

Improving New Residents' Subjective Well-Being through Social Support: The Mediating Role of Self-Concept

Ai-Chun Chang, Ph.D student

Kuo-Chung Huang, Professor

Department of Business Administration
Nanhua University, Chiayi, Taiwan

Abstract

The study extends the literature by conceptualizing social support (instrumental support and emotional support), self-concept and subjective well-being (positive affect and life satisfaction). Based on the sample of 256 female new residents, the integrated structural equation model was examined. It was found that emotional support has a greater positive impact on positive affect than instrumental support and self-concept. Self-concept is a key factor in improving life satisfaction as it plays a complete mediating role between social support and life satisfaction. The research improves the understanding of how instrumental support, emotional support and self-concept behave in the psychological processes to increase positive affect and life satisfaction.

Keywords: Aged Society, Immigration, Instrumental Support, Emotional Support, Positive Affect, Life Satisfaction

1. Introduction

Most countries in the world suffer from population aging due to the declining fertility and/or increasing longevity. In Taiwan, although the fertility rate in 2000 was 1.68 children per woman, the trend in fertility rates has declined. In fact, Taiwan has become one of the lowest fertility areas in the world in 2019, with a fertility rate of 1.05 children per woman. This phenomenon implies an increase of the proportion of the elderly population, people aged 65 years and over, especially as the average life expectancy of Taiwanese has increased from 79.18 years in 2010 to 80.86 years in 2019. In particular, the proportion of aging population has increased from 10.74% in 2010 to 15.28% in 2019, indicating that Taiwan has become an aged society (Ministry of the Interior, 2020). In each country experiencing population aging, there will be a relatively small number of people working, which may result in a shortage of labor and professionals. Although international immigration cannot be treated as a way to deal with population aging, it can improve the age structure of the population, at least for a certain period of time, since most immigrants are young working generations.

Driven by global internationalization, interactions and marriages with foreigners are increasingly common. In Taiwan, new residents who have obtained the ROC nationality and identity card has become the fifth largest ethnic group. Most of the new residents in Taiwan (65.78%) were from Mainland China, Hong Kong and Macao. Because of the smaller cultural distance, these new residents are more likely and quickly adapted to life in Taiwan. As for other new residents, most of them were female (88.54%), and they stayed in Taiwan through marriage immigration (National Immigration Agency, 2020). Foreign spouses living in Taiwan often find it difficult to cope with cultural adaptation and language barriers, which may negatively influence their moods, emotion and life satisfaction, etc. Such negative impacts may be detrimental to the development of subjective well-being of new residents. In addition to this, children's life satisfaction is significantly positive correlated with their parents' life satisfaction, where mothers with high life satisfaction have a greater impact on their children's life satisfaction (Clair, 2012). Therefore, the research agenda on subjective well-being of new residents is important. Investigators should pay more attention to the external (such as social support) and interaction internal (such as self-concept) factors to achieve subjective well-being. To understand the current situation of new residents, especially for foreign brides, an attempt was then made to investigate the relationships among social support, self-concept and subjective well-being. In particular, the research population was Vietnamese immigrant brides living in Taiwan, in view of the fact that, at the end of 2019, 56.12% of foreign spouses were Vietnamese women married to Taiwanese men (National Immigration Agency, 2020).

2. Literature Review

Well-being was measured by Gross Domestic Product (GDP) to interpret the state of people's material position of a country. Combining information about historical and social developments and government policy, well-being enables people to better understand ways to improve their quality of life.

However, GDP cannot cover all the aspects of life situation, and thus different indicators of well-being have been proposed in the literature. One of the indicators of well-being is subjective well-being, which evaluates individuals' feelings and/or real life experiences directly (Andrews, 1991; Conceição & Bandura, 2008; Dolan & Metcalfe, 2012). Generally, subjective well-being is measured by asking people to provide assessments of their life. Yang and Huang (2011) defined subjective well-being as the perception of happiness in personal life from cognitive and emotional perspectives. Portela, Neira and Salinas-Jiménez (2013) used happiness and life satisfaction to measure the affective and cognitive processes involved in subjective well-being. Jeon, Lee and Kwon (2016) defined subjective well-being as a state of satisfaction with personal life involving emotional experiences. Saunders *et al.* (2018) evaluated subjective well-being by assessing affect and life satisfaction. Zhu *et al.* (2020) measured subjective well-being by assessing the overall level of happiness. Blasco-Belled *et al.* (2020) measured subjective well-being by evaluating respondents' satisfaction of life.

Diener *et al.* (1999) conducted a literature review about subjective well-being, and suggested that researchers should take external and internal factors into account. Depending on other people, external factors are those cannot be controlled by individuals themselves. Cobb (1976) defined social support as an information yielding individuals to believe that they belong to a group of communication and mutual obligations, and being valued, respected, loved and cared for. Social support has been recognized as an important role that can improve subjective well-being. According to a sample of 201 individuals working in four insurance companies, Karademas (2006) found that two different forms of social support positively influenced satisfaction with life in different ways, where instrumental social support directly influenced satisfaction with life, whereas emotional social support influenced satisfaction with life indirectly via optimism. Measuring well-being by positive affect and purpose in life, on the basis of a sample of 225 adults aged 65 to 94 years old, Ferguson and Goodwin (2010) showed that social support was a predictor of positive affect, but not purpose in life. According to 381 undergraduate students taking psychology courses, Liet *et al.* (2014) indicated that social support had a direct effect on subjective wellbeing, and an indirect effect via positive psychological capital. In line with a convenience sample comprised 333 athletes from high schools and universities, Jeon, Lee and Kwon (2016) found that subjective well-being can be influenced by social support not only directly, but also indirectly through self-compassion. According to a random sample of 1250 adolescents aged from 12 to 15 years, Rodríguez-Fernández *et al.* (2016) indicated that there were positive correlations between social support and subjective well-being.

The internal factors of subjective well-being are regarding to personalities of the respondents, and self-concept is one such factor that is related to subjective well-being. Self-concept has been shown to be an important variable to predict subjective well-being. According to a sample of 233 undergraduates, Zhang and Xu (2007) indicated that self-concept was a significant predictor of subjective well-being. Based on a sample of 164 college youth physical education teachers, Wang (2008) indicated that self-concept was an important factor affecting subjective well-being. Zhang (2016) tested a random sample of 234 undergraduates, and showed that self-concept positively influenced subjective well-being. On the basis of a sample of 550 female college students, Meng, Wang and Lei (2017) found that the causal relationship between self-concept and subjective well-being was significantly positive. In line with a sample of 717 Chinese older adults, Chao and Wu (2018) found that self-concept positively influenced subjective well-being.

The relationship between the two external and internal factors, social support and self-concept, is causality. Conducting a survey with 699 middle school students, Yoon and Lee (2009) showed that social support and self-concept were correlated. Based on a sample 276 college students, Torres *et al.* (2010) found significantly positive correlations between perceived social support and self-concept. According to a sample of 105 secondary-school students, Seničar and Kobal-Grum (2012) observed that social support was positively correlated with self-concept. In line with a convenience sample of 135 adults with spinal cord injury, Huang *et al.* (2015) found that social support positively influenced self-concept. According to a sample of 93 HIV/AIDS sufferers in city of Manado, Raule (2016) showed that social support had a positive direct effect on self-concept. On the basis of a sample of 411 college students in northwest China, Xu, Li and Yang (2019) showed that self-concept was positively influenced by perceived social support.

3. Research Design

According to the literature review, it was found that social support, self-concept and subjective well-being are causally linked, which can be treated as the theoretical basis for the research framework. As new residents become part of society, their subjective well-being should be carefully concerned. The present research attempted to empirically study the integrated model to understand the psychological processes that influence subjective well-being. The research model is distinctive in the sense that we combine relationships among social support, in terms of instrumental support and emotional support, self-concept and subjective well-being, in terms of positive affect and life satisfaction.

The model depicted in Figure 1 suggested that two different forms of social support (instrumental support and emotional support) positively influence self-concept, and both forms of subjective well-being (positive affect and life satisfaction). Self-concept has a positive impact on both forms of subjective well-being (positive affect and life satisfaction). Since the positive impacts of social support on self-concept and subjective well-being, together with self-concept on subjective well-being were investigated at the same time, it can be assumed that there is a mediation effect of self-concept between social support and subjective well-being.

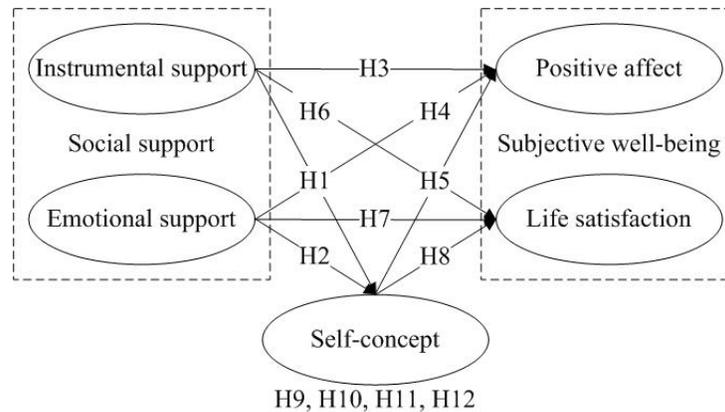


Figure 1: Research framework

According to the research model, the following hypotheses were formulated.

- H1: Instrumental support has a positive impact on self-concept.
- H2: Emotional support has a positive impact on self-concept.
- H3: Instrumental support has a positive impact on positive affect.
- H4: Emotional support has a positive impact on positive affect.
- H5: Self-concept has a positive impact on positive affect.
- H6: Instrumental support has a positive impact on life satisfaction.
- H7: Emotional support has a positive impact on life satisfaction.
- H8: Self-concept has a positive impact on life satisfaction.
- H9: Self-concept plays a mediating role between instrumental support and positive affect.
- H10: Self-concept plays a mediating role between emotional support and positive affect.
- H11: Self-concept plays a mediating role between instrumental support and life satisfaction.
- H12: Self-concept plays a mediating role between emotional support and life satisfaction.

3.1 Measures

The questionnaire used in the present study consisted of two main parts: the first part regarding to respondents' demography profiles, and the second part involving items measuring social support, self-concept and subjective well-being. Social support was assessed using 5 items developed by Lin (2016) and Lin, Hirschfeld and Margraf (2019). Self-concept was assessed using 5 items developed by Chen and Tsai (2016) and Chang (2017). Subjective well-being was assessed using 5 items developed by Watson, Clark and Tellegen (1988) and Jeng and Lee (2017). Questionnaire items were all designed with a seven-point Likert type scale ranging from 1 for "strongly disagree" to 7 for "strongly agree".

In line with a pilot survey, some new residents expressed that they preferred a Chinese questionnaire, the survey questionnaire was therefore initially prepared in a Chinese version, and then translated into Vietnamese, the first language of the respondents. It was further translated back into Chinese to ensure the consistency and accuracy of item descriptions. Three versions of the questionnaire were cross-checked, discussed and revised by three bilingual translators to facilitate the completion of the survey questionnaire. The questionnaire was pretested using a convenient sample of 50 Vietnamese immigrant brides. On the basis of their feedback, some minor changes were made with respect to some wordings of questionnaire items.

3.2 Sample

The survey respondents were female new residents from Vietnam. The respondent was convinced that her personal status will not be disclosed by participating. Paper-based questionnaires were distributed to a total of 280 female new

residents living in Taiwan. After removing 24 incomplete responses, 256 valid samples were obtained for data analysis, and the response rate was 91.4%. The majority (49.6%) of the respondents were aged from 21 to 30 years old.

The most commonly used language for communication in Taiwan was Chinese (55.5%), followed by the mother tongue, Vietnamese (40.2%). 47.3% of the respondents got a high school diploma, and 39.1% got a junior high school diploma. Approximately 44.9% of the respondents have lived in Taiwan less than 5 years, and 40.2% lived in Taiwan for 6 to 10 years. The monthly income mostly ranged from 20,001 to 30,000 NTD, which accounted for 49.6%.

3.3 Analyses of Validity and Reliability

Statistical analysis was performed with two software packages, SPSS 18.0 and AMOS 18.0. Factor analysis with varimax rotation was conducted to explore the validity of the scales. According to the results given in Table 1, the Kaiser-Meyer-Olkin (KMO) values were greater than 0.7, and Bartlett tests of sphericity were significant, indicating that the data was suitable for factor analysis. For social support, two factors, named as instrumental support (IS) and emotional support (ES), were extracted with the sum of variance explained given by 78.825%. Factor loadings for social support were acceptable which ranged from 0.850 to 0.900. For self-concept (SC), one factor was extracted with the sum of variance explained given by 68.831%. Factor loadings for self-concept were acceptable which ranged from 0.810 to 0.847. For subjective well-being, two factors, named as positive affect (PA) and life satisfaction (LS), were extracted with the sum of variance explained given by 73.333%. Factor loadings for subjective well-being were acceptable which ranged from 0.769 to 0.877. All the results of factor analysis satisfied the suggestions by Kaiser (1974).

Table 1: Summary of factor analysis

Construct	Item	Factor loading	Eigen value	Cumulative percentage	KMO value
Instrumental support	IS1	0.881	2.280	45.595	0.722
	IS2	0.855			
	IS3	0.850			
Emotional support	ES1	0.900	1.661	78.825	
	ES2	0.880			
Self-concept	SC1	0.847	3.442	68.831	0.886
	SC2	0.837			
	SC3	0.832			
	SC4	0.822			
	SC5	0.810			
Positive affect	PA1	0.839	2.062	41.234	0.744
	PA2	0.834			
	PA3	0.769			
Life satisfaction	LS1	0.877	1.605	73.333	
	LS2	0.848			

After conducting confirmatory factor analysis, the structural equation modeling technique was incorporated to analyze the research model. The validity and reliability of the measurement model were assessed by examining the loadings, average variance extracted (AVE), composite reliability (CR) and Cronbach's α , which were shown in Table 2.

Table 2: Summary of the measurement model

Construct	Item	Loading	AVE	CR	α
Instrumental support	IS1	0.799***	0.650	0.848	0.847
	IS2	0.812***			
	IS3	0.807***			
Emotional support	ES1	0.735***	0.642	0.781	0.776
	ES2	0.862***			
Self-concept	SC1	0.809***	0.611	0.887	0.886
	SC2	0.794***			
	SC3	0.779***			
	SC4	0.774***			
	SC5	0.750***			
Positive affect	PA1	0.797***	0.549	0.784	0.781
	PA2	0.694***			
	PA3	0.727***			
Life satisfaction	LS1	0.701***	0.569	0.724	0.719
	LS2	0.804***			

Note: *** $p < 0.001$.

As shown in Table 2, all loadings were greater than 0.5 and significant ($p < 0.001$). The AVE values were above 0.5, and the CR and Cronbach's α values were above 0.7, suggesting that there were sufficient convergent validity and reliability of the measures (Hair et al., 2014). The discriminant validity was examined in line with the suggestions by Fornell and Larcker (1981). As shown in Table 3, the square roots of AVEs were all greater than pairwise correlation coefficients, implying sufficient discriminant validity of the measures. In addition, all the correlation coefficients were significant ($p < 0.001$), ranged from 0.268 to 0.652, and less than 0.9. Performing the Harman's single factor test, 74.559% of variance was explained by five factors, in which the first factor accounted for 23.294%, which is less than 50%. Thus, the present study did not suffer from the problem of common method bias (Podsakoff & Organ, 1986; Tabachnick & Fidell, 2014; Yoganathan, Jebarajakirthy & Thaichon, 2015). These demonstrated sufficient validity and reliability of the measures used in this study.

Table 3: Mean, standard deviation (SD) and correlation coefficient

Construct	Mean	SD	IS	ES	SC	PA	LS
IS	5.060	1.118	0.806				
ES	5.215	1.015	0.340***	0.801			
SC	5.488	1.016	0.499***	0.434***	0.782		
PA	4.938	0.968	0.346***	0.463***	0.441***	0.741	
LS	5.365	1.037	0.402***	0.268***	0.652***	0.413***	0.754

Note: *** $p < 0.001$. Diagonal values represent the square root of the AVE.

4. Results

The structural model fit indices under consideration were comparative fit index (CFI), goodness-of-fit index (GFI), incremental fit index (IFI), normed fit index (NFI), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR) and Tucker-Lewis index (TLI), where CFI, GFI, IFI, NFI and TLI should be higher than 0.9, and RMSEA and SRMR should be lower than 0.08 (Hair et al., 2014). The structural model had acceptable fit indices, where $\chi^2(84) = 121.312$, $p = 0.005$, $\chi^2/df = 1.444$, CFI = 0.979, GFI = 0.940, IFI = 0.980, NFI = 0.937, TLI = 0.974, RMSEA = 0.042 and SRMR = 0.041. The model explained 44.3% of the variance for positive affect and 67.3% of the variance for life satisfaction. Figure 2 illustrated the result of the structural model, in which the path coefficients were expressed in the standardized form.

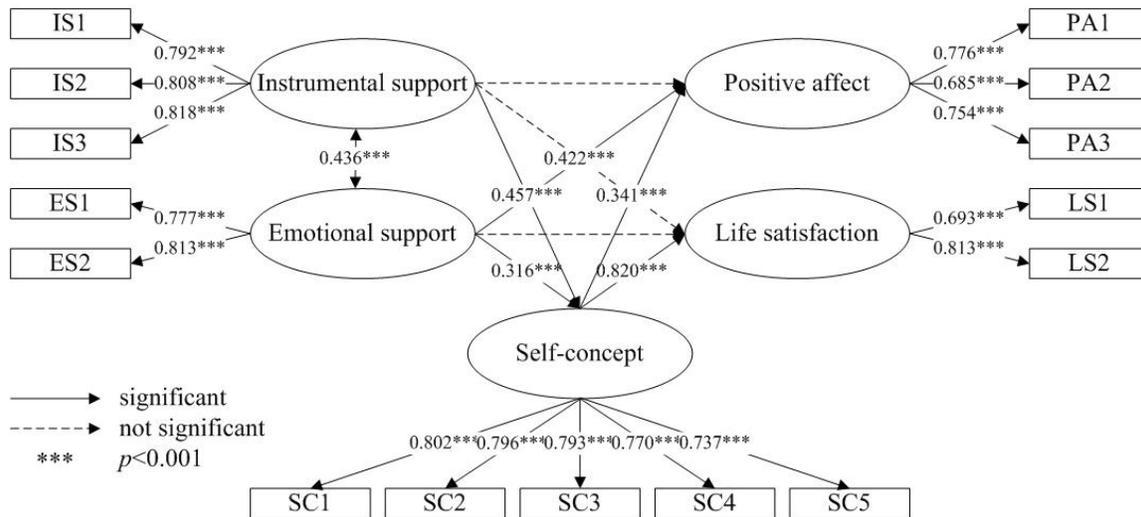


Figure 2: Structural model

As hypothesized, instrumental support ($\beta=0.457, p<0.001$) and emotional support ($\beta=0.316, p<0.001$) had significantly positive impacts on self-concept; emotional support ($\beta=0.422, p<0.001$) and self-concept ($\beta=0.341, p<0.001$) had significantly positive impacts on positive affect; self-concept had a significant positive impact on life satisfaction ($\beta=0.820, p<0.001$).

Thus, hypotheses H1, H2, H4, H5 and H8 were supported. However, no support was found for the hypothesized influential relationships of instrumental support on positive affect, instrumental support on life satisfaction; and emotional support on life satisfaction. Hence, hypotheses H3, H6 and H7 were not supported. The results revealed that self-concept positively influenced subjective well-being (positive affect and life satisfaction), social support (instrumental support and emotional support) positively influenced self-concept, while emotional support positively influenced positive affect.

To have some idea about the effect sizes of pairwise relationships, a bootstrapping approach with resample of 5000 was also made according to the approach suggested by Preacher and Hayes (2008). The unstandardized results with bias-corrected percentile confidence interval and percentile confidence interval for indirect effects were given in Table 4.

Table 4: Summary of effect sizes

Relationship	Direct effect	Indirect effect	Bias-corrected percentile CI	Percentile CI	Total effect
IS→SC	0.423***	-	-	-	0.423***
ES→SC	0.313***	-	-	-	0.313***
IS→PA	-	0.131***	(0.055, 0.246)	(0.049, 0.234)	0.131***
ES→PA	0.379***	0.097***	(0.043, 0.213)	(0.038, 0.196)	0.476***
SC→PA	0.309***	-	-	-	0.309***
IS→LS	-	0.318***	(0.171, 0.491)	(0.165, 0.480)	0.318***
ES→LS	-	0.235***	(0.125, 0.389)	(0.121, 0.384)	0.235***
SC→LS	0.752***	-	-	-	0.752***

Note: *** $p<0.001$.

Mediated by self-concept, the indirect effects of instrumental support on positive affect (0.131, $p<0.001$) and life satisfaction (0.318, $p<0.001$) were significant, and the emotional support indirect effects on positive affect (0.097, $p<0.001$) and life satisfaction (0.235, $p<0.001$) were also significant. Moreover, all the 95% bias-corrected percentile CIs and percentile CIs for indirect effects did not include 0, implying that the four mediation effects existed. Since the direct effect of emotional support on positive affect was significant, while the remaining three direct effects were not significant, it was concluded that self-concept played a partial mediating role between emotional support and positive affect; self-concept had a complete mediation effect between instrumental support and positive affect, and between social support (instrumental support and emotional support) and life satisfaction. Therefore, hypotheses H9, H10, H11 and H12 were supported.

Turning to the total effect, instrumental support (0.423, $p < 0.001$) had a higher impact on self-concept than emotional support (0.313, $p < 0.001$). In terms of positive affect, emotional support (0.476, $p < 0.001$) had a higher impact than self-concept (0.309, $p < 0.001$), followed by instrumental support (0.131, $p < 0.001$). Considering life satisfaction, self-concept (0.752, $p < 0.001$) had the highest impact, followed by instrumental support (0.318, $p < 0.001$), and then emotional support (0.235, $p < 0.001$).

5. Conclusions

The purpose of this study was to investigate the impacts of social support (instrumental support and emotional support) and self-concept on subjective well-being (positive affect and life satisfaction). The findings indicated that positive affect was not only influenced directly by self-concept, but also by emotional support. In addition to direct impact, emotional support also had an indirect impact on positive affect via self-concept. Instrumental support can influence positive affect indirectly through self-concept, while its direct effect was insubstantial.

Generally speaking, emotional support is more psychologically related to self-concept than instrumental support. Emotionally supported by others, personal positive affect increases. This means that emotional support influences positive affect through a less deliberative and more impulsive process. In contrast, the impact of instrumental support on positive affect depends on individuals' self-concept. Instrumental support cannot influence positive affect without self-concept. Consequently, the influential process of instrumental support on positive affect is relative reflective rather than impulsive.

As for life satisfaction, the conclusion was slightly different from positive affect. Interestingly, life satisfaction was influenced directly by self-concept, and indirectly by social support (instrumental support and emotional support) through self-concept. In other words, whether an individual is satisfied with his or her life depends on how well he/she identifies himself/herself. Although social support does influence life satisfaction, its influential process is not direct. After receiving higher social support, individuals' perception of self-concept will increase. Through the positive impact of self-concept on life satisfaction, the impact of social support will then be reflected in their perception of life satisfaction. Taken together, these verify that life satisfaction is relatively more subjective than positive affect.

From the broader perspective, self-concept significantly enhances new residents' subjective well-being, which suggests that strengthening self-concept increases their subjective well-being. One effective way to achieve this is that new residents can make use of social resources to learn or to participate in various activities to improve their ability and self-confidence, and strengthen their self-concept, which is conducive to the improvement of subjective well-being.

The present study proposed an integrated research model that brings together separate theoretical perspectives to investigate psychological factors and processes related to subjective well-being. Although many researches have considered, only a few studies have focused on the simultaneous relationships among social support (instrumental support and emotional support), self-concept and subjective well-being (positive affect and life satisfaction). The research was conducted to better understand the importance of social support and self-concept, especially for new residents. Among all the pairing relationships considered, the respondents exhibited a strongest relationship between self-concept and life satisfaction, followed by the relationship between emotional support and positive affect. Self-concept was found to be an important indicator of subjective well-being. This paper also highlights the significance of emotional support. Emotional support is a key determinant in improving subjective well-being, especially for positive affect.

6. References

- Andrews, F. M. (1991). Stability and change in levels and structure of subjective wellbeing: USA 1972 and 1988. *Social Indicators Research*, 25(1), 1-30.
- Blasco-Belled, A., Tejada-Gallardo, C., Torrelles-Nadal, C., & Alsinet, C. (2020). The costs of the COVID-19 on subjective well-being: An analysis of the outbreak in Spain. *Sustainability*, 12, 6243.
- Chang, W. F. (2017). Self-concept and school adjustment of students with learning disabilities. *Bulletin of Special Education*, 42(3), 1-32.
- Chao, Q., & Wu, J. (2018). The mediation role of general self-concept between social support and subjective well-being in older adults. *Chinese Journal of Behavioral Medicine and Brain Science*, 27(5), 430-433.
- Chen, C. Y., & Tsai, Y. W. (2016). The effects of employee's self-concept, positive attitude and professional fit on promotion opportunity in service industry. *Journal of Human Resource Management*, 16(2), 81-114.
- Clair, A. (2012). The relationship between parent's subjective well-being and the life satisfaction of their children in Britain. *Child Indicators Research*, 5(4), 631-650.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314.

- Conceição, P., & Bandura, R. (2008). Measuring subjective wellbeing: A summary review of the literature. United Nations Development Programme/Development Studies, working paper.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.
- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: Recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409-427.
- Ferguson, S. J., & Goodwin, A. D. (2010). Optimism and well-being in older adults: The mediating role of social support and perceived control. *The International Journal of Aging and Human Development*, 71(1), 43-68.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Hair, J. J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis: Pearson new international edition*. Harlow: Pearson Education Limited.
- Huang, C. Y., Chen, W. K., Lu, C. Y., Tsai, C. C., Lai, H. L., Lin, H. Y., Guo, S. E., Wu, L. M., & Chen, C. I. (2015). Mediating effects of social support and self-concept on depressive symptoms in adults with spinal cord injury. *Spinal Cord*, 53(5), 413-416.
- Jeng, B. J., & Lee, H. M. (2017). The development and validation of psychological well-being scale of technological and vocational college students. *Journal of Education Studies*, 51(1), 1-23.
- Jeon, H., Lee, K., & Kwon, S. (2016). Investigation of the structural relationships between social support, self-compassion, and subjective well-being in Korean elite student athletes. *Psychological Reports*, 119(1), 39-54.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Karademas, E. C. (2006). Self-efficacy, social support and well-being: The mediating role of optimism. *Personality and Individual Differences*, 40(6), 1281-1290.
- Li, B., Ma, H., Guo, Y., Xu, F., Yu, F., & Zhou, Z. (2014). Positive psychological capital: A new approach to social support and subjective well-being. *Social Behavior and Personality*, 42, 135-144.
- Lin, M., Hirschfeld, G., & Margraf, J. (2019). Brief form of the perceived social support questionnaire (F-SozU K-6): Validation, norms, and cross-cultural measurement invariance in the USA, Germany, Russia, and China. *Psychological Assessment*, 31(5), 609-621.
- Lin, Y. S. (2016). A study of the relation between recreation involvement and recreation specialization: Moderating effect of social support. *Journal of Outdoor Recreation Study*, 29(3), 43-75.
- Meng, N., Wang, Y., & Lei, L. (2017). The relationship between selfie editing and subjective well-being among female college students: The mediating role of positive feedback and self-concept. *Psychological Development and Education*, 33(6), 751-758.
- Ministry of the Interior (2020), *Statistical yearbook of interior*. [Online] Available: https://www.moi.gov.tw/files/site_stuff/321/2/year/year.html (February 11, 2021)
- National Immigration Agency (2020), *The number of foreign spouses and the number of spouses of the Mainland China (including Hong Kong and Macao) by home country*. [Online] Available: <https://www.immigration.gov.tw/5385/7344/7350/8887/?alias = settledown> (February 11, 2021)
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research problems and prospects. *Journal of Management*, 12(4), 531-544.
- Portela, M., Neira, I., & Salinas-Jiménez, M. M. (2013). Social capital and subjective wellbeing in Europe: A new approach on social capital. *Social Indicators Research*, 114, 493-511.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Raule, J. H. (2016). Effect of social support, self-concept, stress, self motivated to self actualization of HIV/AIDS in City of Manado. *International Journal of Health Medicine and Current Research*, 1(2), 177-189.
- Rodríguez-Fernández, A., Ramos-Díaz, E., Ros, I., Fernández-Zabala, A., & Revuelta, L. (2016). Subjective well-being in adolescence: The role of resilience, self-concept and perceived social support. *Suma Psicológica*, 23(1), 60-69.
- Saunders, G. R. B., Elkins, I. J., Christensen, K., & McGue, M. (2018). The relationship between subjective well-being and mortality within discordant twin pairs from two independent samples. *Psychology and Aging*, 33(3), 439-447.
- Seničar, M., & Kopal-Grum, D. (2012). Self-concept and social support among adolescents with disabilities attending special and mainstream schools. *Hrvatska Revija za Rehabilitacijska Istraživanja*, 48(1), 73-83.
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics: Pearson new international edition*. Harlow: Pearson Education Limited.

- Torres, F., Pompa, E. G., Meza, C., Ancer, L., & González, M. T. (2010). Relation between self concept and social support in college students. *Daena: International Journal of Good Conscience*, 5(2), 298-307.
- Wang, X. Y. (2008). SWB and self-concept of the college youth physical education teachers. *Shandong Sports Science and Technology*, 30(3), 69-71.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Xu, Q., Li, S., & Yang, L. (2019). Perceived social support and mental health for college students in mainland China: The mediating effects of self-concept. *Psychology, Health & Medicine*, 24(5), 595-604.
- Yang, S. C., & Huang, K. L. (2011). Analyses of junior high school students' online gaming experience and its relationship with self-concept, life adaptation and well-being. *Journal of Educational Media & Library Sciences*, 48(3), 407-442.
- Yoganathan, D., Jebarajakirthy, C., & Thaichon, P. (2015). The influence of relationship marketing orientation on brand equity in banks. *Journal of Retailing and Consumer Services*, 26, 14-22.
- Yoon, S. K., & Lee, C. H. (2009). The relationship between perceived social support, self-concept and ego-resilience of middle-school students. *Journal of the Korea Academia-Industrial Cooperation Society*, 10(10), 2917-2922.
- Zhang, L. (2016). Research on the relationship between self concept and subjective well-being of normal university students. *International Journal of Innovation Education and Research*, 4(4), 79-87.
- Zhang, L., & Xu, Q. (2007). Effects of undergraduates' self-concept, collective self-esteem and individual self-esteem on their subjective well-being. *Chinese Journal of Clinical Psychology*, 15(6), 609-611.
- Zhu, J., Liang, C., Lucas, J., Cheng, W., & Zhao, Z. (2020). The influence of income and social capital on the subjective well-being of elderly Chinese people, based on a panel survey. *Sustainability*, 12, 4786.