A Comparative Study on Positive Psychological Well-Being between Chinese and Taiwanese University Freshmen

Qian Dai, Sichuan University, China
Rong-Xuan Chu, Shih Hsin University, Taiwan

The European Conference on Psychology and the Behavioral Sciences 2015
Official Conference Proceedings

Abstract
This study investigated positive psychological well-being of 734 university freshmen from China and Taiwan. Both Chinese students (n=514) and Taiwanese students (n=220) completed paper-and-pencil surveys in Chinese measuring positive psychological welling (happiness, curiosity and exploration, gratitude, and life satisfaction) as well as their character, clarity about future goals and satisfaction with their own physical appearance. Results indicated that Chinese freshmen showed a significantly lower level of curiosity and exploration and life satisfaction than Taiwanese freshmen. Both Chinese and Taiwanese female students showed a significantly higher level of curiosity and exploration as well as gratitude than their male counterparts. In addition, satisfaction with physical appearance appeared to have the strongest link with one’s positive psychological well-being for Chinese sample. For Taiwanese sample, character and clarity about future goals appeared to be equal predictors of one’s positive psychological well-being. The research findings suggest that personal attributes, gender, social context and cultural value may have an impact on the development of one’s positive psychological well-being. Future research can be focused on how these factors shape individuals’ positive psychological well-being.

Keywords: positive psychology, psychological well-being, happiness, life satisfaction, comparative study
Introduction
With the endeavor of some positive psychologists (e.g. Seligman & Csikszentmihalyi, 2000), positive psychology has drawn an increased attention in the field of psychology in the past twenty years. Decades of research in the discipline have shown the value in studying people’s positive qualities that shape healthy well-being and demonstrated the effects of positive traits as buffers, helping people, for example, cope with stress in life (Masten & Coatsworth, 1998). In recent years, more and more efforts have been paid to exploring factors that contribute to one’s positive psychological well-being. Factors such as hope (see Valle, Huebner, & Suldo, 2006), life goal (see Sheldon, Elliot, Chirkov, Kim, Wu, Demir, & Sun, 2004) and character (see Peterson, Ruch, Beermann, Park, & Seligman, 2007) have received a great deal of attention and have been proven associated with positive psychological well-being in various western contexts. However, there is limited research evidence to suggest that the association between these factors and one’s positive psychological well-being demonstrated in the western contexts can be applied to non-western contexts (e.g., Aisa).

Research shows that Chinese college students present a noticeable degree of psychological difficulty (e.g. depressive and anxious symptoms) in adjusting to university life but few of them seek help from mental health professionals (Chang, 2007). Chinese students with higher level of mental difficulties were found more reluctant to seek professional help (Chang, 2007). Instead, they prefer to resolve their psychological difficulties on their own (Boey, 1999; Chen, 1987; Cheung, 1984, Guo, 1986; Jiang & Wang, 2003). It is suggested that such a phenomenon may be due to social and cultural pressure the Chinese students faced. Under the Chinese cultural context, revealing psychological difficulties may be interpreted as evidence of a flawed character and a sign of weakness (Chang, 2007). It is then not difficult to understand why few Chinese students are willing to come forward to deal with their psychological challenges.

As the literature showing inadequate evidence on the power of positive psychology in non-western contexts and the scarce help-seeking among Chinese students, it is therefore important to understand Chinese students’ psychological states and examine factors that contribute to their psychological well-being. In the present study, we investigated how people’s positive psychological well-being relates to their character, clarity about future goals and satisfaction with their own physical appearance. A total of 734 participants from two universities (a Chinese and a Taiwanese universities) were recruited for the study. We firstly investigated differences in positive psychological well-being between the Chinese and Taiwanese university students. Next, we explored gender differences in the students’ positive psychological well-being. We then examined relationships between the students’ positive psychological well-being and their character, clarity about future goals and satisfaction with their own physical appearance. Lastly, we examined whether any differences found in this study are statistically significant and discussed their related
implications for further studies.

Literature Review
Positive psychology is intended to add people’s knowledge of a balanced science in understanding human experience, combination of sufferings, happiness and intervention to relive suffering and increase happiness (Peterson, Park, & Seligman, 2005). Researchers (Seligman & Csikszentmihalyi, 2000) have suggested that positive psychology can be understood from three levels. Firstly, at the subjective experience level, positive psychology is about well-being, satisfaction, happiness and hope. Secondly, at the individual level, positive psychology is about personal traits, such as love, gratitude, courage and interpersonal skills. Thirdly, at the group level, it is about the civic institutions that help individuals to have a better citizenship, responsibility and work ethics (Seligman & Csikszentmihalyi, 2000). In a nutshell, positive psychology lies in the components of positive emotions, positive character traits, and enabling institutions (Park, Paterson & Seligman, 2004).

In recent years, the power of positive psychological research has been constantly demonstrated in terms of improving individuals’ psychological well-being and physical health. This has led to a change in approach to unraveling the impacts of positive psychology from a theoretical-based to a practical-based orientation. For instance, a growing body of research has devoted itself to examining character strengths. Character strengths are defined as the virtues, as a part of psychological ingredients (Park & Peterson, 2009). Inspired by positive psychology, the Values in Action – Inventory of Strengths (VIA-IS) has done advanced research into strength of character (Peterson & Seligman, 2004). VIA-IS classified 24 widely recognized character strengths under overarching six virtues: wisdom and knowledge, courage, humanity, justice, temperance, and transcendence. Empirical research found that character strengths present as a mental health value to measure subject well-being (Proctor, Maltby & Linley, 2011). Most importantly, character strengths and virtue are considered to be potentially universal to different cultures and nations (Park et al., 2006).

To date, there is a dearth of positive psychological research examining association between character strengths and their interrelationship with personal, environmental and situational variables (Proctor, Maltby, & Linley, 2011). Character strengths like hope and zest were significantly related to life satisfaction (Park and Peterson, 2006; Peterson et al., 2007). Life satisfaction has been defined as a global appraisal of an individual’s quality of life based on the person’s own chosen criteria (Shin & Johnson, 1978; Sam, 2001). Scores obtained from life satisfaction measure are used as an indication of measuring happiness (Proctor, Linley, & Maltby, 2009). In addition, research evidence shows character strengths which are most associated with life satisfaction have also shown to be associated with three orientations to happiness: pleasure, engagement and meaning (Peterson, Ruch, Beermann, Park, & Seligman, 2007; Seligman, 2002; Csikszentmihalyi, 2002). However, despite abundant studies
suggesting the association between character strengths and life satisfaction, many of them were conducted in western contexts. The lack of like investigation conducted in non-western contexts has limited the ability to estimate the impacts of character strengths in association with one’s life satisfaction.

As stated, positive psychology has been widely shown to be effective in terms of promoting individuals’ well-being (Slade, 2010). But, few studies delve into the association between individuals’ personal evaluation (self-regard) and their positive psychological well-being. Particularly, whether one’s self-evaluation of his/her own personality types, clarity about future goals and satisfaction with own physical appearance have an impact on their positive psychological qualities. Regarding personality types, research evidence shows that personality traits are associated with life satisfaction, particularly positive emotion facet of extraversion were the strongest and most consistent predictors of life satisfaction (Schimmack, Oishi, Furr, & Funder, 2004). It is however still unclear whether personality types (extrovert and introvert personality types) have a salient association with one’s other positive psychological qualities (Cheng, Kim, & Hull, 2010). Regarding one’s satisfaction with own physical appearance, a study conducted with 700 University students showed the students’ well-being was influenced by perceived satisfaction with physical appearance, economic level, perceived attitude of parents, religious belief, and locus of control (Tuzgöl Dost, 2006). The study also showed no gender differences in the students’ subjective well-being level, which contradicts another study showing that women might possess an advantage than men in perceived gratitude (Kashdan, Mishara, Breen, & Froh, 2009).

As there is limited research evidence on the association between positive psychological well-being and one’s self-evaluation of his/her own attributes, there is a need to delve into factors that contribute to the association. Also, as most of the positive psychological studies were conducted in western contexts, there is a need to investigate the power of positive psychology in non-western contexts such as Asia.

**Research Purpose**

The purpose of the present study was threefold: firstly, to explore differences in positive psychological well-being between Chinese and Taiwanese first-year university students; secondly, to investigate gender differences in the students’ positive psychological well-being; thirdly, to examine relationships between the students’ positive psychological well-being and three factors, namely, character, clarity about future goals and satisfaction with physical appearance. Life goals are considered as specific motivational projections or outcomes that direct the person through life (Spasovski, 2013). Personality type in the current study is divided into introvert and extrovert. Introvert personality refers to people who are more interested in their inner sense of self and inner world of ideas, whereas extrovert people are generally prefer outside world and people (Cheng, Kim, & Hull, 2010). Physical appearance satisfaction is very pervasive to adolescents during 13-19 years old across
the different countries; and it is especially prevalent among girls (Chen & Jackson, 2012). The indicators used to measure the students’ positive psychological well-being, included happiness, satisfaction with life, curiosity and exploration as well as gratitude.

The present study attempted to answer the following questions:

1. Is there a difference in positive psychological well-being between Chinese and Taiwanese first-year university students?
2. Are there gender differences in the students’ positive psychological well-being?
3. Is there a relationship between character, clarity about future goals, satisfaction with physical appearance and the students’ positive psychological well-being?

Research Participants and Procedures

In total, there were 734 participants recruited out of 1500 first-year university students from two university samples. The Chinese sample consisted of 514 first-year university students (M= 222, 43%; F=292, 57%) from 29 provinces studying various majors (e.g., Economics, Mathematics, Nursing, Medicines, and Engineering) at an urban university in China. The students were recruited through advertisements at attending the first year Mental Health courses. Interested students were given questionnaires to complete in the class.

The Taiwanese sample consisted of 220 first-year university students (M= 90, 41%; F=128, 59%) from eight cities studying different majors (e.g., Art, Chinese Language, Computer Science, and Education) at an urban university in Taiwan. The students were recruited through advertisements passed out to first-year undergraduates in 18 classes of various subjects. Interested individuals were given questionnaires to complete in the class. Both Chinese and Taiwanese students completed self-report paper-and-pencil questionnaires between late September and early October 2014.

Measures

Happiness Scale (HS) (Park & Peterson, 2006)

This 12-item measure examined the degree to which one endorses each of the four orientations to happiness: achievement (Q1, Q9, Q10 – e.g., “I’m proud of myself.”); engagement (Q8, Q3, Q7 – e.g., “I am usually very interested in what I do.”); emotion (Q2, Q6, Q11 - e.g., “I’m usually in a good mood.”); and meaning (Q4, Q5, Q12 - e.g., “I have a clear idea of the meaning of my life.”). Each item required a participant to answer on a multiple-choice rating scale which included five statements that reflected five different degrees of the measured item.

Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larson, & Griffin, 1985)

This 5-item measure examined the degree to which one evaluated his/her global life
satisfaction (e.g., “I’m satisfied with my life.”). The participants answer each question on a 5-point scale (1 = very much unlike me, 5 = very much like me).

Curiosity and Exploration Scale (CES)(Kashdan , Gallagher, Silvia, Winterstein, Breen, Terhar, & Steger, 2009)
This 10-item measure examined the individual’s evaluation of own curiosity and exploration about the world around him/her (e.g., “No matter where I go, I always look for new things and experience.”). Participants select one of five options ranging from “1 (very much unlike me)” to “5(very much like me)” for each question.

Gratitude Scale (GS) (McCullough, Emmons, & Tsang, 2002)
This 6-item measure examined the degree to which the individual showed gratitude to things around him/her (e.g., “There are so many things in my life that deserve my appreciation.”). Each item required a participant to answer on a 5-point scale (1=very unlike me, 5=very like me).

The three factors (character, clarity about future goals and satisfaction with physical appearance) were measured with a 5-point scale. The participants were asked to rate their character from “1, being introvert to “5, being extrovert”, their clarity about future goals from “1 being unclear at all” to “5, being very clear about their future goals”, and their satisfaction with their own physical appearance from “1, being not satisfied at all with their own physical appearance” to “5, being very satisfied with their own physical appearance”.

Results
Descriptive statistics and preliminary analyses
Descriptive statistics for four subscales of positive psychological well-being in Chinese and Taiwanese students are shown in Table 1. Table 1 shows that all variables are normally distributed with values for skewness and kurtosis within acceptable limits. The composite scores of the four subscales were used to examine the reliability of the measurement of positive psychological well-beings. The results showed the measurement for both university samples are reliable (for Chinese sample, for Taiwan sample, and the four subscales of positive psychological well-beings are highly positively correlated ( \( r > .25, p < .01 \)) (see Table 2).
Q1: Is there a difference in positive psychological well-being between Chinese and Taiwanese first-year university students?

Mixed ANOVA was used to examine interaction between gender and nations in influencing Taiwanese and Chinese students’ positive psychological well-being: 2 (nations) \( \times 2 \) (gender) \( \times 4 \) (positive psychological welling: happiness, life-satisfaction, gratitude, curiosity and exploration), with independent groups on the first two factors and repeated measures on the last factors. The results revealed a significant main effect of the four positive psychological well-being subscales, \( F(2.58, 710) = 253.25, p < .001 \), the four psychological well-being scores are significantly different from each other. Gratitude scores the highest (M=3.53, SD=0.47), followed by curiosity and exploration (M=3.13, SD=0.77), life-satisfaction (M=2.94, SD=0.73), and happiness (M=2.69, SD=0.46). However, there is no significant three-way interaction between gender, nations, and positive psychological well-being.

There is a significant interaction between positive psychological well-being and
nations, F(2.58,710)=6.49, p < .001. T-test showed there are significant differences between Chinese students and Taiwanese students in their curiosity and exploration scores (t= -2.34, df=723, p <.05) and life satisfaction scores (t= -4.91, df=726, p<.001). Taiwanese students revealed more curiosity and exploration (Taiwanese M=3.23, SD=0.71; Chinese M=3.08, SD=0.79) and life satisfaction (Taiwanese M=3.14, SD=0.66; Chinese M=2.86, SD=0.74) than Chinese students. However, it showed no significant difference in gratitude and happiness between Chinese and Taiwanese students.

Q2: Are there gender differences in the students’ positive psychological well-being?

A significant interaction was found between gender and positive psychological well-being, F(2.58,710)=5.12, p <.01. For Chinese sample, an independent t-test showed a significant difference in curiosity and exploration (t= -3.32, df=510, p <.01) as well as in gratitude (t= -3.32, df=510, p <.01) between male and female students. Chinese female students showed a higher level of curiosity and exploration (Male M=3.43, SD=.52; Female M=3.57, SD=.41) as well as gratitude (Male M=3.43, SD=.52; Female M=3.57, SD=.41) than Chinese male students. For Taiwanese sample, an independent t-test revealed gender differences in happiness (t=.62, df=214, p <.05), curiosity and exploration (t=1.55, df= 212, p < .05) and gratitude (t=-1.55, df=212, p < .05). Taiwanese male students showed a greater level of happiness than their female counterparts (Male M=2.75, SD = .52; Female M=2.71, SD=.42). Taiwanese female students showed a greater level of curiosity and exploration (Male, M=3.50, SD=.56; Female M=3.61, SD=.44) and gratitude (Male M=3.50, SD=.56; Female M=3.61, SD=.44). There were no significant gender differences found between Chinese male and Taiwanese male students or between Chinese female and Taiwanese female students.

Q3: Is there a relationship between character, clarity about future goals, satisfaction with physical appearance and the students’ positive psychological strengths?

Pearson correlation Tests were employed to examine relationships between individual’s personality character, physical appearance satisfaction, clarity about future goals and positive psychological well-being separately. Table 3 indicates that for Chinese sample, character is significantly correlated to happiness, life satisfaction, curiosity and exploration. Clarity about future goals is significantly correlated to happiness, curiosity and exploration and gratitude. Satisfaction with physical appearance is significantly correlated to happiness, life satisfaction, curiosity and exploration and gratitude.
Table 3. Pearson Correlation test on relationships between character, clarity about future goals, satisfaction with physical appearance and Chinese university students’ positive psychological well-being.

<table>
<thead>
<tr>
<th></th>
<th>Happiness</th>
<th>Life Satisfaction</th>
<th>Curiosity and exploration</th>
<th>Gratitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td>.175**</td>
<td>.107*</td>
<td>.097*</td>
<td>ns</td>
</tr>
<tr>
<td>Clarity about future goals</td>
<td>.263**</td>
<td>ns</td>
<td>.231**</td>
<td>.170**</td>
</tr>
<tr>
<td>Satisfaction with physical appearance</td>
<td>.347**</td>
<td>.319**</td>
<td>.190**</td>
<td>.143**</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

ns = not significant

Table 4 shows that for Taiwanese sample, character is significantly associated with happiness, life satisfaction and curiosity and exploration. Also, clarity about future goals is significantly associated with happiness, life satisfaction and curiosity and exploration. Satisfaction with physical appearance is significantly associated with happiness and life satisfaction.

Table 4. Pearson Correlation test on relationships between character, clarity about future goals, satisfaction with physical appearance and Taiwanese university students’ positive psychological well-being.

<table>
<thead>
<tr>
<th></th>
<th>Happiness</th>
<th>Life Satisfaction</th>
<th>Curiosity and exploration</th>
<th>Gratitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td>.330*</td>
<td>.217*</td>
<td>.230*</td>
<td>ns</td>
</tr>
<tr>
<td>Clarity about future goals</td>
<td>.428*</td>
<td>.187*</td>
<td>.345*</td>
<td>ns</td>
</tr>
<tr>
<td>Satisfaction with physical appearance</td>
<td>.383*</td>
<td>.274*</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

*p < .01

ns = not significant
Discussion

Differences in positive psychological well-being between Chinese and Taiwanese university students

Results reported here showed that there are significant differences between Chinese and Taiwanese students in two positive psychological well-being indicators: curiosity and exploration as well as life satisfaction. Taiwanese students reported a higher level of curiosity and exploration as well as life satisfaction than Chinese students. Such results may be associated with differences in social context and cultural values between the two nations. Past research suggests that there is a tendency for Western societies to exhibit more creativity than people from Confucian Asian societies (Kim, 2005; Cheng, Kim & Hull, 2010) and life satisfaction is influenced by cultural values (Lu, Gilmour & Kao, 2010). A study shows that international students from Europe and North America were on the whole more satisfied with their lives than their peers from Africa and Asia (Sam, 2001). Yan and Zhen’s (2007) study suggests that students from Mainland China have a lower level of life satisfaction than their counterparts in Hong Kong and United States. Although both China and Taiwan share a Confucian heritage, there are socio-political and economic differences between China and Taiwan. For example, the Chinese communist party governs Mainland China whereas Taiwan follows a more western style democracy with a greater level of freedom of expression. Also, Taiwan’s higher education system has more foreign influences. For instance, American universities influence many Taiwanese higher education institutions. In addition, Taiwan’s economic model is more liberalized whereas the Chinese economy involves strong state intervention. Therefore, these subtle differences between China and Taiwan may be accounted for the differences between Chinese students’ and Taiwanese students’ level of curiosity and exploration as well as of life satisfactions.

Gender differences in positive psychological well-being

Analyses of gender differences showed that the female students in both nations typically reported higher scores on the gratitude measure than did the male students. The results remain consistent with previous work that suggests that women might possess an advantage over men in experiencing and benefiting from gratitude (Kashdan, Mishra, Breen, & Froh, 2009). These results are also supported by a study (Linley, Maltby, Wood, Joseph, Harrington, Peterson, Park, & Seligman, 2007) study in which they found women’s scores for kindness and love were higher than men’s, and showed the strongest effect sizes for gender differences (together with gratitude). In both samples, female students showed a higher level of curiosity and exploration than their male counterparts. Such results may suggest a certain level of emancipation from traditional Chinese expectations of women. Traditionally, Chinese women are perceived to be more homely and sheltered and are not expected to be as adventurous as Chinese men. Regarding happiness measure, in Taiwanese sample, male students reported a significantly higher level of happiness than their female counterparts. Such a result is not in line with past research. Coats and Feldman’s (1996) research showed
that women are better able to encode happiness emotion than men. One explanation for this inconsistency may be that Coats and Feldman’s (1996) study was conducted with adult participants and mainly focused on nonverbal emotions. However, the current study conducted with adolescents with a focus on positive psychological well-being.

*Relationships between character, clarity about future goals, satisfaction with physical appearance and the students’ positive psychological well-being*

Analyses showed that in both samples, the students showed a satisfactory level of self-evaluation of their character, clarity about future goals and satisfaction with their own physical appearance. Character is significantly linked to happiness, life satisfaction and curiosity and exploration. Clarity about future goals seems to be a predictor to happiness, and curiosity and exploration. Satisfaction with physical appearance is positively and significantly correlated with happiness and life satisfaction. Such results imply that both Chinese and Taiwanese students showed a satisfactory level of self-evaluation of their attributes and these attributes are shown significantly and positively correlated with the positive psychological well-being. This echoes the past study done with Chinese university students (Zhen & Zhang, 2004) that students who have more positive self-evaluation are more likely to feel satisfied with their lives. Recent studies on positive psychology revealed the consistent association between life satisfaction and the gratitude, curiosity and hope (Park, Peterson, & Seligman, 2006; Peterson, Ruch, Beermann, Park, & Seligman, 2007). Previous research also revealed that there is a link between meaning of life and positive psychological well-being (Pan, Wong, Joubert, & Chan, 2008). Several researchers have found that attainment of meaning of life is strongly associated with positive dimensions of psychological well-being among college students (Zika & Chamberlain, 1992).

**Conclusion**

It can be concluded that one’s self-evaluation of own character, clarity about future goals and physical appearance may have an impact on their positive psychological well-being. People who value their own attributes appear to have a higher level of positive psychological well-being. Along with socio-political and cultural differences, gender differences seem to play a role in influencing how one’s positive psychological well-being is perceived. This study has important implications for applications in positive psychology education in university settings. It appears that encouraging students to appreciate their own attributes may contribute to the enhancement in their positive emotions and thoughts.

The study contributes to our understanding of positive psychological well-being between Taiwan and Chinese university students as well as of factors associated with their self-evaluation of their own positive emotions. However, there are some limitations in this study. First, the unequal sizes existed between Chinese (N=514) and Taiwanese samples (N=220). This could have potentially skewed the data for the
two sample groups to positive psychological well-being subscales. Second, the study recruited participants from two universities only. It cannot be used to generalize to all Chinese and Taiwanese university students. In order to gain a fuller picture of the development in university students’ positive psychological well-being, a number of issues and social variables deserve considerations for the future studies. First, what and how factors contribute to the association between positive psychological well-being and personal evaluation. Second, further work can be focused on the enhancement of self-evaluation and positive psychological well-being among Chinese and Taiwanese university students.
References


