

PERSPECTIVE AND INSIGHT

Predicting happiness and depression among Chinese undergraduates: The mediating role of gender and five-factor model

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ABSTRACT

Previous research has demonstrated that gender plays a significant role in influencing happiness and mental well-being in happiness and depression in Chinese society concerning the Five Factor Model (FFM). The present study investigates gender differences in happiness and depression among Chinese undergraduate students as well as the mediating role of personality factors from the FFM. A total of 5,648 undergraduate students (aged between 17 and 29) were recruited from universities across China. Results indicated that females reported significantly higher happiness and higher depression than males. The findings suggest that females are more likely to express emotional feelings than males, such as gratitude and happiness. Furthermore, the results indicate that extraversion mediates the relationship between gender and both happiness and depression, while neuroticism mediates the relationship between gender and depression. Consistent with previous findings, the present study confirms that extraversion is the most reliable predictor of positive affect (e.g., happiness), whereas neuroticism is the most reliable predictor of negative affect (e.g., depression).

Key words: happiness, depression, personality, gender, Chinese

INTRODUCTION

The pursuit of happiness is often considered a universal human desire, but its importance, expression, and even our very perception of it can vary widely across individuals and cultures. Happiness in Chinese civilization, referred to as Fu or Fu-qí, is a concept that includes material wealth, physical well-being, and the pursuit of a virtuous and tranquil existence. This notion is influenced by Daoist and Confucian ethics, which prioritize the importance of harmony and balance. In the Chinese cultural settings, where collectivism and social harmony are highly valued, conventional gender roles and expectations may impact how happiness and depression are experienced and expressed. Examining these connections within Chinese society can offer

useful insights into the interactions between cultural and individual elements in influencing emotional well-being. Nevertheless, with the growing interaction between Chinese and Western cultures, the traditional Chinese notions of happiness may be changing (Lu, 2001; Lu & Gilmour, 2004; Lu & Shih, 1997).

Cultural variables and individual characteristics, such as personality traits, both have an impact on subjective well-being. Studies by DeNeve & Cooper (1998) and Steel *et al.*, (2008) have demonstrated this influence. Nevertheless, the relationship between cultural variables, individual variations, and happiness has not been thoroughly investigated within the Chinese contexts.

This research aims to explore the connections between

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gender, personality characteristics (evaluated using the Five Factor Model [FFM]; Costa & McCrae, 1992), and emotional wellness (happiness and sadness) in college students. It also aims to broaden the existing body of knowledge on happiness by examining these relationships in a sizeable sample, emphasizing the cultural and individual elements that impact it.

GENDER AND HAPPINESS

Previous research has consistently demonstrated gender differences in happiness and depression, with women generally reporting higher levels of both compared to men (Alesina *et al.*, 2004; Kelley & Stack, 2000; Koker, 1991; Wood *et al.*, 1989). For example, in a sample of 600 Taiwanese participants, Lu *et al.* (1997) found that women scored significantly higher on measures of happiness (Females: $M = 70.65$, Males: $M = 66.95$; $t = 1.97$, $P < 0.05$) and exhibited greater variance in their scores (Levene's $P < 0.001$) compared to men. Similar findings have been reported in studies of subjective well-being across various cultural contexts (Fugl-Meyer *et al.*, 2002; Hampton & Marshall, 2000; Hintikka *et al.*, 2001; Shmotkin, 1990), suggesting that gender differences in emotional well-being may be a cross-cultural phenomenon (Handzic, 2006).

In addition to happiness, women have also been found to score higher on measures of neuroticism and depression compared to men (Cheng & Furnham, 2003). For instance, Mirowsky and Ross (1995) reported that women experienced distress 30 percent more often than men and were more likely to express negative emotions. Similarly, Fujita, Diener, and Sandvik (1991) found that women tended to experience more depression than men, even though they were just as happy.

In addition to gender, personality traits have also been found to play a significant role in shaping individual differences in happiness and well-being. The following section will discuss the relationship between personality and happiness, with a focus on the FFM.

PERSONALITY AND HAPPINESS

Numerous studies have investigated the relationship between personality traits and happiness (Cheng & Furnham, 2001; Costa & McCrae, 1980; Lu & Hu, 2005; Lu & Shih, 1997). In a study of 423 Chinese university students, Lu and Hu (2005) found that extraversion and neuroticism significantly predicted happiness. They also reported that extraversion was positively correlated with leisure satisfaction, while neuroticism showed the opposite pattern. Similarly, in a sample of 235 American university students, Furnham and Cheng (2000) found that extraversion predicted happiness, whereas

neuroticism predicted unhappiness. Cheng and Furnham (2001) also demonstrated that extraversion was positively correlated with positive affect, and was negatively correlated with negative affect, and that both extraversion and neuroticism predicted happiness and depression, mediated by self-esteem.

The strong link between extraversion and happiness has been highlighted by several researchers. Eysenck (1983) famously stated, "Happiness is a thing called stable extraversion". Chamorro-Premuzic, Bennett, and Furnham (2007) argued that personality traits were "the most robust predictors of happiness" and reported that happiness was positively correlated with extraversion, agreeableness, and conscientiousness. These personality traits explained a considerable amount of variance in happiness (Chamorro-Premuzic *et al.*, 2007). Similarly, DeNeve and Cooper (1998) concluded that extraversion and agreeableness were the most reliable predictors of positive affect, while neuroticism was the most reliable predictor of negative affect and life dissatisfaction. In another study, Cheung *et al.* (2001) reported a close relationship between neuroticism and depression.

AIMS OF THIS STUDY AND HYPOTHESES

Building upon the existing literature on gender differences in emotional well-being and the relationship between personality traits and happiness, the present study aims to investigate the interplay between gender, personality factors (as measured by the FFM; Costa & McCrae, 1992), and emotional well-being (subjective happiness and depression) among Chinese undergraduate students. Specifically, we seek to examine the potential mediating role of extraversion and neuroticism in the relationship between gender and happiness/depression.

Based on previous findings, we proposed two hypotheses. H1: Female participants would report higher levels of both subjective happiness and depression compared to their male counterparts. H2: Extraversion would mediate the relationship between gender and both subjective happiness and depression, while neuroticism would mediate the relationship between gender and depression only.

METHOD

Participants

Five thousand, six hundred and forty-eight students between the ages of 17 and 29 (2180 males; 3198 females; 193 unspecified gender) were recruited from universities in China. Students were recruited from Northeast China (Heilongjiang Polytechnic; $N = 111$), Northern China (HeBei Normal University, Northern

China Electric Power University $N = 1211$), Eastern China (Shanghai Jiaotong University, East China Normal University, East China University of Science and Technology; $N = 2563$), Southern China (Sun Yat-Sen University; $N = 282$), Central China (Wuhan University; $N = 190$), Southwest China (Chongqing University; $N = 268$), Northwest China (Lanzhou Jiaotong University; $N = 476$), Hong Kong (City University of Hong Kong; $N = 214$), Macau (Macau University of Science and Technology; $N = 182$), and Taiwan (Providence University; $N = 151$).

Instruments

Subjective Happiness Scale. Subjective happiness scale consists of 4 items (e.g., "In general, I consider myself...", "Compared with my peers, I consider myself...") (Lyubomirsky & Lepper, 1999). A total of 4 items are rated on a 7-point Likert scale, where 1 and 7 represents "not a very happy person, less happy, not at all" and "very happy person, more happy, a great deal", respectively ($\alpha = 0.74$).

Self-Rating Depression Scale. The Self-Rating Depression Scale (Zung, 1965) consists of 20 items (e.g., "I feel down-hearted and blue", "Morning is when I feel the best") on a 4-point scale where 1 represents "occasionally" and 4 represents "always" ($\alpha = 0.75$).

The FFM. The ten-item personality inventory (TIPI) (Gosling *et al.*, 2003) consists of 10 items to measure the FFM personality domains. Participants were required to rate on the self-report of how they viewed themselves on a 7-point scale where 1 represents disagree strongly and 7 represents agree strongly on all 10 items (e.g., "Extraverted, enthusiastic", "Critical, quarrelsome").

Procedures

Data were collected through questionnaires *via* a convenience sampling and were completed on a voluntary basis. The students completed these questionnaires in their free time. The questionnaires took approximately 15 to 20 minutes to complete.

RESULTS

Our data analysis consists of two parts: one is to verify the gender difference on happiness and depression as mentioned above; the other is to investigate if personality would mediate the relationship between gender, happiness and depression.

Gender difference on depression and happiness

Table 1 reports the gender differences in happiness and depression. Results indicate that females score significantly higher than males on subjective happiness

(mean $[M] = 20.47$, standard deviation $[SD] = 4.39$), and depression ($M = 41.63$, $SD = 8.14$). This supports hypothesis 1 of this study that females would report higher happiness and higher depression than males.

Table 2 reports the mean differences of the FFM across gender. Results indicated that females scored significantly higher than males across the FFM, including, openness ($t = 2.83$, $P < 0.01$), conscientiousness ($t = -2.65$, $P < 0.01$), extraversion ($t = -3.57$, $P < 0.001$), agreeableness ($t = -10.32$, $P < 0.001$), and neuroticism ($t = -3.97$, $P < 0.001$)

Table 3 reports the correlations among subjective happiness, depression and the FFM. Subjective happiness was significantly and positively correlated with openness ($r = 0.25$, $P < 0.001$), conscientiousness ($r = 0.20$, $P < 0.001$), extraversion ($r = 0.35$, $P < 0.001$), and agreeableness ($r = 0.25$, $P < 0.001$). Subjective happiness was also negatively correlated with neuroticism ($r = -0.20$, $P < 0.001$). Besides, depression was significantly and negatively correlated with openness ($r = -0.21$, $P < 0.001$), conscientiousness ($r = -0.21$, $P < 0.001$), extraversion ($r = -0.10$, $P < 0.001$), and agreeableness ($r = -0.10$, $P < 0.001$). Depression was negatively and positively correlated with neuroticism ($r = 0.20$, $P < 0.001$). Generally, subjective happiness was negatively correlated with depression ($r = -0.34$, $P < 0.001$)

We then conducted multiple mediational analyses using the 5,000 bootstrap samples and a bias corrected confidence interval to examine mediation effect of personality (Preacher *et al.*, 2007). The mediator is significant when the 95% confidence intervals (CI) do not contain zero. For subjective happiness, as shown in Figure 1, extraversion significantly mediated the relationship between gender and subjective happiness (95% CI = 0.03, 0.10). Also, neuroticism significantly mediated the relationship between gender and subjective happiness (95% CI = -0.06, -0.02). For depression, neuroticism significantly mediated the relationship between gender and depression (95% CI = 0.03, 0.10). Therefore, the results support hypothesis 2 that extraversion mediated females' experience of subjective happiness and depression whereas neuroticism mediated females' experience of depression (Figure 2).

DISCUSSION

The present study generated a number of intriguing findings. First of all, females reported significantly higher happiness and depression than males. These results echoed previous findings that females tended to report higher happiness (Alesina *et al.*, 2004) as well as higher depression (Koenig *et al.*, 1994; Upmanyu *et al.*, 1992; Wiseman *et al.*, 1995) whereas males tended to

Table 1: Gender difference in happiness and depression

	Males		Females		t-value	Cohen's d
	M	SD	M	SD		
Subjective happiness	19.16	4.54	20.47	4.39	-10.16*	-0.29
Depression	40.90	8.15	41.63	8.14	-2.97*	-0.09

M, mean; SD, standard deviation; *, $P < 0.01$; The sample size for subjective happiness was 2036 for males and 2923 for females. The sample size for depression is 1944 for males and 2626 for females.

Table 2: Mean differences of the five factor model by gender

		M	SD	t-test	Cohen's d
Openness	Males	9.91	2.25	2.83*	0.08
	Females	9.74	2.14		
Conscientiousness	Males	9.34	2.49	-2.65*	-0.07
	Females	9.52	2.45		
Extraversion	Males	8.36	2.74	-3.57*	-0.10
	Females	8.63	2.75		
Agreeableness	Males	9.49	2.04	-10.32*	-0.29
	Females	10.08	2.03		
Neuroticism	Males	7.47	2.35	-3.97*	-0.11
	Females	7.74	2.41		

M, mean; SD, standard deviation; *, $P < 0.01$.

Table 3: Correlations between subjective happiness, depression and the five factor model

Factors	1	2	3	4	5	6	7
1. Openness	1	-	-	-	-	-	-
2. Conscientiousness	0.29*	1	-	-	-	-	-
3. Extraversion	0.27*	0.06*	1	-	-	-	-
4. Agreeableness	0.02	0.15*	0.27*	1	-	-	-
5. Neuroticism	-0.05*	-0.22*	0.11*	-0.22*	1	-	-
6. Subjective happiness	0.25*	0.20*	0.35*	0.09*	-0.20*	1	-
7. Depression	-0.21*	-0.21*	-0.10*	-0.10*	0.20*	-0.34*	1

*, $P < 0.01$.

report higher loneliness and lower emotional expressiveness (Brody, 1997; Brody, 1999; Koenig *et al.*, 1994; Upmanyu *et al.*, 1992; Wiseman *et al.*, 1995). This could be due to that males tended to express emotion associated with power and status such that their masculinity and social status would not be threatened (Brody, 1997; Brody, 1999; Levant & Kopecky, 1995). Females, on the other hand, tended to express more emotional feelings, like gratitude and happiness (Becker & Smenner, 1986; Gordon *et al.*, 2004). Likewise, the Chinese perspective conceptualizes happiness with "being content with one's lot and feeling sincerely thankful for whatever life brings" (Lu, 2001). This could indicate that females may have a tendency to be content with whatever life brings to them more easily than males.

Secondly, extraversion and neuroticism were found to mediate the gender-happiness link and gender-depression link, respectively. This finding echoed previous studies that females were more emotional than males (Alesina *et al.*, 2004; Cenkseven Önder & Akbas, 2007), and that extraversion and neuroticism could influence the link between gender and happiness as well as depression (Davila *et al.*, 2003; Hills & Argyle, 2001). After all, extraversion has been a reliable predictor of positive affect, such as happiness (De DeNeve & Cooper, 1998). For Chinese people, intense hedonic emotions are rarely expressed even though they are acknowledged as a part of the happiness experience (Lu, 2001). In the present study, extraversion did account for a significant amount of variance in the relationship between gender and subjective happiness.

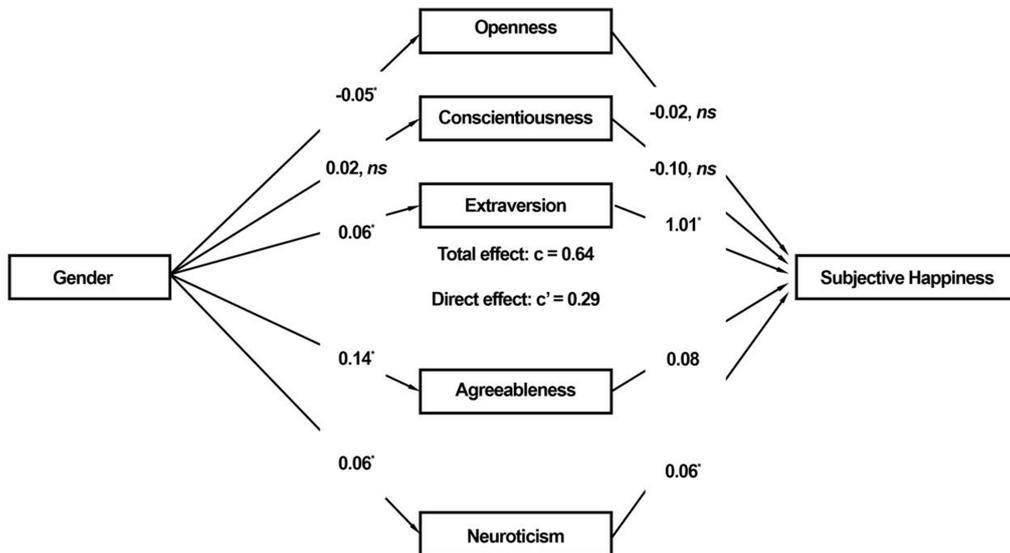


Figure 1. Path model of dispositional factors mediating the relationship between gender and subjective happiness. *, $P < 0.01$.

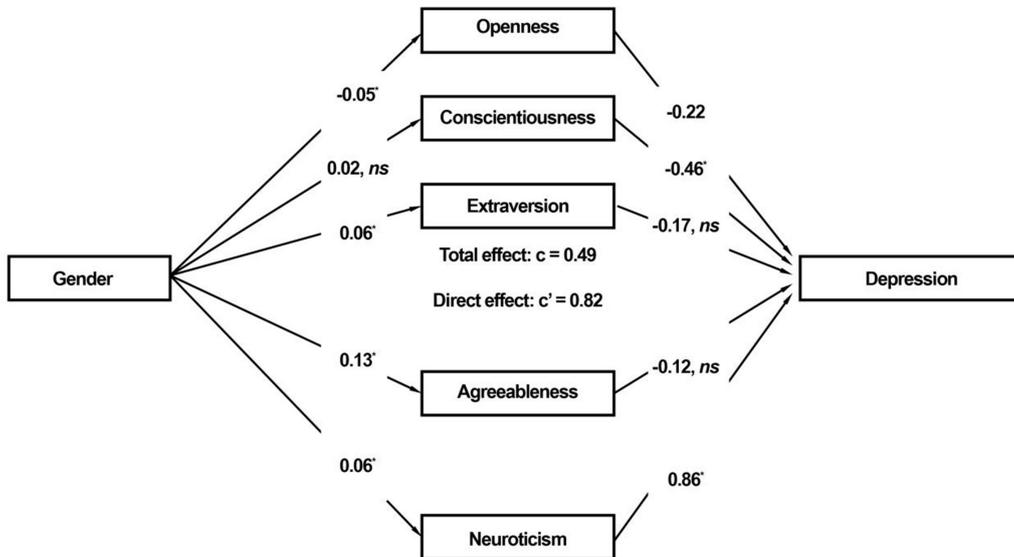


Figure 2. Path model of dispositional factors mediating the relationship between gender and depression. *, $P < 0.01$.

Thirdly, neuroticism was found to mediate the relationship between gender and depression, which is consistent with previous findings that neuroticism was more predictive of negative affect (Davila *et al.*, 2003; De Neve & Cooper, 1998). As neuroticism was a strong predictor of depression, and it accounted for a significant amount of variance in the relationship between gender and depression as well in the present study (Costa *et al.*, 2001; Goodwin & Gotlib, 2004; Lynn & Martin, 1997).

Taken together, these findings show that gender seems to exert the similar pattern of impact on happiness and depression for the Chinese as it did for the Westerners. This came as no surprise as it has been argued that

nowadays, neither Chinese people in Hong Kong and Mainland China nor people in Taiwan province of China could claim a pure heritage of Chinese traditions and cultural values due to the increasingly greater impact brought in by Western cultures to Eastern cultures, such as economic globalization, political interactions, strategic alliance, and systemic cultural communications from greater impacts (Bond, 1996; Hwang, 1987; Lu, 2001; Yue *et al.*, 2014a; Yue *et al.*, 2014b).

LIMITATIONS AND FUTURE DIRECTIONS OF RESEARCH

This study generated some really intriguing findings in

terms of the gender difference on happiness and depression among Chinese undergraduates, with regard to the mediating role of the FFM. However, there are several limitations that need to be addressed in future researches. First of all, even though the present sample size is very big, it includes a homogeneous group, *i.e.*, university students. So it is suggested that future studies ought to include samples from different walks of life to verify the present findings. Secondly, the present study used self-report measures; in so doing, participants might fill in the questions in a social desirable way. Therefore, it is recommended that future studies use other ways of data collection to cross-validate the findings. Thirdly, the present study sampled Chinese undergraduates only, future studies ought to recruit students from other countries or societies as well to justify the cross-cultural validity of the present findings. Last but not the least, future studies ought to examine more variables, such as, to test the directions of the relationship. For example, there is also room for a more cohesive integration of present findings with similar findings to strengthen the theoretical underpinning. Another example, H2 of present study assumed that different personalities might have diverse mediating role of happiness and depression, but there was a lack of support for it. Future studies ought to seek to verify this assumption by examining further how gender matters for happiness and depression *via* the moderation of Big-FFM. To conclude this paper, would like to quote a widely cited statement from Freud: *The great question that has never been answered, and which I have not yet been able to answer, despite my thirty years of research into the feminine soul, is "What does a woman want?" (Jones, 1953)*. This may be the ultimate answer or question to this study.

DECLARATION

Author contributions

Yue XD designed the overall concept and outline of the manuscript, reviewed the literature, and wrote the manuscript.

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None.

Ethics approval

Not applicable.

Conflict of interest

Yue XD is the editorial board member of the journal. The article was subject to the journal's standard procedures, with peer review handled independently of the editor and the affiliated research groups.

Use of large language models, AI and machine learning tools

None declared.

Data availability statement

Not applicable.

REFERENCES

- Alesina, A., Di Tella, R., & MacCulloch, R. (2004). Inequality and happiness: are Europeans and Americans different? *Journal of Public Economics*, 88(9-10), 2009-2042. <https://doi.org/10.1016/j.jpubeco.2003.07.006>
- Argyle, M., Martin, M., & Crossland, J. (1989). Happiness as a function of personality and social encounters. In J. P. Forgas, & J. M. Innes (Eds.), *Recent advances in social psychology: An international perspective* (pp. 189-247). Elsevier Science Publishers B.V.
- Bassi, M., & Delle Fave, A. (2004). Adolescence and the changing context of optimal experience in time: Italy 1986-2000. *Journal of Happiness Studies*, 5(2), 155-179. <https://doi.org/10.1023/B:JOHS.0000035914.66037.b5>
- Becker, J. A., & Smenner, P. C. (1986). The spontaneous use of thank you by preschoolers as a function of sex, socioeconomic status, and listener status. *Language in Society*, 15(4), 537-545.
- Bond, M. H. (1996) *Handbook of Chinese psychology*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199541850.001.0001>
- Brody, L. R. (1997). Gender and emotion: Beyond stereotypes. *Journal of Social Issues*, 53(2), 369-393. <https://doi.org/10.1111/j.1540-4560.1997.tb02448.x>
- Brody, L. R. (1999). *Gender, emotion, and the family*. Harvard University Press.
- Bruner, J. (1990). *Acts of Meaning: Four Lectures on Mind and Culture*. Harvard University Press.
- Cenkseven Önder, Fulya & Akbas, T. (2007). Examining the predictors of subjective and psychological well-being of university students. *Turkish Psychological Counseling and Guidance Journal*. 43-65.
- Chamorro-Premuzic, T., Bennett, E., & Furnham, A. (2007). The happy personality: mediational role of trait emotional intelligence. *Personality and Individual Differences*, 42(8), 1633-1639. <https://doi.org/10.1016/j.paid.2006.10.029>
- Cheng, H., & Furnham, A. (2001). Attributional style and personality as predictors of happiness and mental health. *Journal of Happiness Studies*, 2(3), 307-327. <https://doi.org/10.1023/A:1011824616061>
- Cheng, H., & Furnham, A. (2003). Personality, self-esteem, and demographic predictions of happiness and depression. *Personality and Individual Differences*, 34(6), 921-942. [https://doi.org/10.1016/S0191-8869\(02\)00078-8](https://doi.org/10.1016/S0191-8869(02)00078-8)
- Costa, P. T., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of Personality and Social Psychology*, 81(2), 322-331. <https://doi.org/10.1037/0022-3514.81.2.322>
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38(4), 668-678. <https://doi.org/10.1037/0022-3514.38.4.668>
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Psychological Assessment Resources.
- Davila, J., Karney, B. R., Hall, T. W., & Bradbury, T. N. (2003). Depressive symptoms and marital satisfaction: within-subject associations and the moderating effects of gender and neuroticism. *Journal of Family Psychology*, 17(4), 557-570. <https://doi.org/10.1037/0893-3200.17.4.557>
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197-229. <https://doi.org/10.1037/0033-2909.124.2.197>
- Eysenck, H. J. (1983). *I do: your guide to a happy marriage*. J. Wiley & Sons Canada
- Fugl-Meyer, A. R., Melin, R., & Fugl-Meyer, K. S. (2002). Life satisfaction in 18- to 64-year-old swedes: in relation to gender, age, partner and immigrant status. *Journal of Rehabilitation Medicine*, 34(5), 239-246. <https://doi.org/10.1080/1650197021000011111>

- [/doi.org/10.1080/165019702760279242](https://doi.org/10.1080/165019702760279242)
- Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: the case for emotional intensity. *Journal of Personality and Social Psychology*, 61(3), 427-434. <https://doi.org/10.1037/0022-3514.61.3.427>
- Furnham, A., & Cheng, H. (2000). Perceived parental behaviour, self-esteem and happiness. *Social Psychiatry and Psychiatric Epidemiology*, 35(10), 463-470. <https://doi.org/10.1007/s001270050265>
- Goodwin, R. D., & Gotlib, I. H. (2004). Gender differences in depression: the role of personality factors. *Psychiatry Research*, 126(2), 135-142. <https://doi.org/10.1016/j.psychres.2003.12.024>
- Gordon, A. K., Musher-Eizenman, D. R., Holub, S. C., & Dalrymple, J. (2004). What are children thankful for? An archival analysis of gratitude before and after the attacks of September 11. *Journal of Applied Developmental Psychology*, 25(5), 541-553. <https://doi.org/10.1016/j.appdev.2004.08.004>
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37(6), 504-528. [https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1)
- Hampton, N., & Marshall, A. (2000). Culture, gender, self-efficacy, and life satisfaction: a comparison between Americans and Chinese people with spinal cord injuries. *Journal of Rehabilitation*, 66(3), 21-28.
- Hills, P., & Argyle, M. (2001). Happiness, introversion-extraversion and happy introverts. *Personality and Individual Differences*, 30(4), 595-608. [https://doi.org/10.1016/S0191-8869\(00\)00058-1](https://doi.org/10.1016/S0191-8869(00)00058-1)
- Hintikka, J., Koskela, T., Kontula, O., Koskela, K., Koivumaa-Honkanen, H. T., & Viinamäki, H. (2001). Religious attendance and life satisfaction in the Finnish general population. *Journal of Psychology and Theology*, 29(2), 158-164. <https://doi.org/10.1177/009164710102900207>
- Hwang, K. K. (1987). Face and favor: the Chinese power game. *American Journal of Sociology*, 92(4), 944-974. <https://doi.org/10.1086/228588>
- Jones, E. (1953). *The Life and Work of Sigmund Freud First Edition*. Basic Books.
- Kelley, T. M., & Stack, S. A. (2000). Thought recognition, locus of control, and adolescent well-being. *Adolescence*, 35(139), 531-550.
- Koenig, L. J., Isaacs, A. M., & Schwartz, J. A. J. (1994). Sex differences in adolescent depression and loneliness: why are boys lonelier if girls are more depressed? *Journal of Research in Personality*, 28(1), 27-43. <https://doi.org/10.1006/jrpe.1994.1004>
- Koker, S. Comparison of life satisfaction levels of normal adolescents and adolescents with problems. Ankara Üniversitesi, (Master Thesis), 1991.
- Levant, R. F., & Kopecky, G. (1995). *Masculinity reconstructed: Changing the rules of manhood- at work, in relationships, and in family life*. Plume Publishing.
- Lu, L. (2001). Understanding happiness: a look into the Chinese folk psychology. *Journal of Happiness Studies*, 2(4), 407-432. <https://doi.org/10.1023/A:1013944228205>
- Lu, L., & Gilmour, R. (2004). Culture and conceptions of happiness: Individual oriented and social oriented SWB. *Journal of Happiness Studies*, 5(3), 269-291. <https://doi.org/10.1007/s10902-004-8789-5>
- Lu, L., & Hu, C. H. (2005). Personality, leisure experiences and happiness. *Journal of Happiness Studies*, 6(3), 325-342. <https://doi.org/10.1007/s10902-005-8628-3>
- Lu, L., & Shih, J. B. (1997). Personality and happiness: is mental health a mediator? *Personality and Individual Differences*, 22(2), 249-256. [https://doi.org/10.1016/S0191-8869\(96\)00187-0](https://doi.org/10.1016/S0191-8869(96)00187-0)
- Lu, L., Shih, J. B., Lin, Y. Y., & Ju, L. S. (1997). Personal and environmental correlates of happiness. *Personality and Individual Differences*, 23(3), 453-462. [https://doi.org/10.1016/S0191-8869\(97\)80011-6](https://doi.org/10.1016/S0191-8869(97)80011-6)
- Luo, L., Gilmour, R., & Kao, S. F. (2001). Cultural values and happiness: an east-west dialogue. *The Journal of Social Psychology*, 141(4), 477-493. <https://doi.org/10.1080/00224540109600566>
- Lynn, R., & Martin, T. (1997). Gender differences in extraversion, neuroticism, and psychoticism in 37 nations. *The Journal of Social Psychology*, 137(3), 369-373. <https://doi.org/10.1080/00224549709595447>
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: preliminary reliability and construct validation. *Social Indicators Research*, 46(2), 137-155. <https://doi.org/10.1023/A:1006824100041>
- Handzic, M. (2006). Knowledge Management in SMEs Practical guidelines. *Journal of Commerce and Industry*. 1. 1-11.
- Mirowsky, J., & Ross, C. E. (1995). Sex differences in distress: real or artifact? *American Sociological Review*, 60(3), 449. <https://doi.org/10.2307/2096424>
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227. <https://doi.org/10.1080/00273170701341316>
- Shmotkin, D. (1990). Subjective well-being as a function of age and gender: a multivariate look for differentiated trends. *Social Indicators Research*, 23(3), 201-230. <https://doi.org/10.1007/BF00293643>
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, 134(1), 138-161. <https://doi.org/10.1037/0033-2909.134.1.138>
- Upmanyu, V. V., Upmanyu, S. and Dhingra, M. (1992). Gender differences in loneliness. *Journal of Personality and Clinical Studies*, 8(1-2), 161-166.
- Wiseman, H., Guttfreund, D. G., & Lurie, I. (1995). Gender differences in loneliness and depression of university students seeking counselling. *British Journal of Guidance & Counselling*, 23(2), 231-243. <https://doi.org/10.1080/03069889508253008>
- Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: a consideration of emotional style and marital status. *Psychological Bulletin*, 106(2), 249-264. <https://doi.org/10.1037/0033-2909.106.2.249>
- Yue, X. D., Liu, K. W., Jiang, F., & Hiranandani, N. A. (2014). Humor styles, self-esteem, and subjective happiness. *Psychological Reports*, 115(2), 517-525. <https://doi.org/10.2466/07.02.PR0.115c18z6>
- Yue, X. D., Wong, A. Y., & Hiranandani, N. A. (2014). Humor styles and loneliness: a study among Hong Kong and Hangzhou undergraduates. *Psychological Reports*, 115(1), 65-74. <https://doi.org/10.2466/20.21.PR0.115c11z1>
- Zung, W. W. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12, 63-70. <https://doi.org/10.1001/archpsyc.1965.01720310065008>