma allowed clients to engage in the counseling process (Corrigan, 2004). This can be suggested that, given the social stigma within the Thai context (Tuicomepee et al., 2012), being able to normalize counseling is one of the important factors that relate to clients' counseling engagement among Thais.

As they were attending counseling, the clients in the study hoped to rely on the counselors' expertise and professionalism and were ready to disclose their personal experiences in detail. Their expectations about their roles and their counselors' roles were consistent with previous studies suggesting that clients may expect that their main role as clients was to disclose their personal experiences (Farber, Berano, & Capobianco, 2004). Moreover, clients may anticipate their counselors to play a directive role as the primary contributor to the counseling work and change process (Bachelor, Laverdière, Gamache, & Bordeleau, 2007; Westra, Aviram, Barnes, & Angus, 2010). This might suggest clients' deference to their counselors (Rennie, 1994) who were perceived as an expert in the hierarchical counseling relationships (Linell & Luckmann, 1991; Strong, Sutherland, & Ness, 2011). However, how the clients in the study trusted in their counselors' expertise and were open to follow their counselors' guidance while saw their disclosure as a way to assist their counselors might also suggest the patronage nature of the hierarchical social structure in Thailand. The patronage nature means that people with lower status usually expect people with higher status to assume responsibilities in helping and protecting them, while they in return show humility, respect, trust, and willingness to be guided (Iwasaki & Horie, 2000). The patronage nature within the Thai context may influence clients' counseling engagement to initially be assisting their counselors while waiting to follow their guidance. However, clients later learned that their counseling engagement was not only to disclose sufficient information and wait to follow their counselors' guidance but also to collaboratively explore their problems and possible solutions with the counselors.

Components of the counseling relationships found to contribute to clients' counseling engagement were consistent with previous literature. These were confidentiality (Fitzpatrick, Janzen, Chamodraka, & Park, 2006), acceptance (Carey et al., 2007), and appropriate professional boundaries (Rolvjord, 2016). Moreover, previous research suggested that clients may be able to engage more as their counselors position themselves more like a friend than a distant professional by revealing something about themselves, expressing genuine interests in their clients, or refraining from exerting authority over them. (Gibson, Cartwright, Kerrisk, Campbell, & Seymour, 2016). The current study further suggested that clients may feel the psychological closeness with their counselors as the result of their counselors' word choices. This was due to the Thai language structure having different sets of vocabularies for different occasions and social positions (Iwasaki & Horie, 2000). Clients in the

study initially chose words that showed humble respect to their counselors who held a higher status in their relationships. Their preoccupations with formalities and mannerisms with their counselors were found to make it difficult for them to openly engage in counseling or straightforwardly express themselves. However, they were able to open up and be themselves after the counselors chose to use informal words that suggested a more equal status and more psychological closeness between them, signaling to clients that they could relax and adopt a more casual set of vocabularies. It should also be noted that in Thailand, people with higher status, including the counselors, usually need to express their desire for informality first, even though clients themselves may also desire it. This point underlines one of the challenges of clients' counseling engagement specific to the Thai context and Thai counselors should be mindful of their word choices.

Moreover, coherent with the existing literature, clients in the study not only willingly and actively engaged in the counseling tasks, but also assumed the responsibilities of continuously changing themselves or solving their problems by applying what they had learned from counseling in everyday lives (Hoener, Stiles, Luka, & Gordon, 2012). Clients continuously contemplated themselves, possible solutions, or what they had learned from counseling in everyday lives (Bowman & Fine, 2000). They also tried new behaviors learned from counseling that they hoped would lead to positive changes (Clarke, Rees, & Hardy, 2004). Lastly, clients evaluated the counseling outcomes and decided whether to continue or terminate their counseling process (Hill, 2005).

Conclusion

This IPA study explored clients' experiences of counseling engagement in Thailand where seeking professional mental health services tend to be stigmatized, while counseling services are generally invisible and inaccessible to the public. The study found that the clients were able to normalize seeking counseling despite the perceived social stigma. It also found that the counseling relationships in the study were initially influenced by the hierarchical, collectivist, and patronage nature of the Thai social structure as clients initially were waiting to follow their counselors' guidance while maintaining proper mannerisms with their word choices. However, as the counselors were inviting their clients to collaborate and using informal words, clients were able to openly engage with their counselors towards the achievement of changes. Therefore, despite the lack of clients' previous knowledge regarding counseling as well as the initial power difference within the counseling relationship, clients learned to actively engage in the counseling tasks, while also continued their engagement outside sessions by applying what they had learned from counseling in everyday lives.

Suggestions

For clients: Current or prospective clients can use the results presented in the study to consider adapting or increasing their engagement in the counseling process.

For counselors: Counselors may use the results presented in the study to help encourage clients' counseling engagement, for example, by discussing confidentiality or maintaining appropriate boundaries with their clients. Moreover, specific to the contexts where counseling is not commonly known or where there is the social stigma

regarding mental health services, counselors may need to directly discuss their roles and their clients' roles or may need to help normalize their clients' psychological problems and their decisions to seek counseling respectively. Additionally, counselors should be mindful of their word choices in the contexts where choices of words could imply the extent of the psychological distance within the counseling relationships.

For future research: In the Thai context, future research may pursue studies of clients' experiences of difficulties in counseling engagement or counseling experiences of involuntary clients. Additionally, because all the participants in the study were coincidentally female, future research may also include Thai male clients' experiences of counseling engagement, as the social norms or values related to being a Thai male may affect their counseling engagement differently from those of Thai females.

Acknowledgments

Sincere gratitude to all the participants for their valuable contributions to the study.

References

- Ægisdóttir, S., Leach, M. M., Romano, J. L., Tomlinson-Clarke, S., & Canel-Çınarbaş, D. (2019). Sociopolitical, cultural, and historical contexts that influence counseling practice in four countries. *The Counseling Psychologist*, 47(4), 578-607. doi:10.1177/0011000019883321
- Bachelor, A., Laverdière, O., Gamache, D., & Bordeleau, V. (2007). Clients' collaboration in therapy: Self-perceptions and relationships with client psychological functioning, interpersonal relations, and motivation. *Psychotherapy: Theory, Research, Practice, Training*, 44(2), 175-192. doi:10.1037/0033-3204.44.2.175
- Bohart, A. C., & Tallman, K. (1999). *How clients make therapy work: The process of active self-healing*. Washington, DC: American Psychological Association.
- Bohart, A. C., & Tallman, K. (2010). Clients: The neglected common factor in psychotherapy. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works in therapy* (2nd ed., pp. 83-111). Washington, DC: American Psychological Association.
- Bowman, L., & Fine, M. (2000). Client perceptions of couples therapy: Helpful and unhelpful aspects. *American Journal of Family Therapy*, 28(4), 295-310. doi:10.1080/019261800437874
- Carey, T. A., Carey, M., Stalker, K., Mullan, R. J., Murray, L. K., & Spratt, M. B. (2007). Psychological change from the inside looking out: A qualitative investigation. *Counselling and Psychotherapy Research*, 7(3), 178-187. doi:10.1080/14733140701514613
- Clarke, H., Rees, A., & Hardy, G. E. (2004). The big idea: Clients' perspectives of change processes in cognitive therapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 77(1), 67-89. doi:10.1348/147608304322874263
- Cooper, A., & Cooper, J. (1991). How people change with and without therapy. In R. C. Curtis & G. Stricker (Eds.), *How people change: Inside and outside therapy* (pp. 173-189). Boston, MA: Springer.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614-625. doi:10.1037/0003-066X.59.7.614
- Farber, B. A., Berano, K. C., & Capobianco, J. A. (2004). Clients' perceptions of the process and consequences of self-disclosure in psychotherapy. *Journal of Counseling Psychology*, 51(3), 340-346. doi:10.1037/0022-0167.51.3.340
- Fitzpatrick, M. R., Janzen, J., Chamodraka, M., & Park, J. (2006). Client critical incidents in the process of early alliance development: A positive emotion-exploration spiral. *Psychotherapy Research*, 16(4), 486-498. doi:10.1080/10503300500485391
- Gibson, K., Cartwright, C., Kerrisk, K., Campbell, J., & Seymour, F. (2016). What young people want: A qualitative study of adolescents' priorities for engagement

across psychological services. *Journal of Child and Family Studies*, 25, 1057-1065. doi:10.1007/s10826-015-0292-6

Goldfried, M. R. (1991). Transtheoretical ingredients in therapeutic change. In R. C. Curtis & G. Stricker (Eds.), *How people change: Inside and outside therapy* (pp. 29-37). Boston, MA: Springer.

Hill, C. E. (2005). Therapist techniques, client involvement, and the therapeutic relationship: Inextricably intertwined in the therapy process. *Psychotherapy: Theory, Research, Practice, Training*, 42(4), 431-442. doi:10.1037/0033-3204.42.4.431

Hoener, C., Stiles, W. B., Luka, B. J., & Gordon, R. A. (2012). Client experiences of agency in therapy. *Person-Centered and Experiential Psychotherapies*, 11(1), 64-82. doi:10.1080/14779757.2011.639460

Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). Client engagement in psychotherapeutic treatment and associations with client characteristics, therapist characteristics, and treatment factors. *Clinical Psychology Review*, 34(5), 428-450. doi:10.1016/j.cpr.2014.06.004

Iwasaki, S., & Horie, P. I. (2000). Creating speech register in Thai conversation. *Language in Society*, 29(4), 519-554. doi:10.1017/S0047404500004024

Levitt, H. M., Pomerville, A., & Surace, F. I. (2016). A qualitative meta-analysis examining clients' experiences of psychotherapy: A new agenda. *Psychological Bulletin*, 142(8), 801-830. doi:10.1037/bul0000057

Linell, P., & Luckmann, T. (1991). Asymmetries in dialogue: Some conceptual preliminaries. In I. Markova & K. Foppa (Eds.), *Asymmetries in dialogue* (pp. 1-20). Hemel Hempstead, UK: Harvester Wheatsheaf.

Rennie, D. L. (1994). Clients' deference in psychotherapy. *Journal of Counseling Psychology*, 41(4), 427-437. doi:10.1037/0022-0167.41.4.427

Rolvjord, R. (2016). Five episodes of clients' contributions to the therapeutic relationship: A qualitative study in adult mental health care. *Nordic Journal of Music Therapy*, 25(2), 159-184. doi:10.1080/08098131.2015.1010562

Sangganjanavanich, V. F., & Nola Rajsuwat, K. (2015). Counseling in Thailand. In T. H. Hohenshil, N. E. Amundson, & S. G. Niles (Eds.), *Counseling around the world: An international handbook* (pp. 153-159). Alexandria, VA: American Counseling Association.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method, and research*. London: Sage.

Strong, T., Sutherland, O., & Ness, O. (2011). Considerations for a discourse of collaboration in counseling. *Asia Pacific Journal of Counselling and Psychotherapy*, 2(1), 25-40. doi:10.1080/21507686.2010.546865

Tuicomepee, A., Romano, J. L., & Pokaeo, S. (2012). Counseling in Thailand: Development from a Buddhist perspective. *Journal of Counseling and Development*, 90(3), 357-361. doi:10.1002/j.1556-6676.2012.00044.x

Westra, H. A., Aviram, A., Barnes, M., & Angus, L. (2010). Therapy was not what I expected: A preliminary qualitative analysis of concordance between client expectations and experience of cognitive-behavioural therapy. *Psychotherapy Research*, 20(4), 436-446. doi:10.1080/10503301003657395

Contact email: npaoin@gmail.com

Planning and Designing Multi-function Commercial Space of Chinese Wonderland

Lim Hong En, Chung Yuan Christian University, Taiwan
Wu Tsann-Chung, Chung Yuan Christian University, Taiwan
Lim Yi Ting, Chung Yuan Christian University, Taiwan

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

The global economy has been growing vigorously especially tourism industry. Tourism is one of the most effective way to grow local businesses. By attracting large amount of tourist to come for visit, it not only can enhance the local businesses' growth, but also improve the country's economic growth. To attract more tourists, the food and culture of the destination must be special so that it is worth visiting. By adding the brand "Shan Shui Tea House" combine with indigo dye and tea culture of the Southwest Minority Nationality and planning into more systematic multi-functional commercial space. 'This study is done in Yang So of Mainland China. The design mainly focused on re-planning the multi-function of sales department and dining area of Chinese Wonderland. The main goals of this study can be concluded as below: 1) Explore the background and culture of sales department, dining area and other related documents. 2) Analyze the developing structure of multi-functional commercial space and combine with local historical culture. 3) Designing a structure and methods that is full of local culture characteristics by adding the brands of Chinese Wonderland². Promote the specialties and gourmet cultural with the unique of the brands. Provide a series of service that combine with the natural beauty and create a comfortable atmosphere to increase the sales profit.

Keywords: Chinese Wonderland, Brand Design, Sales Department, Dining Area, Planning Design

iafor

The International Academic Forum
www.iafor.org

Introduction

The global economy has increased vigorously especially tourism industry. Tourism is one of the most effective way to grow local businesses. To attract more tourists, the food and culture of the destination must be special so that it is worth visiting. Nowadays, most tourist designing their travel itineraries with sightseeing at "local souvenir sell department" and "tasting local food". Consumers can enjoy the food after their purchase in local souvenir shop. To the business operators, it is a way to increase the profits.

This study is to cooperate with the Chinese Wonderland which located in Mainland China, which are focused on restoring and re-planning the multi- function of sales department and dining area. To combine the sales department (1st Floor) and dining area (2nd Floor) , thus, transform the space into a multi- commercial space that completely different style from other related industries. An appropriate space planning scheme is proposed in the design, which breaks the traditional design configuration and enable tourists to stay longer.

Body

This research is going to choose pin-dyeing method as the design concept and transform into the space. The technique of pinning have to be focused on the fixer, waiting for the time of dyeing, and watching the water absorption of the fabric.

First, use the ropes to bind the stick with different angles (show in Figure 1). Due to the different binding positions, special pattern effects will be formed on the fabric. Most people will use chopsticks or bamboo stick to fix it.

Next, dyeing the cloth together by two stick, and then soak into the blue dye together. Dyeing the cloth together and then soaking into the blue dye. The place where it is cover tightly by the stick will not be soaked with blue dye, so a pattern will be produced.

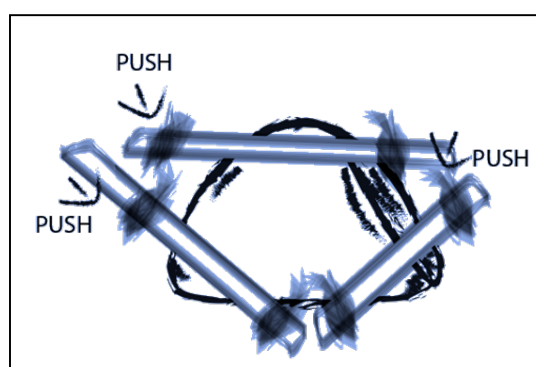


Figure 1: Pin-dyeing method

The intensity of dyeing will affect the texture of the dyed fabric. If the fabric was not tied tighter, the blue dye will penetrate into the fabric, at the end there will be no obvious pattern on it. The way of dyeing is correct and fixed, the pattern will be obvious and different based on the way of dyeing.

Using the blue dye as the extended of design concept and it is added into the multi-function space. Convert the strength of pin-dyeing into the space configuration which is open spaces, semi-open spaces, and privacy spaces.

1. Loose intensity - texture become not so much obvious (open spaces)
2. Moderate intensity - moderate texture (semi-open spaces)
3. Perfect intensity which is stable - the texture is obvious (privacy spaces)

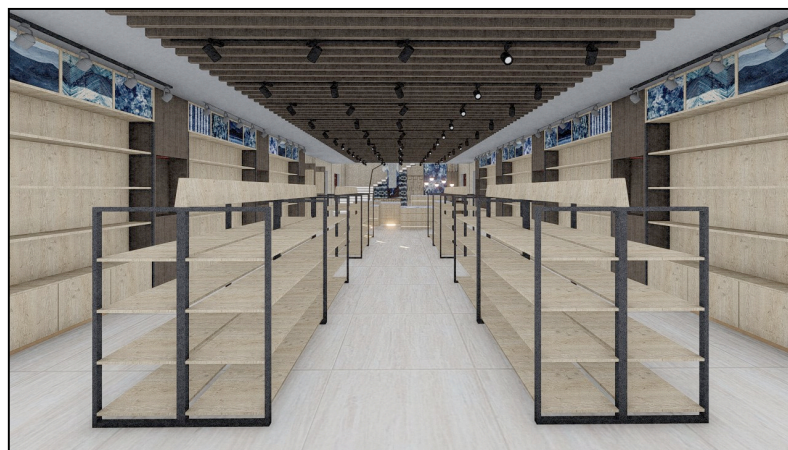


Figure 2: 3D Rendering Design

Conclusions

This research and design project cooperates with Chinese Wonderland, Guilin in China to re-plan the sell department and Chinese restaurant. At the beginning, the site analysis was done to investigate the local geographic conditions and the cultural background of the local ethnic minorities.

The base and surrounding areas were surveyed and mapped, and analyzed the shortcomings and restrictions of space. After discussing with the operator, the design were started. Through a lot of literature collections, understand the operation and design methods of multi-commercial spaces, and use in planning and design.

Due to the use of staff stairs on the first and second floors of this research base, the movement line was not smooth enough. Therefore, designing stair to increase the moving line, so that the sales department and Chinese restaurants can both make a profit.

Appendices

Acknowledgements

Looking back to my study life, I finally completed my studies. Thank you for all the people who support me! They supported me, helped me, and give me courage to move towards my goal

First of all, thanks to my professor, Wu Tsann-Chung, for giving me the privilege to be his student. Teachers often taught me patiently in writing essays, assured students

to play freely, and gave pragmatic teaching and correction. Pleasure for the classmates I met at Chung Yuan Christian University.

A special thanks for all the teachers and classmates who helped me during my schooling. Thanks also to participating in The 10th Asian Conference on Psychology & the Behavioral Sciences (ACP2020).

Footnotes

¹ One spare separate into two different businesses. Multi-function commercial space using business philosophy and cultural to meet the space demand of different preferences. In line with consumer demand, therefore, using the combination of different industries in same space to create more passenger flows and sales.

² Chinese Wonderland located in Yangshuo. It is an artistic conception scenic area based on Tao Yuanming's "Peach Blossoms". As an AAAA-level tourist attraction in Yangshuo County, Guilin, China, Chinese Wonderland is a tourist resort recommended by the World Tourism Organization.

References

Humayun Khan, *How to create retail store interiors that get people to purchase your products*, 2018.

<https://www.shopify.com/retail/120057795-how-to-create-retail-store-interiors-that-get-people-to-purchase-your-products>

志田慣平 (1995). ストアデザイン入門 店舗の計画設計 [*Introduction of Store Design*]. Japan

鄭世陽 (2001). *Practical Food & Beverage Service Industry*. Taiwan.

劉典嚴 (2005). *Retailing Management*. Taiwan.

謝致慧 (2006). *Store Facility Planning and Management*. Taiwan.

漂亮家具編輯部 (2018). *Idea Business 03X*. Taiwan

Baker, J.Grewal, D.&Parasuraman,A., *The influence of store environment on quality inferences and store image*, J.Acad Mark Sci.22,4,1994.

Florida, R.(2004b). *Cities and the Creative Class*. New York: Routledge Published.

Chinese Wonderland Information. CYCU iiDesign Center, Chung Yuan Christian University.

Contact email: honggen720@gmail.com

***Planning and Designing Research with Brand of Indigo Art Living Store for
Chinese Dining Space - Li River Side***

Lim Yi Ting, Chung Yuan Christian University, Taiwan
Wu Tsann-Chung, Chung Yuan Christian University, Taiwan
Lu Xuqi, Chung Yuan Christian University, Taiwan
Adrian Ng Yee Khai, The University of New South Wales, Australia

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

In recent times, the tourism industry has experienced an increase in tourism revenue. However, this upward trend has also led to changes in terms of business models and consumption patterns. For example, the usage of unique brand identities to enhance and manage the tourism industry of the Li River where was assigned as World Natural Heritage at 2014, thus giving consumers a whole new experience. This manuscript will discuss in detail, the design methods employed in Li River via the Indigo Art Living Store on the delivery of the full cultural experience of Yangshuo to tourists. More specifically, the application and process of the art style of handicrafts made by local minorities - indigo-dyeing on the potential concept of the new dining space. This study has discussed and explore the following research objectives: 1) Explore on Chinese dining spaces and related case studies on their business models. 2) Explore on branding, culture and history uniqueness. 3) Explore on the brand(s) business model on systematic dining experiences, design cues, system design and use various concepts to perform space design. The result will promote the crafts and local food culture, whole brand image and space design in combining natural karst topography; this combination provides tourists a comprehensive local cultural experience and the appreciation of the beauty of the Li River.

Keywords: Li River, Yangshuo, Chinese Dining Spaces, Brand Space

iafor

The International Academic Forum
www.iafor.org

Introduction

The global tourism industry and activity development are entering a new stage, catering industry and tourism, the leisure industry is interdependent. To build itself into an international food capital, China has made great efforts to develop the tourism, leisure and catering industries in various counties and cities. To this end, we will effectively combine local characteristics, brand culture and catering to drive new consumption expectations.

In this study, on the west bank of Li River¹ in Yangshuo County², China. The old buildings which were not operated or carried out any commercial activities will be re-planned and renovated.

Choose to use the brand - Indigo Art Living Store³, it's design is research to study the specialized and characteristic catering industry space scheme. To replan the use of brand unique impression and culture, natural mutual combination, become the promotion of local arts and crafts and artistic spirit of the catering space. Provide travelers with high quality rest and dining space.

Body

After accepting the project, I went to mainland China for a base investigation with the operator. During the conversation, I got to know the current development situation of the base and discussed with the operator how to make the brand survive in tourism in the future. I needed to adapt to the current situation and gradually grow and develop.

The buildings along the Li river in this study are located in Yangshuo county, with Binjiang road to the west. The li river is on the east side and the Yangshuo Ferry Terminal is on the north side of the base. With beautiful scenery, the base building is located in the west street of the bustling Yangshuo ancient town, which is a must-go for tourists who disembark on passenger ships. The distance between Yangshuo town Xijie Pedestrian street and the base is 600 meters.



Figure 1: “Jing Chu Yu Lan” - Indigo Art Living Store brand design.

In order to improve the design and planning of the whole building, the brand “Indigo”(菁出於嵐) was adopted. Operators and brand planners set the whole building as "Indigo Art Living Store". The name comes from the blue, blue is an annual grass plant, the leaves can be blue dye. Its meaning is blueness. It is extracted from bluegrass, but its color is much bluer and darker than that of bluegrass. The characters of "JING from LAN" (菁出於嵐), "JING"(菁) and "LAN"(嵐) are converted to the meaning of bluegrass and all fresh from the mountain, to represent the landscape of Yangshuo mountain.

Design Brand Space using concept and idea –“Blue grass and all fresh from the mountains”, design people on the mountain now. After leaving Yangshuo Ferry Terminal, continue to experience the misty dining space. At the same time, the surrounding is shrouded in mist, from which consumers can feel the unique culture and ways of Baiyue4 people in the mountain space. To used the blue dye technology, let the invisible Mountain and River space experience the feeling of Guilin Yangshuo mountains.. The Dining Spaces enjoy the view of the Li river while dining. And the whole spatial personality is with the four elements of cordial, soft, delicate and young.

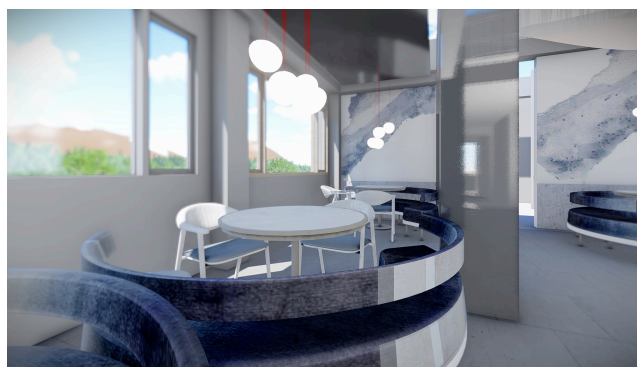


Figure 2: Dining Space Design.

For this reason, space planning and the whole brand floor also need to be combined with the Chinese dining space, so that consumers can experience a complete consumption experience space. Space is integrated with the rich cultural colors and natural features applied in the place so that people can be immersed in the cultural experience of Yangshuo in Guilin.

Conclusions

The development of global tourism industry and activities is entering a new stage, and the requirements of customers in the catering industry are constantly improving. Through literature and case studies, we can understand the development and future direction of Chinese restaurant, as a reference for design planning, so as to make the brand space play the maximum benefit. The design meets the needs of management for space, transforms the brand concept, and designs and matches the most suitable Dining space in the local natural culture.

This study focuses on the combination of space and brand, and derives the study of interior design modules and materials, so as to provide reference for future brand expansion.

The design process not only produces design thinking, but also enables us to understand and break through the understanding of the cultural connotation, retain the impression brought by the brand and provide a comfortable environment for people to relax and heal in the sightseeing and leisure space.

To a certain extent, the results of this study can help the operators to sort out and put forward the ideal design results and conclusions, and the literature review can provide the design reference analysis when the design needs to be revised in the future.

Appendices

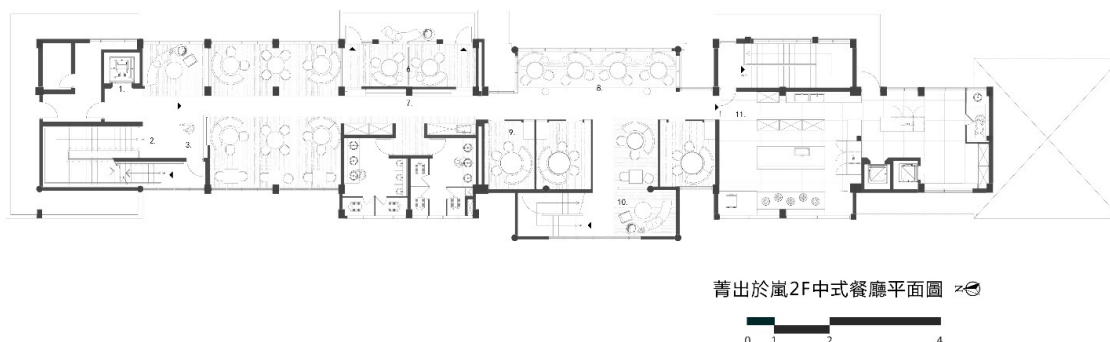


Figure 3: Indigo Art Living Store 2F- Chinese Dining Space Plan.

Acknowledgements

I thanks my advising professor Dr.Wu Tsann-Chung for his support and encouragement. I sincerely thanks Dr.Wu for the learning opportunities. I would not be able to comple of this project could not have been finished without the support of my partner Adrian Ng and Lu Xuqi, thank you for allowing me time away from you to research and write.

Finally, to my caring, loving, and supportive my parents : my deepest gratitude. Your encouragement when the times got rough are much duly noted and appreciated. My heartfelt thanks.

Footnotes

¹ (Chinese: 漓江; pinyin: Lǐ jiāng) is a generic term for the tributary of the upper reaches of the Guijiang River and is located in the northeastern part of the Guangxi Zhuang Autonomous Region, China.

² (Chinese: 陽朔縣; pinyin: Yángshuò Xiàn) is a county under the jurisdiction of Guilin City, in the northeast of Guangxi Zhuang Autonomous Region, China.

³ Operators and brand planners set the name of whole building.

⁴ means Hundred Yue. or simply Yue were various indigenous non-Chinese peoples who inhabited the regions of Southern China to Northern Vietnam between the first

millennium BC and the first millennium AD. They were known for their short hair, body tattoos, fine swords, and naval prowess.

References

Li River - https://en.wikipedia.org/wiki/Li_River

Yangshuo County- https://en.wikipedia.org/wiki/Yangshuo_County

Baiyue- <https://en.wikipedia.org/wiki/Baiyue>

黃東林(2010)。桂林市旅游气候舒适度评价。氣象研究與應用。

Huang,Dong-Lin(2010). Journal Of Meteorological Research And Application.
Comfort Evaluation of Guilin Tourism Climate.

万建中 (2011)。中國飲食文化。中央編譯出版社。中國飲食的結構。中國
Wan,Jian-Zhong (2011). Journal of Chinese Dietary Culture. The structure of the
Chinese die. Central Compilation & Translation Press. China

Huang,Jia-Hao (2019). Cite Publishing Ltd . *Food and beverage experience design.*
Taiwan

漂亮家具編輯部 (2018). IDEA BUSINESS 03X. Taiwan

Indigo Art Living Store Brand Information. CYCU iiDesign Center. Chung Yuan
Christian University.

Contact Email: etinglim@gmail.com

***The Dynamics of Depressive Symptoms on Criminal Investigators in Semarang
(North Central Java) Police***

Devario Delano, Soegijapranata Catholic University, Indonesia
Pius Heru Priyanto, Soegijapranata Catholic University, Indonesia

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

According to Sulistyanto (Assistant of Human Resources of Indonesian National Police), a large percentage of police suicide is related to depression. Police suicidal behaviors are serious social and psychological problems that must be anticipated and resolved. In 2016 there were 13 cases of police suicide and 5 cases of suicide attempts recorded in Indonesia. The incident was reduced in 2017 to be 7 cases, similarly in 2018, and in 2019 the cases turned to be 6. Further investigation indicates that one of the main reasons to commit suicide was depression. The purpose of the research was to portray the dynamics of depressive symptoms among the criminal investigators in order to anticipate and prevent further suicidal attempts. The Beck Depression Inventory II (1996) questionnaires were distributed to the criminal investigators in Semarang Police. The number of the questionnaires delivered were 9 and the overall response rate was 27 where 5 police scored 0 to the entire BDI questionnaires, 1 police scored 1 and the other participants scored 2, 6, and 18. Three participants with the highest scores were selected to participate in in-depth interviews. The interviews were conducted 2 times, 30 minutes each. The results indicated that 3 criminal investigators on duty in North Central Java Police were not vulnerable to have major depression disorder so that such suicidal behaviors would not be conducted in immediate time. Furthermore these individuals may be the references or role models for ones who are coping with depression symptoms. Further discussions are followed.

Keywords: Depressive Symptoms, Criminal Investigators, Police

iafor

The International Academic Forum
www.iafor.org

Introduction

Law Enforcement

One of the most stressful occupations in American society is the work of police. The exposure to multiple critical incident stressors including the risk of being seriously injured and even killed is one of the risk factors of police work (Lieberman et al., 2002). Lynn (2019) stated that studies showed police officers and firefighters were more likely to die by suicide than in the line of duty. In 2017, according to the Ruderman Family Foundation, at least 140 police officers and 103 firefighters died by suicide compared to 129 police officers and 93 firefighters in the line of duty. Statistics data in Indonesia showed that there were police officers who committed suicide from time to time. Based on Indonesia Police Watch (IPW) President's statement, Neta S. Pane, in 2016 there were at least 13 cases of police suicide in record alongside with 5 cases of suicide attempts followed by 7 incidents in 2017 (Ramadhan, 2018). Researcher sought similar data regarding police suicide phenomenon in the following years and got the number to be at least 7 and 6.

The infamous motto of police officers around the globe is to serve and to protect others and society which is true too in Indonesia and yet data showed that they sometimes couldn't protect themselves, ultimately doing a suicide behavior. Police suicidal behaviors are serious social and psychological problems that must be anticipated and resolved. According to Sulistyanto (Assistant of Human Resources of Indonesian National Police), a large percentage of police suicide was related to depression. Indonesian National Police Department had dispatched several experts, including clinical psychologist to increase mental health hoping to reduce depressive symptoms of police officers (Pradewo, 2018). The ratio of experts and police in the field had not been adequate so that the purpose of this research was to portray the dynamics of depressive symptoms among police officers especially divisions that were vulnerable to depression and suicide behavior. Division of criminal investigators, patrol unit, and mobile brigade corps (special forces) were regarded to those categories.

Depression and Beck Depression Inventory II (BDI-II)

According to American Psychiatric Association, depression (major depressive disorder) is a common and serious medical illness that negatively affects how you feel, the way you think and how you act. Depression causes feelings of sadness and/or a loss of interest in activities once enjoyed. It can lead to a variety of emotional and physical problems and can decrease a person's ability to function at work and at home (Parekh, 2017). One study represented that there were 631 respondents, and data were collected from both male (n=479) and female (n=152) sworn police officers with the majority of the sample (42.9%) had been working for the police force for more than 20 years at time of survey. The result showed that from 235 respondents (181 men, 54 women), or 37.2%, of the police sample met the criteria for classification as depressed (Lawson, Rodwell, & Noblet, 2012). In another study, its researchers stated that greater childhood trauma exposure, greater neuroticism and lower levels of perceived self-worth during academy training, and greater negative life events and greater perceived work stress in the first year of police service were associated with greater levels of current depression symptoms (Wang et al., 2010). The estimated rate of

probable major depression was 21.6% (180/832). Police officers might have a higher estimated rate of depression than previously thought, and those with depression have a poorer quality of life (Chen et al., 2013). Researchers thought that it was important to become aware to depression.

The Beck Depression Inventory-II (BDI-II) is currently one of the most widely used measures in both research and clinical practice for assessing depression. Confirmatory factor analysis indicated that a bifactor model with a general depression factor and three specific factors consisting of cognitive, affective and somatic showed the best fit to the data. Internal reliability was moderate to high for all subscales and for the total scale. Scores on BDI-II discriminated between clinical and general population, supporting for external validity (Garcia-Batista et al., 2018). The internal consistency of the 21-item BDI-II was high (Cronbach's $\alpha = .90$). Reliability for factors included: sickness behavior (Cronbach's $\alpha = .82$), Affective (Cronbach's $\alpha = .71$), and Cognitive (Cronbach's $\alpha = .80$). All BDI-II factors scores were significantly correlated with depressive severity (i.e., BDI-II total score), hopelessness, desired for hastened death, and anxiety. While this sample endorsed a mild level of depressive symptoms overall, individual participants ranged from minimal to severe. Consistent with existing literature, symptoms that are typically classified as somatic in nature (e.g., fatigue) were highly prevalent (Tobias et al., 2017). Based on these studies, researchers deemed that BDI-II was suitable for current issues.

Methodology

The Beck Depression Inventory II (BDI-II) questionnaires which had been adapted to Indonesian language were distributed to the criminal investigators in Semarang Police. Such questionnaires had been tested by experts and fulfilled the criteria. The police officers completed the BDI-II around 10 minutes after delivery. The researchers then reviewed all the questionnaires and separated the "high-score low-score." The number of the questionnaires delivered were 9 because the other police officers in the same division (criminal investigator) were out-of-reach. The overall response rate was 27 where 5 police scored 0 to the entire BDI questionnaires, 1 police scored 1 and the other participants scored 2, 6, and 18. 3 police officers whose score had had the highest point were personally asked by the researcher to have their permission to conduct further research by interviewing them deeply. All police officers agreed to such an act and the researcher conducted the in-depth interview 2 times for every participant which lasted approximately 30 minutes each. The interview protocol which the researcher used to interview them was made based on the same BDI-II questionnaires. The researcher explored each of the 21-item especially items that they scored high.

Result

The findings from the researcher in-depth interview in portraying dynamics of their depressive symptoms went as follows. First, good social relationship. In police department, especially criminal investigator unit, there would always be teamwork. Good communication skills and trust to one another were required on each individual. Teamwork made the progress and the outcome of work reached maximum capacity which reduced the symptoms. Next, the ability to carry concrete responsibility and

duty. When someone deemed himself worthy and capable to carry such burden in police department, they would develop sense of self-esteem which decreased depressive symptoms. Optimism rate of the future would be best applied in normal barometer. The future might be terrifying especially if we clung to an ideal that might have passed. Police officers who could let go of their ideals and compromised to today's standard tended to resist from the symptoms. Indonesia is a religious country so that police officers performed religious activities regularly. Police officers had been given special time to perform such an act in day-to-day routine, such as sholat at 3 PM and other religious programs. This without a doubt mitigated the depressive symptoms for they rethought and meditated the divine values of their religion. For instance that suicidal behavior would be a severe punishment in hereafter. The ability to accept and learn from past failure or setbacks experience would be crucial in battling depressive symptoms according to police officers. In life they said, setbacks and failures were going to find its way to us. The critical point was that how we coped with it, were we allowing ourselves to be discouraged for a long time by a setbacks or not? Succeeding this ability lowered the depressive symptoms. The police officers said that they did something they loved (hobby) such as sport once a week. According to police officers, doing something that we loved help ourselves lighten the burden of responsibility and duty as police officers and simultaneously reducing symptoms of depression. The last aspect in which police officers regarded to be responsible in combating depressive symptoms was high self-awareness. Police officers whom researcher interviewed claimed that they all practiced self-awareness by doing regular self-talk. They talked to themselves before they conducted such an act and always rethought and were able to vision the consequences in the future.

Conclusions

Based on our research findings, we concluded that 3 criminal investigators on duty in North Central Java Police were not vulnerable to have major depression disorder so that such suicidal behaviors would not be conducted in immediate time, furthermore these individuals might be the references or role models for ones who were coping with depression symptoms. By being aware of what key aspects contributed to trigger such depressive symptoms, we hope that people could conduct the behavior to prevent it worsen. We know that we conducted the research for just one division (criminal investigator unit) of many divisions in Semarang (North Central Java) Police.

So the next research questions are obvious. How about the other divisions such as mobile brigade corps (special forces)? Furthermore, how about other aspects of police mental health, such as Post-Traumatic Stress Disorder (PTSD) and Anxiety? Not only we hope the implications of the present findings is sufficient enough for portraying the dynamics of depressive symptoms but we also hope that this research would be reference for Indonesian government and National Police.

References

Chen, H., Chou, F. H., Chen, M., Su, S., Wang, S., Feng, W., Chen, P., Lai, J., Chao, S., Yang, S., Tsai, T., Tsai, K., Lin, K., Lee, C., & Wu, H. (2013). A survey of quality of life and depression for police officers in Kaohsiung, Taiwan. *Quality of Life Research*, 15, 925-932.

Garcia-Batista, Z. E., Guerra-Pena, K., Cano-Vindel, A., Herrera-Martinez, S. X., Medrano, L. A. (2018). Validity and reliability of the Beck Depression Inventory (BDI-II) in general and hospital population of Dominican Republic. *PLOS ONE*, 13(6), e0199750.

Lawson, K. J., Rodwell, J. J., & Noblet, A. J. (2012). Mental health of a police force: estimating prevalence of work-related depression in Australia without a direct national measure. *Psychological Reports*, 110 (3), 743-752.

Lieberman, A.M., Best, S.R., Meltzer, T.J., Fagan, J.A., Weiss, D.S., & Marmar, C.R. (2002). Routine occupational distress in police. *Policing: An International Journal of Police Strategies and Management* 25, 421–441.

Lynn, C. (2019, April 7). Behind the badge: Suicide's toll on police, other first responders. Retrieved from <https://www.statesmanjournal.com/story/news/2019/04/07/police-officers-fire-department-first-responders-depression-suicide-rate/3068917002/>

Parekh, R. (2017). What is Depression? Retrieved from <https://www.psychiatry.org/patients-families/depression/what-is-depression>

Pradewo, B. (2018, March 24). Polisi Bunuh Diri Karena Depresi, Begini Langkah Antisipasi Polri. Retrieved from <https://www.jawapos.com/nasional/hukum-kriminal/24/03/2018/polisi-bunuh-diri-karena-depresi-begini-langkah-antisipasi-polri/>

Ramadhan, B. (2018, January 3). IPW: Polisi Bunuh Diri Indikasi Beratnya Beban. Retrieved from <https://www.republika.co.id/berita/nasional/hukum/18/01/03/p1zb41330-ipw-polisi-bunuh-diri-indikasi-beratnya-beban>

Tobias, K. G., Lehrfeld, J., Rosenfeld, B., Pessin, H., & Breitbart, W. (2017). Confirmatory factor analysis of the Beck Depression Inventory-II in patients with advanced cancer: A theory-driven approach. *Palliative and Supportive Care*, 15(06), 704-709.

Wang, Z., Inslicht, S. S., Metzler, T. J., Henn-Haase, C., McCaslin, S. E., Tong, H., Neylan, T. C., Marmar, C. R. (2010). A prospective study of predictors of depression symptoms in police. *Psychiatry Research*, 175, 211-216.

Contact email: devario.delano@gmail.com

***Health Consideration in Architectural Design: An Interrelation Between
Architecture and Neuroscience***

Dea Luma, The University of Tokyo, Japan
Yoshiyuki Kawazoe, The University of Tokyo, Japan

The Asian Conference on Psychology & the Behavioral Sciences 2020
Official Conference Proceedings

Abstract

Neuroarchitecture is a new frontier in architecture that lies between the interrelation of neuroscience and architecture. This research aims to understand and accumulate factual knowledge on the impact of architectural design in human perception and judgment while monitoring brain activity using electroencephalogram (EEG) recordings. To achieve this, we have conducted an experiment separated into two parts: an observation part and a judgment part - both consisting of 3 sessions of pictures of indoor built environment categorized by color, proportions, and texture. To present the pictures and achieve the collection of information from the judgment, we have used a digitalized semantic differential method using a bipolar rating scale, whereas to monitor human brain activity, we have used NeuroSky Mindwave mobile device. Subjects have been exposed to a visual stimulation while the selection of the pictures has taken into consideration cultural background, a range of colors from monochromatic to colorful and from bright to pastel, rooms of classical golden section proportions, and contemporary approaches, as well as various textures. Results showed a judgment and observation impact varying from environments with bright and pastel colors, rough and soft texture, as well as classical proportions and traditional Japanese rooms. This study provides an opportunity to improve the approach to architectural design, placing a primary focus on the user's well-being.

Keywords: Neuroarchitecture, Evidence-Based Design, Well-Being

iafor

The International Academic Forum
www.iafor.org

Introduction

The past decade has seen a growth in the concern of occupants' health and comfort in indoor environments resulting in a widespread interest of research in new ways of architectural planning and design. Architecture, in addition to the meaning of art or the practice of designing and constructing buildings, as a word, it also defines the structure of something carefully designed, such as the chemical architecture of the human brain (New American Oxford Dictionary). Brain architecture is comprised of billions of neuron connections, so neuro-architecture has historically been used to define those connections across the brain. Simultaneously, "*neuro-architecture*" portrays a new frontier in architecture that lies between the interrelation of neuroscience and architecture. This discipline aims to combine human experience in architecture on one hand and brain research on the other in order to accumulate factual knowledge on the impact of architectural design in the human brain, respectively, in human behavior.

Several authors have expressed the meaning, potential, and the importance of this approach. Edelstein (Edelstein, 2013) describes Neuroarchitecture as the approach that informs design by measuring the built environment, with brain and body measurements as well as the sociological, behavioral, and economic outcome. Meanwhile, (Banaei, Hatami, Yazdanfar, & Gramann, 2017) define Neuroarchitecture as a field that uses neuroscientific tools to get a better understanding of the impact of architectural design on human perception and experience. Similarly, in his book 'Neuroarchitecture' Metzger defines the notion as a combination of aspects of neuroscientific research with features of the buildings designed to 'provide people with essential sensory stimulation.' Further, Metzger recognizes its fundamental potential, although he argues that it is still mostly presented as a collection of ideas rather than as a tenable theory (Metzger, 2018), while Edelstein highlights the challenges that the 'inherent complexity of the brain and mind brings to the researchers (Edelstein, 2008, p. 54). Previous researches have been focused on architectural form (Banaei, Hatami, Yazdanfar, & Gramann, 2017), Familiarity, Novelty, Comfort, Pleasantness, Arousal and Presence through VR (Virtual Reality) (Vecchiato et al., 2015), multisensory perceptual integration and embodiment – the role of tactile perception and hapticity (Papale, Chiesi, Rampinini, Pietrini, & Ricciardi, 2016), spatial cognition (Hartley, Lever, Burgess, & O'Keefe, 2014). Conducting such collaborative research would require a systematic investigation that would quantify observations to create an empirical database. An increasing number of studies on this matter (Albright, 2015; Gage, 2016; Pallasmaa et al., 2009; Arbib (2009) have noted that the importance of the joint efforts of architecture and neuroscience land towards empirical evidence, as an essential part of the research process. With the technological developments, the interest in the readings of brain electrical signals known as impulses has grown. Brain-Computer Interface (BCI) represents the connection between the computer and the human brain – which is the most recent development of Human-Computer Interface (HCI). BCI reads the electrical signals produced by the brain from different areas of the human head, translates these signals into actions, and commands that can control computer(s) (Ramadan, Refat, Elshahed, & Ali, 2015, p. 31). This way, the BCI system has opened a new window to the architects in their design process so that they can base their decision making on the evidence on brain recordings, which leads to a better understanding of how architecture affects the brain.

However, it is still no widely understood the relationship between observation and judgment in architecture. This paper presents an attempt to investigate the impact of different indoor environments on the human brain, by using neuroscientific tools for brain wave measurements on one side, and additional analysis for understanding the subjective declaration on the other.

Methodology

Participants

Nineteen volunteers have participated in this study (eight females; mean \pm SD 31.0 \pm 6.11). The group of participants has consisted of different cultural backgrounds (9 Japanese, 1 Korean, 1 Thai, 1 Taiwanese, 1 Kosovar, 1 Sri Lankan, 1 Moroccan, 1 Hungarian, 1 Iranian and 1 Spanish). Statistical analyses of the data were carried out using the IBM Statistical Package for the Social Sciences. The study was approved by the Ethics Committee of The University of Tokyo. Prior to the start of the experiment, participants were informed that the research was related to the investigation of aesthetic judgments during the measurement of brain waves, but the experimental goals were not mentioned.

Experimental design and procedure

The experimental set-up considered two aspects of analysis: psychological response (brain wave) and subjective declaration (questionnaire). To extract the data for the psychological response, we measured brain waves using the tool selected for this research – NeuroSky Mindwave. Based on the algorithms that this device offers – information on meditation and attention, we have tried to understand more deeply the interconnection between these two psychological states in relation to the visual stimuli of the environment, which in this case would be the means for testing subjects. Whereas, for the second part of the research, a semantic differential type of questionnaire was used. Prior to the set-up of the experiment, the initial stage of the process analyzed the tendency of the use of materials, colors, openings and proportions in an indoor environment. We analyzed and selected the interior design pictures from Books, Magazines and Open sources on Internet.

Color

Categorization for color divisions has taken into account the proportional distribution of colors in the physical aspect of the environment, color palette (bright, pastel), as well as combinatorial variation concerning the quantity and variety of colors (monochromatic, polychromatic).

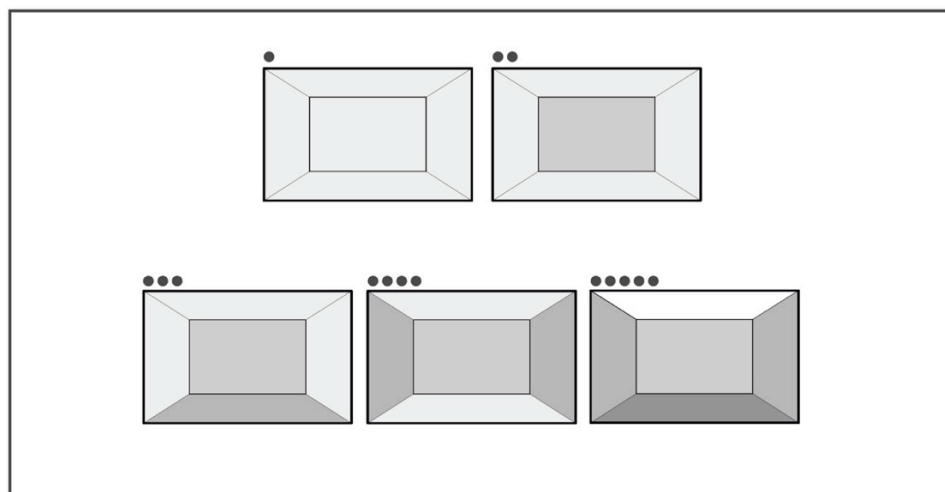


Figure 1. The number of colors in use and its distribution in the physical environment

Proportions

Historically, proportional characteristics have played an essential role in the design of architecture but also its perception. Therefore, in order to reach variations in terms of proportion, it has been proposed that within the framework of this group to include some of the typical historical proportional applications such as Golden Ratio, Georgian, Modular, Contemporary, and traditional Japanese. In coordination with these groups, it has been proposed to use some of the images of buildings designed by world-renowned architects such as Palladio and Le Corbusier. As a result, this group could be defined in two main categories: the height of the space and the ratio of openings in relation to the axes of the room.

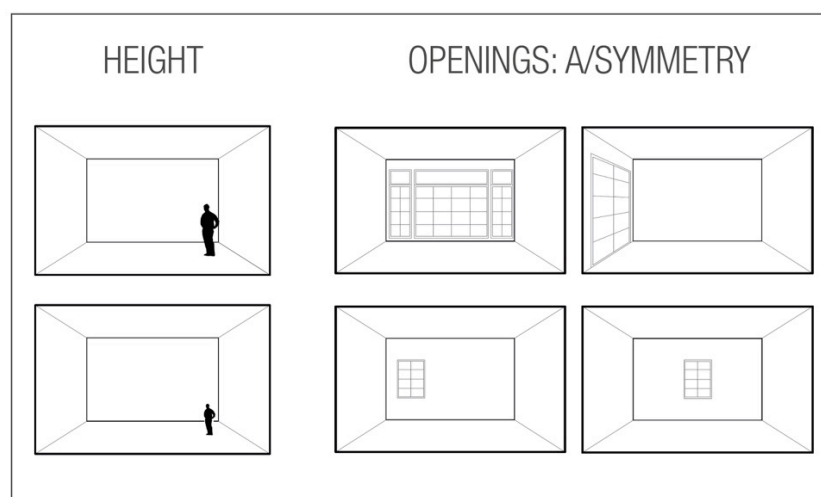


Figure 2. Analysis of the proportional characteristics of the environment

Texture

The interior texture stimuli were selected based on two sub-categories, including usability (common and uncommon), and the method of application / proportional balance of the texture (uniformly and in combination). Resultantly, the setting was composed of the textures, including tiles, concrete, wood, stone, and metal, whereas Japanese interiors include cases of the use of tatami as well.



Figure 3. The choice of textures in interior design

Moreover, the properties of these materials, such as reflection, semi-reflection, and absorption, are also considered as subcategories of these divisions.

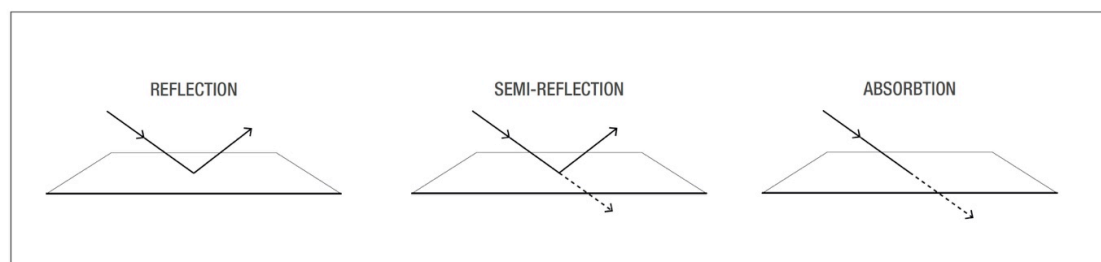


Figure 4. Properties of the materials

Part 1: Observation

The first part of the experiment started with the screening of 30 pictures (10 pictures represented each category) representing the before-mentioned categories, which began with Colors, to be followed by Proportion and Texture. Each picture lasted 3 seconds parted by a 1-second break through a fixation cross between each picture. Before every section, two displays (every 5 seconds) appeared: the name of the section: Section 1 / Colors and the second display with a guiding line to the participants: “Please take a look at these pictures” following with the third display with the fixation which remained in view for 1000ms before the pictures appeared. Participants have been asked to sit in front of the computer screen in the lab environment. The images were presented on a 25.6 inches monitor at a viewing distance of 90 cm.

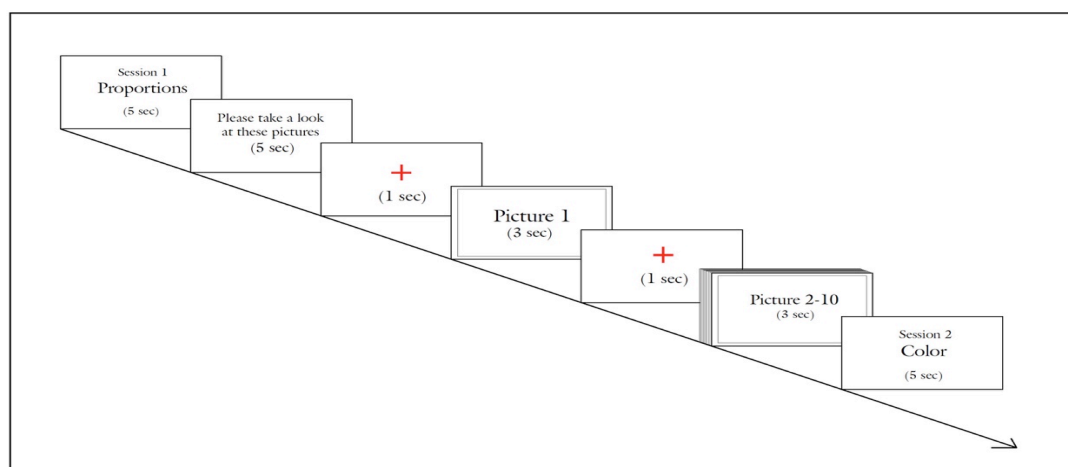


Figure 5. The sequence of events on trial

Part 2: Judgment

With the same set of pictures, this part of the experiment intends to slow the pace of the observation - different from the first part which is characterized with short timing observation - by asking the subjects to take as much time as they need to look at the pictures and follow by a judgment in scale from -5 to 5 (Fig. 6). For interactive purposes, subjects have been given a tablet (Huawei Media Pad T3-7) in which they had a semantic differential bipolar slider designed in MAX Cycling 74 interactive language programming software. Pictures have been presented in random order, although the selection of the pictures consistent with a gradual scale of difference.

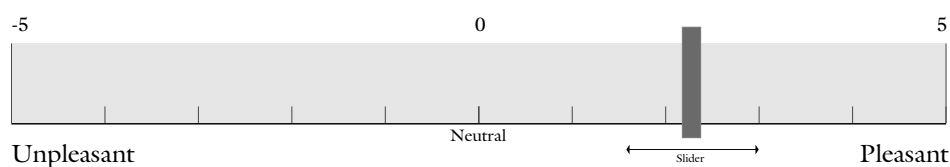
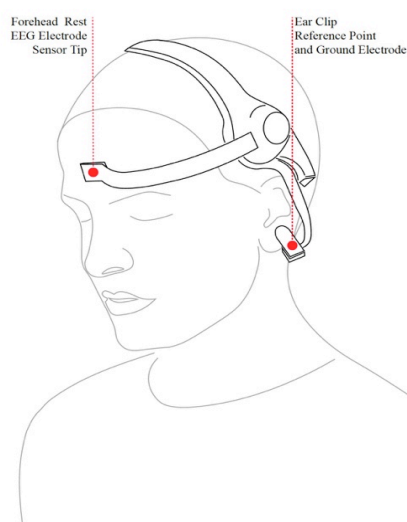


Figure 6. Illustration of the bipolar slider for judgment

EEG Recording

NeuroSky is designed to give you real-time feedback on brain activity. Its brain-computer interface (BCI) technology works by monitoring brain electrical impulses with a forehead sensor. The neural signals are input into the ThinkGear chip and interpreted with NeuroSky's patented algorithms. The values of Attention and Meditation for each second brain wave (gamma, beta, alpha, theta, delta) - converted to binary numbers, which later one was reorganized to an average value in a chart separated for each subject. Based on the NeuroSky indications, "Attention" values range from 0-100 (eSense meter), and its intensity represents the mental "focus" or "attention". Meanwhile, "Meditation" values have the same range 0-100, but they indicate the level of mental "calmness" or "relaxation." (Neurosky, 2012).



Neural Oscillation

Brainwave Type	Frequency range	Mental states and conditions
Delta	0.1Hz to 3Hz	Deep, dreamless sleep, non-REM sleep, unconscious
Theta	4Hz to 7Hz	Intuitive, creative, recall, fantasy, imaginary, dream
Alpha	8Hz to 12Hz	Relaxed, but not drowsy, tranquil, conscious
Low Beta	12Hz to 15Hz	Formerly SMR, relaxed yet focused, integrated
Midrange Beta	16Hz to 20Hz	Thinking, aware of self & surroundings
High Beta	21Hz to 30Hz	Alertness, agitation

Neurosky. (2012). MindWave Mobile: User Guide, p.12.

NeuroSky Device Brain Wave Measurements

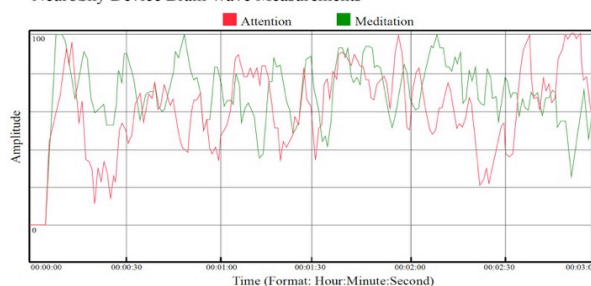


Figure 7. NeuroSky device details

Results

The participants' brainwaves and subjective declarations were measured using standard statistical techniques. First, for both attention and meditation, we calculated the mean values for 19 participants ($M=31.0$, $SD=6.11$) for the rooms where for the first round, each group represented one variable. Secondly, each of the rooms inside one group represents another set of variables. Our goal was to find out whether there are any statistically significant differences in the mean measurements between the three groups of stimuli (color, proportions, and texture) and whether there are significant differences between rooms individually. The one-way analysis of variance (ANOVA) was used to detect any significant changes that could influence EEG recordings between the average values of participants. Statistical analysis data was produced using EXCEL 2019 (Microsoft Inc.). A p-value of <0.05 was considered significant. Bonferroni tests were used for posthoc tests of multiple comparisons.

Part 1: Observation results

Statistical analysis

The results showed that there were statistically significant differences between groups as determined by one-way ANOVA ($F(2,126) = 7.904$, $p=0.0005$). Differences in between pictures within the groups have also shown a statistical significance. The differences in the values have been shown in the attention level, while, in general, values of meditation have shown no significant changes.

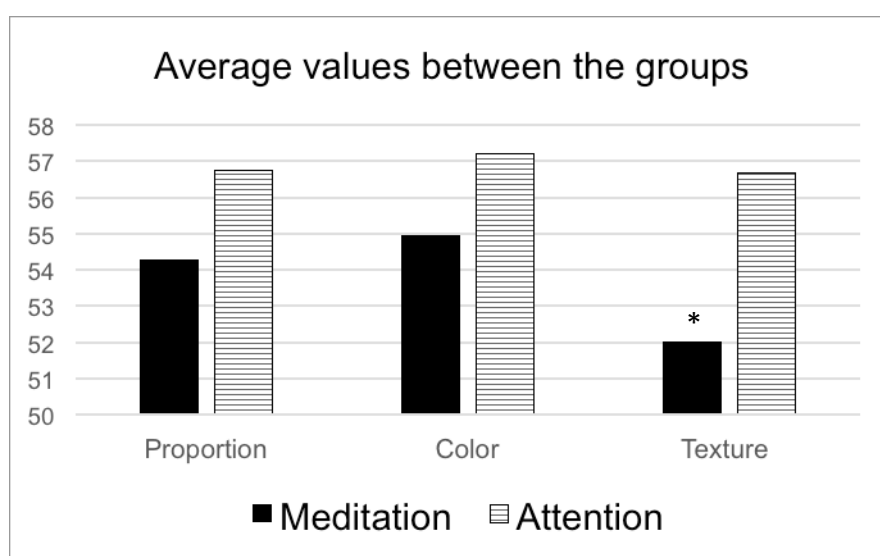


Figure 8. Average values between groups

From the analysis of brain waves, we can notice the average values increase or decrease depending on the combinations of indoor environments. In the table below, we present the mental effort visually for each category in particular:

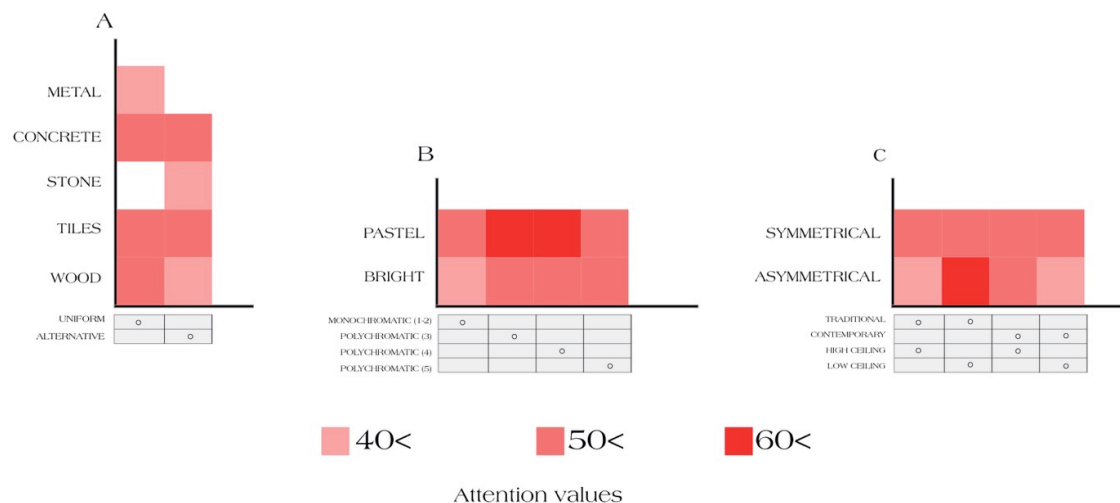


Figure 9. Levels of attention values in different categories

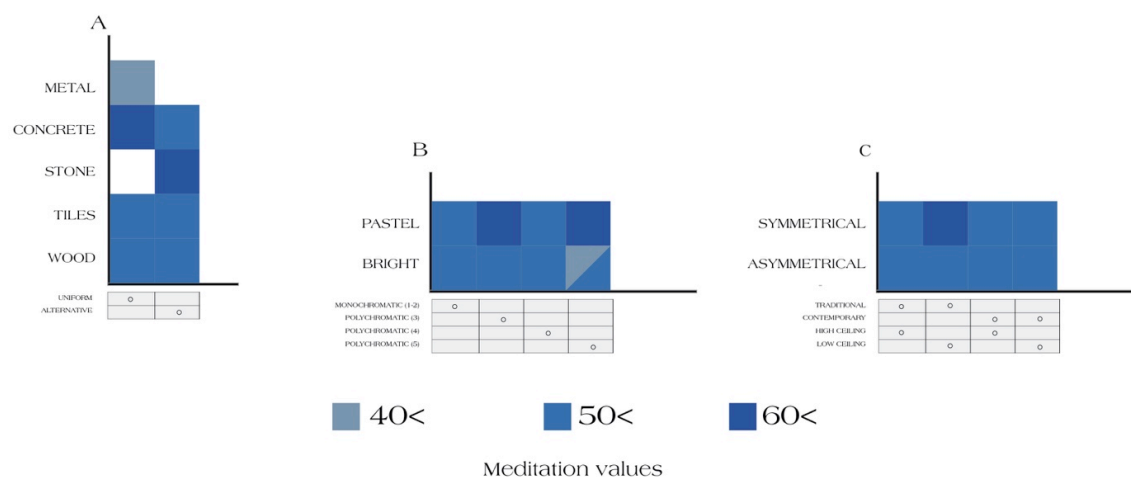


Figure 10. Levels of meditation values in different categories

Based on the NeuroSky indications of "Attention" and "Meditation" values which range from 0 - 100 (eSense meter), we have analyzed the tendencies for neutral (40-50) or elevated (60<) levels of attention and meditation in an attempt to understand the effect of those pictures in these values. Tendencies for higher focus have shown rooms with multiple colors, asymmetrical proportional axis as well as room categorized by a uniform distribution of materials. On the other hand, higher meditation levels have shown rooms with the symmetrical proportional axis, pastel colors. Meanwhile, variations in the distribution of the texture, particularly concrete and stone, have shown elevation in meditation. However, a significant reduction has been observed in the room made of metallic textures.

Part 2: Judgment results

Subjective declarations have shown a trend slightly different from that of the brain waves. In the semantic differential ratings between "pleasantness" and "unpleasantness" of the pictures, in the group of pictures with colors, two most pleasant environments resulted two traditional Japanese rooms, where one of them was characterized by a soft blue color which is an unusual example of a typical Japanese environment, and the other one represents a common Japanese environment.

Regarding unpleasantness in this category, the overall response to this question was surprisingly persistent within participants. The highest negative value goes to the three images which represent cases of a polychromatic interior (5+colors). Interestingly, unpleasantness has been related to the image which represents a case of a monochromatic interior (1 color) as well.

Further, regarding proportions, a pronounced sense of pleasantness is observed in the case of a contemporary room with asymmetrical features and dominated by wood paneling, while the second most pleasant room is the Georgian style room of high ceiling room and many openings. In terms of unpleasantness, unlike the previous category, in this category only one photo has marked negative values represented by it is a room characterized by polychromatic bright colors (yellow, red and green) as well as relative roughness of the material such as exposed concrete.

Lastly, Texture group photos are actually photos with higher values of pleasantness on average compared to the two aforementioned groupings. The most pleasant picture regarding texture based on the evaluation is indicated to be the wood-enclosed environment. Other distinctive components of this room are brightness and uniformity in the distribution of the materials.

Below (Fig. 11) represents detailed results between judgment and observation in each category, and the comparison between them.

Factors			Judgment <small>(Subjective declaration)</small>		Obersvation <small>(Brainwave evaluation)</small>	
Classification			Pleasant	Unpleasant	Attention High	Meditation High
Color	Type	Bright		○		
		Paste	○			
	Composition	Monochromatic C	○			
		Monochromatic B&W		○		○
Proportions	Ceiling	Polychromatic		○		○
		High	○		○	
	Balance	Low	○			
		Symmetrical	○		○	○
	Distribution	Asymmetrical	○	○		
		Uniformly	○	○	○	
Texture	Material	Variations	○	○	○	
		Wood	○			
		Tiles	○			
		Concrete			○	
		Stone				○
		Metal		○		
		Golden Ration				○
		The Modulor		○	○	
		Japanese Traditional	○			○
		Georgian	○		○	
		Green				○

Figure 11. Judgment vs. Observation results

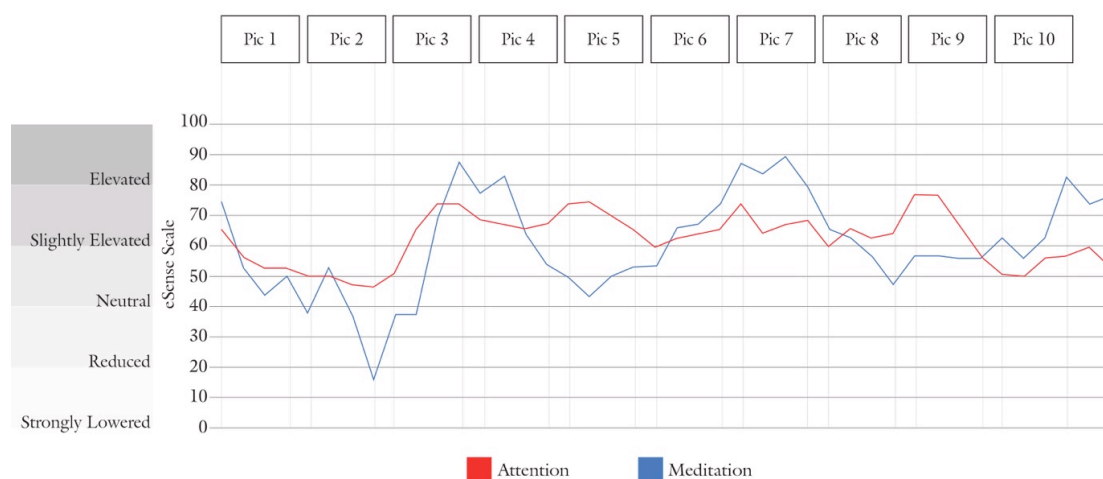


Figure 12. Details of brainwave evaluation using eSense meter scale

Differences in observation between architects and non-architects

Kirk et.al, (2009) on their brain study using fMRI have proved that brain correlates to aesthetic expertise. Their experiment on the judgment of architecture done by has tested two groups of people (architects and non-architects) exposed to an architectural stimuli and controlled stimuli (faces). The results show that the expertise impacts cognitive and perceptual system. Therefore, through this experiment, we extended our analysis towards the understanding whether professional background and a difference between architects and non-architects could be observed in the attention levels. As a result, a statistically significant difference between architects and non-architects has been observed in the average attention level of the proportion group ($t(4)=52.4$, $p=0.00000079$).

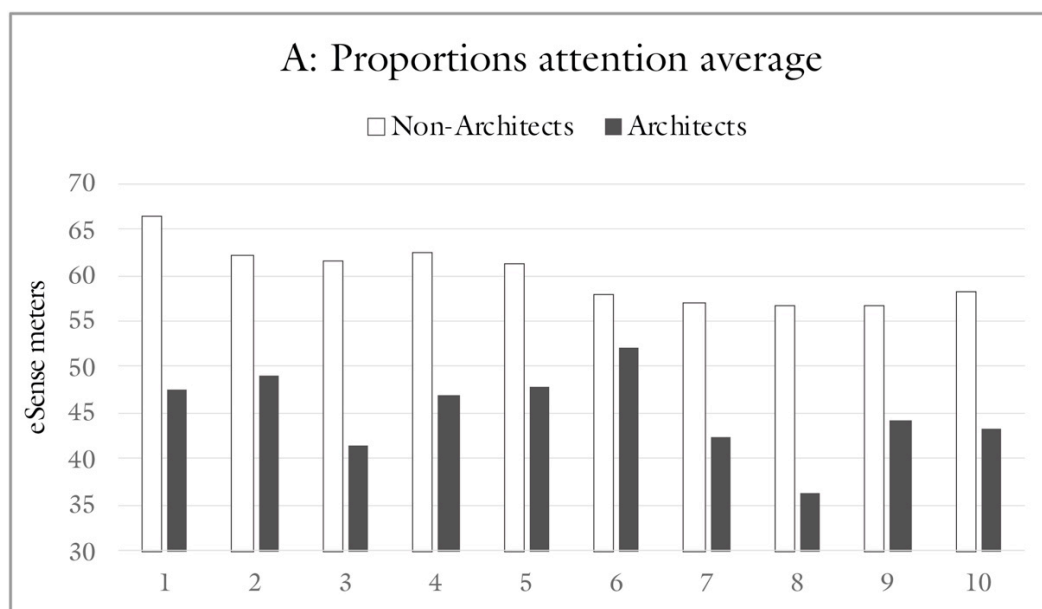


Figure 13. Difference in perception between architects and non-architects

Discussion and conclusion

The literature review shows a strong interrelation between the two disciplines and the methodologies applied for achieving results towards the understanding of occupants' judgment and perception in indoor environments. There was a significant difference in the brainwave's fluctuations between the three groups of stimuli as well as within each of the groups of stimuli, which support the assumption that brain dynamics differ between different architectural environments. The correlation between "pleasantness – unpleasantness" on the one hand and "attention – meditation" as brain dynamics on the other is evident, and the variability in the results has confirmed the complexity of intertwining these disciplines. However, given that our findings are based on a limited number of participants, the results of such analysis should consequently be treated with considerable caution.

The results obtained could be interpreted in two ways: on the one hand, the analysis revealed a correspondence between pleasantness and elevated levels of attention, which informs us about the tendency of cognitive "awakening" to the environments we tend to like. On the other hand, an overlap of the brain dynamic results has been observed in the cases where meditation as well has been related to the pleasantness. Consequently, this overlap could be accounted to the algorithmic ends, interpretations of which are beyond the scope of this study.

A remarkable result that has emerged from the data has been the high values of mental effort related to the uniformity of the distribution of textures in an indoor environment, primarily represented by traditional Japanese rooms. The observed correlation could be attributed as being a result of the relatively higher number of Japanese nationals as part of the experiment (9 out of 19).

As might have been expected, our findings highlighted a reduction in the meditative state towards the room consisting of metallic textures, which, due to its rarity of the use in every-day life environment, was chosen as one of the 'uncommon' rooms in the group. This would appear to indicate that a low level of meditation or 'calmness' could point with relation to the unfamiliarity with the environment. We cannot rule out that familiarity might have influenced the consistency of the high rate of pleasantness towards traditional Japanese environments due to the suggestion, as mentioned above, regarding the impact of the cultural background.

The correlation between professional background and perception of architecture is of interest mentioning especially because this research, in particular, emphasizes the importance of the shift in focus from the architects to the user, and how the design of the architecture affects them - regardless of the architects who design the houses based on their taste. This issue is consistent with several authors who have reinforced the idea and the importance of human-centered design (Pallasmaa, 2012), (Caroline Constant, 2015), (Hall, 1969), (Ashihara & Riggs, 1992), (Neutra, 1954), (De Botton, 2008). Moreover, this confirms previous findings in the literature (Kirk et al., 2009) of the relationship between the expertise and the brain dynamics. This correlation demonstrates just how important it is to have an empirical basis for measuring perceptions of architecture for the decision-making processes.

In fact, this evidence is compelling for the benefit of the collaborative approach between architecture and neuroscience especially since this collaborative approach has been increasingly recognized and pushed forwards by several authors who have focused their research on this opportunity (Albright, 2015; Eberhard, 2009; Edelstein & Macagno, 2011; Pallasmaa et al., 2009).

However, a number of potential limitations should be considered. First, the present study has investigated only through the algorithms provided by the device for measuring brain waves. As a result, the findings might not be transferrable to specific brainwaves in relation to particular stimuli. Secondly, given the relatively small sample size, further experimental investigations are needed to estimate the correlation between the perception of architectural environments in relation to the judgment.

Nevertheless, this study has gone some way towards enhancing our understanding of the relationship between architecture and neuroscience. Moreover, the present study could suggest several courses of action in order to extend further the empirical database, which would lead to aid for the decision-making process in the architectural design.

References

- Albright, T. D. (2015). Neuroscience For Architecture. *Mind in Architecture*, 197–217.
- Ashihara, Y., & Riggs, L. E. (1992). 隠れた秩序: *Tokyo Through the Twentieth Century*. Kodansha International.
- Banaei, M., Hatami, J., Yazdanfar, A., & Gramann, K. (2017). Walking through Architectural Spaces: The Impact of Interior Forms on Human Brain Dynamics. *Frontiers in Human Neuroscience*, 11(September), 1–14.
<https://doi.org/10.3389/fnhum.2017.00477>
- Caroline Constant. (2015). Eileen Gray: Operating in Dialogue. *Disegno Nr. 8*, 148–161.
- De Botton, A. (2008). *The Architecture of Happiness*. Knopf Doubleday Publishing Group. Retrieved from <https://books.google.co.jp/books?id=jZi4SAwG9oQC>
- Eberhard, J. P. (2009). Brain Landscape: The Coexistence of Neuroscience and Architecture. *Brain Landscape: The Coexistence of Neuroscience and Architecture*, 1–280. <https://doi.org/10.1093/acprof:oso/9780195331721.001.0001>
- Edelstein, E. A., & Macagno, E. (2011). Form Follows Function: Bridging Neuroscience and Architecture, 1–22.
- Gage, F. H. (2016). *Neuroscience and Architecture*.
<https://doi.org/10.4324/9781315775869>
- Hall, E. T. (1969). *The Hidden Dimension*. London: The Bodley Head Ltd.
- Hartley, T., Lever, C., Burgess, N., & O’Keefe, J. (2014). Space in the brain: How the hippocampal formation supports spatial cognition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1635).
<https://doi.org/10.1098/rstb.2012.0510>
- Kirk, U., Christensen, M. S., & Nygaard, N. (2009). Brain correlates of aesthetic expertise: A parametric fMRI study. *Brain and Cognition*, 69(2), 306–315.
<https://doi.org/10.1016/j.bandc.2008.08.004>
- Neurosky. (2012). MindWave Mobile: User Guide, 1–19.
- Neutra, R. (1954). *Survival through design*. New York: Oxford University Press.
- Pallasmaa, J. (2012). *The Eyes of the Skin: Architecture and the Senses*. Wiley.
- Pallasmaa, J., Mallgrave, H. F., & Arbib, M. (2009). *Architecture and Neuroscience*.
- Papale, P., Chiesi, L., Rampinini, A. C., Pietrini, P., & Ricciardi, E. (2016). When

neuroscience “touches” architecture: From hapticity to a supramodal functioning of the human brain. *Frontiers in Psychology*, 7(JUN), 1–8.
<https://doi.org/10.3389/fpsyg.2016.00866>

Vecchiato, G., Tieri, G., Jelic, A., De Matteis, F., Maglione, A. G., & Babiloni, F. (2015). Electroencephalographic correlates of sensorimotor integration and embodiment during the appreciation of virtual architectural environments. *Frontiers in Psychology*, 6(DEC), 1–18. <https://doi.org/10.3389/fpsyg.2015.01944>

Picture references:

Farrant, J. 123RF. (March 28, 2020)(https://www.123rf.com/photo_66686879_rough-grunge-interior-concrete-wall-background.html)

(March 28, 2020) Retrieved from:
<https://www.sketchuptextureclub.com/textures/architecture/tiles-interior/design-industry/design-industry-concrete-square-tile-texture-seamless-14104>

(March 28, 2020) Retrieved from: <https://www.bigstockphoto.com/image-322795930/stock-photo-brown-stone-texture%2C-retro-style-brick-wall-background-abstract-rocks-pattern-gray-stones%2C-textur>

(March 28, 2020) Retrieved from: https://www.freepik.com/premium-photo/wood-texture-background-with-old-natural-pattern_3731760.htm

(March 28, 2020) Retrieved from: <https://www.next.co.uk/style/st447225/117556>

***Unleash the Warrior in You: A Mixed Method Study on the
Psychological Well Being of Student Athletes from the University of the East***

Jemabel G. Sidayen, University of the East, Manila, Philippines
Frederick Fabellon, University of the East, Manila, Philippines

Asian Conference in Psychology 2020
Official Conference Proceedings

Abstract

Psychological well – being is a balanced, well – integrated, and harmonious interplay between six facets of the self which includes positive relationships, personal mastery, autonomy, meaning in life, personal growth, and development (Ryff, 2018). The researchers' convergent parallel mixed method study focused on exploring the psychological well-being of UE student athletes in order to help them understand their well-being as a relevant factor in their ability to cope with the rigors of collegiate sports competition and academic requirements. One hundred ninety-one (191) student athletes participated in the quantitative survey using Psychological Well-Being Scale by Carol Ryff to profile their well-being using the six – factor model. In addition, fifteen (15) sessions of semi-structured interviews and focused group discussions were conducted to identify their concerns and challenges. Summary of results revealed the student athletes' very low autonomy and low average self-acceptance, which are linked to their prevailing issues on personal dilemma and management concerns. Based on converged data analysis, conflict arise from pressure of expectations to deliver win records for various sports track despite prevailing concerns. Further, their re-defined victory is also another area of concern as one may infer here why some would not perform at par to their potentials. As a way to cope with lack of autonomy, they have de-emphasized defeats and focused on giving their all-out effort.

Key Words: psychological well – being, student-athletes, sports psychology

iafor

The International Academic Forum
www.iafor.org

Introduction

“A sound mind is a sound body, and a sound body is a sound mind.” This remains a common challenge for student athletes in order to maximize their potentials in performing and competing for their chosen sports while attending to the demands of their academic classes. Extensive demands placed on student athletes can be exhausting. Training schedules, lost study time, class absences, as well as emotional and physical stress can place a heavy burden on the student athletes.

Ryff claimed that ensuring high level of psychological well-being among student athletes should be a joint effort of all stakeholders to ensure corresponding impact on global health and well-being as cited by Blanchard, Amiot, Perreault, Vallerand, & Povencher (2009). Well-being studies have found that high level of psychological functioning, adaptive short-term responses of emotions and long term affects among athletes are crucial to perform optimally in high pressure environment over time (Jones, Meijen, McCarthy, and Sheffield, 2009; Lundquist & Kentta, 2010). Well-being helps athletes deal with the diverse challenges they face during their sporting career.

Reviewing the UE Red Warrior's team standings in the University Athletic Association of the Philippines (UAAP), the university's overall rank is within the lower one third among all the competing schools from seasons 76 to 80. Based on the records, the researchers aim to explore the psychological well-being of UE student athletes to help them cope better with their sports and academic performance.

Methodology

The study utilized the convergent parallel mixed – methods research design. Specifically, descriptive research method was used in the quantitative phase and phenomenological approach for qualitative phase. The study covered a total of 191 UE student athletes from varied sports track. Purposive Sampling was used with the following criteria for the inclusion of the participants: (1) enrolled as students for school year the study was conducted (2) have joined in intercollegiate sports competition or in UAAP games.

A survey administering the Psychological Well – Being Scale by Carol Ryff was done in the quantitative phase. It is an eighty-four (84)-item test with six dimensions namely autonomy, environmental mastery, personal growth, positive relation with others, purpose in life, and self-acceptance. Psychological well-being profile was computed using percentage, mean, and percentile ranks. In addition, fifteen (15) sessions of semi – structured interviews and focused group discussions were also conducted. These sessions were followed by steps in thematic analysis including transcriptions, coding, bracketing and generation of themes.

Conclusion

Comparative analysis of the results survey show the strengths of the student athletes including high personal growth, average positive relations with others, average purpose in life and low average environmental mastery. These indicate that they have

trusting relations with others, and capable of empathy and affection. They also have sense of changing for the better. They are somehow aware of how to make ends meet. On the other hand, weaknesses reflected their very low autonomy and low self-acceptance. These connote their lack of internal locus of evaluation and high tendency seek approval from others. As supported by Kimball (2004), the study revealed that student athletes feel the pressure to comply with coaches' control, academic demands, sponsorships, and power dynamics. Thus, they also somehow lack a positive attitude towards themselves. Maturity and optimal functioning also needs improvement.

Further, based from thematic analysis, the researchers were able to formulate two (2) major themes, and six (6) sub themes to summarize their issues, concerns, and challenges. The first major theme is *personal dilemma* under which subthemes include physical struggles, socio – emotional support, academic difficulties, and financial limits. The second major theme of *management concerns* with two sub themes covering community support and coaching style.

The perceptions of student athletes on intercollegiate competitions are analyzed and summarized into three (3) major themes and seven (7) sub themes. The first major theme is anchored on *keeping a positive outlook* with sub themes on topics including overcoming challenges and keeping motivated. The second major theme highlights the student athletes' experiences in *achieving goals* which covers sub themes on sacrifices, perseverance, and becoming better. The third major theme pertains to the student athletes' *redefining victory* with sub themes on de-emphasized defeats and giving an all-out effort.



Figure 1: The Climb

Meanwhile, the researchers used the figure entitled “The Climb” to represent the lived experiences shared by the participants during semi structured interviews and focused group discussions. Their lived experiences have evolved on *balancing between academics and sports* which is reflected by the student athlete climbing the stairs while carrying the books and a ball. The broken stairs reflect the *concerns and challenges of student athletes*. Despite the dangers of traversing through the broken stairs, the student athlete is still trying to navigate his way to the top. In addition, the core support group of the student athletes are their team mates as shown by the group cheering behind the climbing student athlete. Success has been *redefined* by the student athletes as *becoming better* in your craft and *giving your all-out effort* in

sports competitions which is shown on the student athlete standing on top of the stairs. Themes from the analysis reflect the student athletes' capacity to make use of whatever they have in order to get into their target goals for their academics and sports career.

Summary of converged data revealed the student athletes' very low autonomy and low average self-acceptance, which are closely linked to their prevailing concerns on personal dilemma and management concerns. Similarly, converged data analysis showed conflict arising from pressure of expectations to deliver win records for various sports track despite prevailing concerns. Further, their re-defined victory is also another area of concern as one may infer here why some would not perform at par to their potentials. As a way to cope with lack of autonomy, they have de-emphasized defeats and focused on giving their all-out effort.

Recommendations for the second part of the study include establishment of facility for *Sports Psychology Unit* which aims to promote a referral system for student athletes with psychological concerns as well as to help raise concerns on improving sports facilities, training equipment, allowances issues, etc. Likewise, a *Psychosocial Support Program* must be developed for the improvement of self-acceptance and autonomy among student athletes. Collaborative effort of coaches, trainers, and UE Community will be utilized to participate as a support group in the enhancement of the psychological well-being of UE student athletes. Lastly, *Academic Progress Report Program* is necessary to monitor issues related to their academic needs such as class schedules, scholarship slots, academic standing, exam schedules, attendance, and more.

References

- Blanchard CM, Amiot CE, Perreault S, Vallerand RJ, Povencher P (2009). Cohesiveness, Coach's Interpersonal Style and Psychological Need: Their Effects on Self-Determination and Athletes' Subjective Well-Being. *Psychology of Sports and Exercise*, 10, 545-551.
- Jones M, Meijen C, McCarthy PJ, Sheffield D (2009). A Theory of Challenge and Threat States in Athletes. *International Review of Sport and Exercise Psychology*, 2:2, 161-180
- Kimball, Aimee C. (2004) *You Signed the Line: Collegiate Student-Athletes' Perceptions of Autonomy*. PhD dissertation, University of Tennessee. Retrieved from https://trace.tennessee.edu/utk_graddiss/2282
- Lundquist C, Kentta G (2010). Positive Emotions are Not Simply the Absence of the Negative Ones: Development and Validation of the Emotional Recovery Questionnaire (EmRecQ). *The Sport Psychologist*, 24, 468-488.
- Ryff, Carol (2018). Well-being with Soul: Science in Pursuit of Human Potential. *Perspectives in Psychological Science*, 13, 242-248.

Contact email: jemabel.sidayen@ue.edu.ph



©The International Academic Forum 2018
The International Academic Forum (IAFOR)
Sakae 1-16-26-201
Naka Ward, Nagoya, Aichi
Japan 460-0008
www.iafor.org