

THE RELATIONSHIP BETWEEN SOCIAL SUPPORT AND SUBJECTIVE WELL-BEING OF PRESCHOOL TEACHERS: TAKE AGE AS THE MODERATOR VARIABLE

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ABSTRACT

This study aims to discuss influence of preschool teachers' social support on subjective well-being (SWB), and age's moderation effect on this relationship. We took 384 Taiwanese preschool teachers as the testees, to proceed measurement of the Social Support Scale, Satisfaction with Life Scale, and Positive and Negative Emotion Scale. The collected data is analyzed for structural equation modeling with LISREL software, and the analytical results show that preschool teachers' social support has positive influence on SWB, that the more preschool teachers obtain social support, the higher SWB will be. In the influential relationship of preschool teachers' social support and SWB, age has significant moderation effect. The older the preschool teachers' age, the better their social support's influence on SWB will be. According to the research findings, we proposed suggestions that enhance preschool teachers' social support and SWB for preschool teachers, kindergartens, and governmental institutions.

Keywords: Preschool teachers, social support, subjective well-being.

INTRODUCTION

Recently, psychologists have emphasized the need for promoting people's well-being, beyond the existing focus on symptom reduction. Particularly, after positive psychology emerges, seeking for subjective well-being (SWB) has become an indispensable factor in a successful life (Wood & Tarrier, 2010). Ben-Shahar (2007) even points out directly that SWB is the only one standard of evaluating one's life, and is the ultimate goal among all goals. In the educational field, the purpose of education is to cultivate the students to be a happy man, and enable them to lead a meaningful, dignified, and living with contributions to the society. Early childhood education and care is the starting point and foundation of an individual's lifelong and life-wide learning, and it is also the key to all happy education. If the preschool teachers want the children to become the most important developmental asset in the society and the source of the nation's growth and vitality, they have to guide the children to obtain SWB. However, how can a teacher without SWB guide the children to cultivate their SWB so as to help them become citizens with SWB in the future? Therefore, it is necessary to investigate the children's teacher's SWB.

In a rapidly changing society and a disturbing educational environment, particularly, in recent years, policies in Taiwan have been changing continuously, and work in the kindergartens are extremely complicated and multi-dimensional. When preschool teachers face all above-mentioned factors' impact, if they cannot deal with the problems soundly, in the long run, not only preschool teachers will be influenced directly, but also the children will be affected

indirectly, both a major impact on quality of education. In this case, SWB has become the focus that draws everyone's attention.

Cohen and Will (1985) indicate the increase of social support contributes to reducing the extent of stress and raising personal SWB. Besides, social support can decrease negative emotions, and enable people to generate positive energy to face challenges in the future. Relative research findings also prove that social support can lessen the individual's stress, enhance the work performance, and maintain mental and physical happiness so as to elevate SWB (Diener, Gohm, Suh, & Oishi, 2000; Holt-Lunstad, Smith, & Layton, 2010). Therefore, it is necessary for us to discuss the influence of preschool teachers' social support on SWB.

The increased risk for losing health and competence, social networks suggest that older people should have lower levels of SWB than younger people. However, according to Snyder and Lopez (2007), when people get older, they learn more about the beautiful memory. As a result, they can obtain SWB more easily than the younger people. Besides, Pinquart and Sörensen's (2000) meta-analysis also shows that, the elders have higher SWB. In addition, as far as Taiwan's educational field is concerned, influenced by Chinese people's culture of honoring the elders, the older preschool teachers have higher social position, enjoy better wages and benefits, and bear less work loadings. The older preschool teachers may obtain SWB more easily than the younger preschool teachers. As such, it is likely that age plays the role of a moderator in the SWB influential relationship. To sum up, the purpose of this study is to explore influence of preschool teachers' social support on SWB, and the age's moderation effect.

LITERATURE REVIEW

Subjective well-being

The early recounting of and research on well-being can be traced back to the philosophical speculation, which can be classified into two orientations—hedonism and eudaimonism (Huppert & So, 2013; Kahneman, Diener, & Schwarz, 1999; Waterman, 1993). SWB proposed by Diener (1984, 2000) complies with the thinking trend of hedonism. Besides, SWB is the individual's cognitive and affective evaluations on his/her own life, and it is a kind of subjective and positive feelings (Diener & Chan, 2011; Suh & Oishi, 2011). To speak concretely, SWB is an experience of agreeable emotions and high degree of life satisfaction, and such experiences come from the individual's subjective evaluation on promoting positive emotions, decreasing negative emotions, and elevating life satisfaction. When one has positive affection balance; or, to make it more clearly, the experience of a large quantity of happy emotions, scarce unhappy or painful experiences, and satisfaction with his/her own living, he/she can be regarded as one with rich SWB. To take a step further, on one hand, the concept of SWB integrates the early studies related to cognitive well-being and emotional well-being to consolidate the conceptual foundation of well-being, where life satisfaction reflects cognitive components in the survey of well-being from the angle of sociology. On the other hand, positive and negative emotions reflect emotional components of surveying well-being from the angle of psychology (Diener, Oishi, & Lucas, 2003; Snyder & Lopez, 2007). To measure SWB, generally, Diener, Emmons, Larsen and Griffin's (1985) satisfaction with life scale (SWLS) is used to proceed measurement of SWB's cognitive aspect, while positive and negative affect scale (PANAS) by Watson, Clark and Tellegen (1988), or the Long-Term Affect Scale (LTAS) are used by Diener, Smith, and Fujita (1995) to proceed measurement of SWB's emotional aspect.

Social support

Social support is a complicated concept. Although many scholars have tried to define and describe social support, it is very difficult to define and assess social support (Hupcey, 1998). Generally, it is considered that social support is the various informal and formal assistance obtained from one's own social network, and what the individual has gained can raise his/her own ability of adaptation (Lin, 1986; Taylor, 2011). Social support is also a multi-dimensional concept that includes two composite parts—one is social network structure, and the other is social network function. Social network structure consists of formal and informal support, while social network function refers to perceived social support, including emotional support, instrumental support, and so on (Pedersen, Spinder, Erdman, & Denollet, 2009; Thoits, 2011; Tonsing, Zimet, & Tse, 2012). In other words, survey of social support can focus on the structure of interpersonal relationships, with social support's sources such as family, friends, and the important others to serve as the survey dimension of social support. Moreover, it can focus on the perceived availability of functional support, with social support's types, such as emotional support, instrumental support, instrumental support, appraisal support, to serve as the survey dimension of social support.

In realistic research, most studies adopt viewpoint of perception's social support, and use multidimensional scale of perceived social support to examine the perception of available social support (Kliem, Möble, Rehbein, Hellmann, Zenger, & Brähler, 2015; Oh, Ozkaya, & LaRose, 2014). Taking cultural context of Taiwan's kindergartens into considerations, those preschools emphasize on the perspective of social network functions. And, when we measured preschool teachers' social support, the multidimensional scale of perceived social support was used, and Broadhead, Gehlbach, DeGruy and Kaplan's (1988) Social Support Questionnaire (SSQ) forms, including emotional support, and substantial support. Emotional support involves various kinds of psychological support, including care, encouragement, respect, acceptance, and so on; while substantial support provides material assistance, financial resources, professional efficacy, and message and knowledge acquirement.

Social support and subjective well-being

Starting from Antonovsky's (1974) buffer theory, Cohen and Wills (1985) point out that social support can enhance the individual's SWB through practicing stress buffering hypothesis, which refers to social support can lessen impact caused by stress to enhance the individual's SWB when he/she faces stress (Cohen & Wills, 1985). In Homans's (1961) social exchange theory, interpersonal interaction is founded on the reciprocal principle that both sides give and get repaid mutually. The more the reward both sides provide, the more possible they can obtain supportive relationship. As a result, when people can gain psychological benefits like caring, respecting, and assisting mutually through mutual rewarding in social support, they will be able to strengthen the ability of adaptation, and further raise SWB (Popliger, Toste, & Heath, 2009). In Holt-Lunstad's (2010), Huxhold, Fiori, and Windsor's (2013), and Gardner's (2011) research findings, it is also proved that social support can help raise SWB. Therefore, we can assume that preschool teachers' social support has positive influence on SWB.

Age differences

According to Carstensen's (1992) socioemotional selectivity theory, the social goals that people pursue will differ with people at different age. The elder people are, the more they know how to exert social support to obtain SWB. According to Snyder and Lopez's (2007)

expression, the elder people are, the more they know how to forget unhappy memories, and the more easily they can acquire SWB. Pinquart and Sörensen (2000) proceeded meta-analysis and found from the analytical results that the elder people have higher SWB. In Chinese people's culture of "honoring the elders", compared to the younger people, the older preschool teachers enjoy more social resources, and can gain social support more easily to raise SWB. As a result, we can assume that age plays the role of the moderator in the influential relationship of preschool teachers' social support and SWB.

Method

Participants

By means of purposive sampling, we extracted 384 preschool teachers as the research subject. The teachers' average age is 39.29 years old, average working years is 8.02, and all participants are female.

Measures

Demographic questions

Demographic questions include age, working years, marital status, education, and job responsibilities. Age and working years are filled with numbers by the testees directly, and marital status, education, and job responsibilities are choice questions for the testees to choose in accordance with their actual condition.

Social Support Scale

Social Support Scale refers to Social Support Questionnaire (SSQ) prepared by Broadhead et al (1988). The Social Support Scale is a 10-item, 4-point Likert scale with two 5-item subscales: emotional support and substantial support. Regarding the scoring method, Social Support Scale gives 1 to 4 points in accordance with "Extremely Disagree", "Disagree", "Agree", and "Extremely Agree". Sample items for emotional support subscale include: I will talk to my good friend to help me forget the unhappy things; or When I am in a bad mood, I will seek for my family's support and encouragement. Sample items for substantial support subscale include: When I have issues that I cannot solve, I will seek for my coworker's help; and I will ask for my student's parents to help me do some things. Through data collecting from the pretests, we proceeded Internal consistency analysis and principal factor analysis using Promax rotation. The analytical pretest results show that, the emotional support factor's (Factor 1) λ is between 0.81-0.90, while substantial support factor's (Factor 2) λ is between 0.77-0.88. Two factors explained 73.21 % of the total variance (Factor 1: 38.06 %, Factor 2: 35.15 %), and the overall scale showed good internal consistency (Cronbach α = 0.85). Separate item analyses for each resulting subscale (factor) were carried out: substantial support showed good internal consistency (Cronbach α = 0.88), and emotional support was excellent (Cronbach α = 0.91).

Satisfaction with Life Scale

We used the adapted Satisfaction with life scale (SWLS) with totally 5 items. The scoring method adopted Likert's four-point scale design from "Extremely Disagree", "Disagree", "Agree", to "Extremely Agree" to give 1 to 4 points. Sample items include: My life is full of happiness and laughters; I love the way of my life presently. Through reliability and validity analysis, the factor loading ranges between 0.83 to 0.90. The total explanatory variance of the 5 items is 74.29%, and the total Cronbach' α =0.91.

Positive and Negative Emotion Scale

Positive and negative emotion scale imitates Diener et al's (1995) Long-Term Affect Scale (LTAS), including positive and negative emotion subscales, each with 5 items. The scoring method adopted Likert's four-point scale design from "Extremely Disagree", "Disagree", "Agree", to "Extremely Agree" to give 1 to 4 points; and the sample items include: I feel proud of myself; I am interested in everything. The negative emotional subscale's sample items include: I get upset easily; and I feel bored. Regarding measurement of emotions, some disputes still exist in definition and measurement of positive and negative emotions. For example, whether positive emotions and negative emotions are independent respectively or reject each other (Diener & Emmons, 1985). We consider positive and negative emotions as two formative measurement dimensions. In other words, since positive and negative emotional subscales measure different constructs, they should be tested separately. Through pretest's reliability and validity analysis, the factor loading of the positive emotional subscale ranges between 0.79 to 0.90. The total explanatory variance of the 5 items is 74.17%, and the total Cronbach' $\alpha=0.91$. the factor loading of the negative emotional subscale ranges between .84 to .90, the total explanatory variance of the 5 items is 76.45%, and the total Cronbach' $\alpha=0.92$.

Procedure and data analysis

We invited 10 early childhood educators with academic research experiences to serve as the subject matter experts and helped us proceeded the scale items' evaluation and sampling. Regarding the evaluation of the content's validity, we consulted the experts' viewpoints one by one to modify the items' terms. Then, according to expert's four-level ranking, we estimated the content validity index, and deleted items with value lower than .90 to complete the pretest scale. In regard of sampling, with the assistance of the subject matter experts, we recruited those who intended to fill out the questionnaire, and acquired the appropriate time to proceed tests in the kindergarten. The pretest samples were 150 preschool teachers in Taiwan, and the formal samples were 384 preschool teachers. To collect data for pretest questionnaire, SPSS software was used to conduct reliability and validity analysis of Social Support Scale, Satisfaction with life scale, and Positive and negative emotion scale. For formal questionnaire's data, we used SPSS software first, and exerted Harman's Single Factor Test before proceeding statistic test, and entered the score of all items in the questionnaire. Then, by means of exploratory factor analysis, the un-rotated factor solution was obtained to explore the first (largest) factor's percentage of explained variance, to detecting problem of common method variance (CMV). Next, with LISREL statistic software, and through structural equation modeling to discuss influence of preschool teachers' social support on SWB and the age's moderation effect. Finally, with Hu and Bentler's (1999) recommended guidelines, we gained acceptable fit of CFI > 0.95, RMSEA < .06, AGI > 0.9, AGFI > 0.8.

RESULTS

Common method variance analysis

For 25 items from Social Support Scale, Satisfaction with life scale, and Positive and negative emotion scale, we proceeded exploratory factor analysis and un-rotated factor solution, and it shows that 5 factors—the first (largest) factor's percentage of explained variance is 24.53%, not larger than 50%. None of 25 items' first factor loading are larger than 0.5. Therefore, this research adopted self-reporting form inventory to collect single testee's

cognitive information, and it presents that there is no problem of CMV, and in the subsequent analysis, there will not occur CMV inflating the observed correlations among variables thereby obscuring their true relationships.

Primary results: Measurement model

Using the two-step approach recommended by Kline (2011), we first examined a measurement model with no structural paths to examine model fit prior to estimating the full structural model. We used *confirmatory factor analysis to analyze measurement model of social support and SWB*. The original hypothesized social support measurement model had the following model fit: $\chi^2(34)=41.22$, $p=0.18$, RMSEA = 0.03, GFI = 0.94, AGFI = 0.91, CFI=0.98. This final model had adequate model fit. The final measurement model with standardized path estimates is shown in Figure 1.

According to factor loadings, we calculated composite reliability (CR) and average variance extracted (AVE), finding that CR of emotional support and substantial support are 0.92 and 0.90, respectively; and AVE of emotional support and substantial support are 0.70 and 0.65, respectively. CR and AVE are all within the range of ideal value. Such phenomena explain each latent variable has had proper convergent validity.

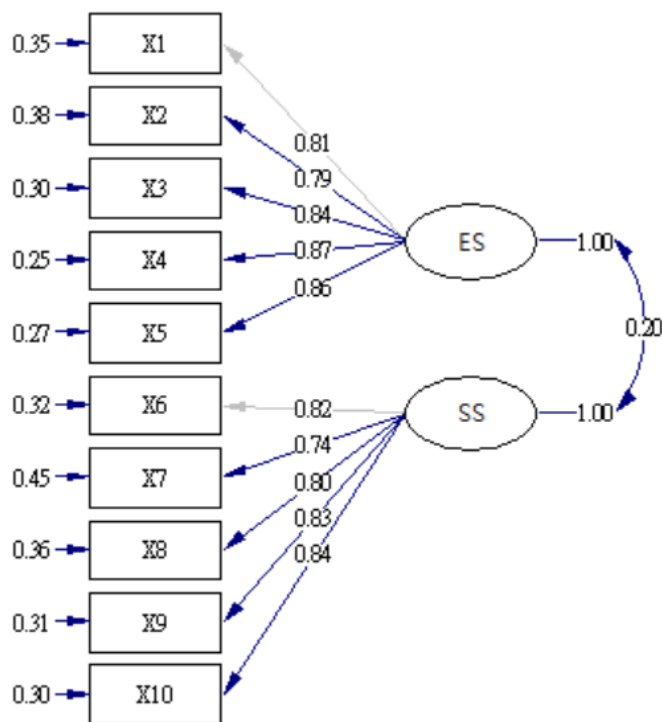


Fig. 1 measurement model of social support (standardized solution)

Note: X1 to X10 signify items, ES signifies emotional support, and SS signifies substantial support

The original hypothesized SWB measurement model had the following model fit: $\chi^2=122.76$, $df=87$, $p=0.01$, RMSEA = 0.04, GFI = 0.92, AGFI = 0.90, CFI=0.99. This final model is fit. The final measurement model with standardized path estimates is shown in Figure 2. According to factor loadings, we calculated CR and AVE. CR of life satisfaction, positive emotion, negative emotion are 0.91, 0.90, and 0.89, respectively. AVE of life satisfaction, positive emotion, and negative emotion are 0.65, 0.65, and 0.63, respectively.

CR and AVE are all within the range of ideal value. Such phenomena explain each latent variable has had proper convergent validity.

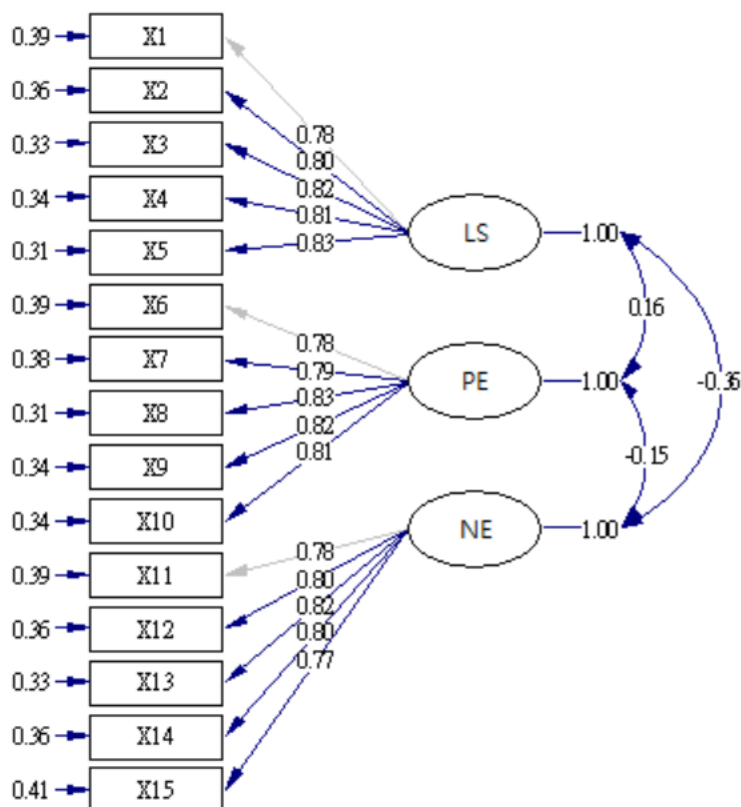


Fig. 2 Measurement model of SWB (standardized solution)

Note : X1 to X15 represent items, LS is life satisfaction, PE is positive emotion, NE represents negative emotion

Relationship between social support and subjective well-being of preschool teachers

Based on literature deduction, this research assumes that relationship exists between social support and SBW. Meanwhile, age is considered as the moderator. As a result, we proposed two hypothesized models; one is the original full structural model (Model 1), showing the relationship between social support and SWB of preschool teachers, and the other is the original full hybrid model related to social support and SWB of preschool teachers to increase the age of the moderator in the alternative model (Model 2). Model 1 has the model fit: $\chi^2(4)=3.66$, $p=0.55$, RMSEA = 0.01, GFI = 0.99, AGFI = 0.98, CFI=0.99. Similarly, the final model has adequate model fit, as shown in Figure3. Model 2 has the model fit: $\chi^2(7)=13.55$, $p=0.06$, RMSEA = 0.04, GFI = 0.98, AGFI = 0.96, CFI=0.99. The final model with standardized path has adequate model fit, and estimation is shown in Figure4.

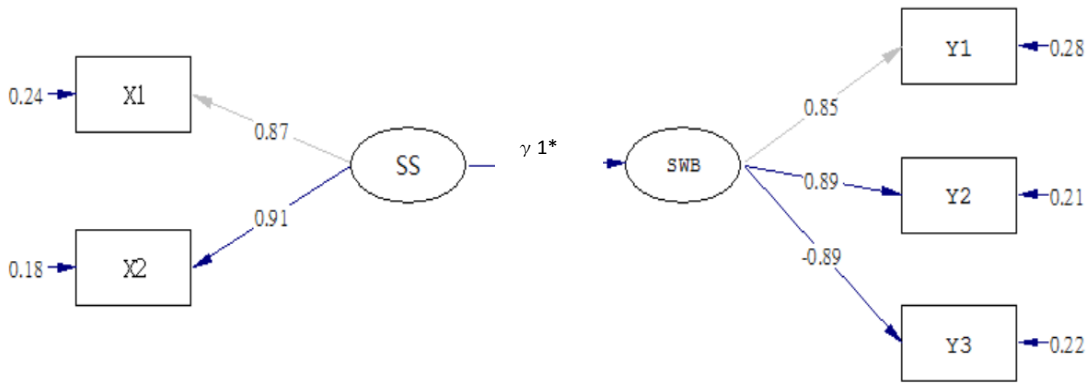


Fig. 3 The original full structural model (standardized solution)

Note: X1=emotional support, X2=substantial support, Y1= life satisfaction, Y2= positive emotion, Y3=negative emotion, SS= social support.
Path coefficient ($\gamma 1$) is statistically significant.

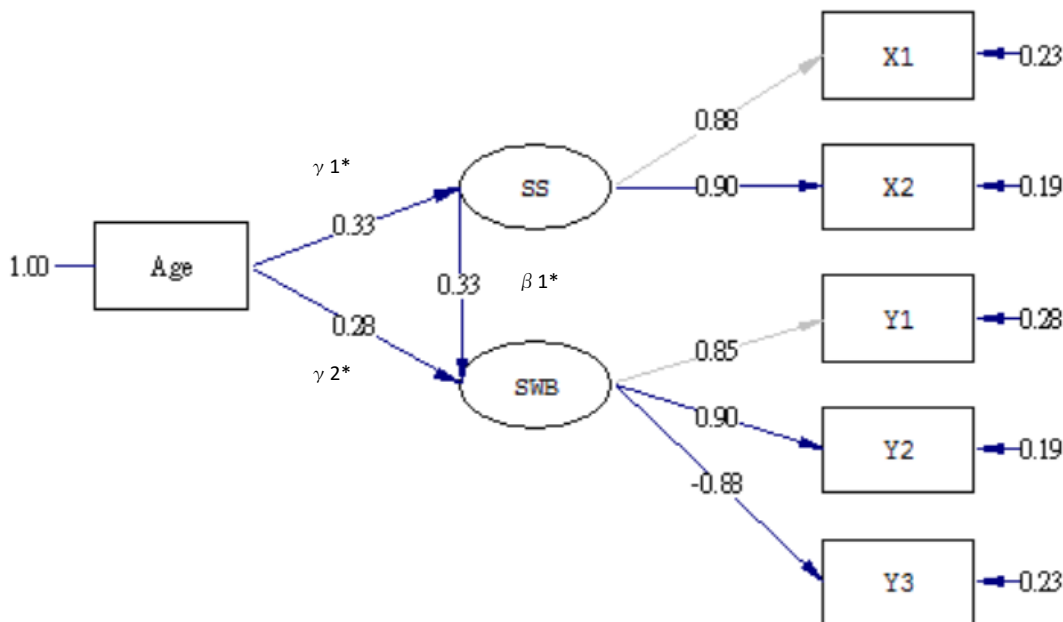


Fig. 4 The alternative model (standardized solution)

Note: X1=emotional support, X2=substantial support, Y1= life satisfaction, Y2= positive emotion, Y3=negative emotion, SS= social support.
All path coefficients ($\gamma 1$, $\gamma 2$, $\beta 1$) are statistically significant.

According to Fig. 3, social support→SWB’s path coefficient is 0.42, $p < 0.05$, explaining that preschool teachers’ social support has significantly positive influence on SWB. As preschool teachers’ social support raises, SWB becomes higher as well. Based on Fig. 4, Age→social support’s path coefficient is 0.33, $p < 0.05$, and Age→SWB’s path coefficient is 0.28, $p < 0.05$. On the other side, social support→SWB’s path coefficient is 0.33, $p < 0.05$. Compared to the original full structural model, the path coefficient is low, which explains that age has moderation effect. That is, preschool teachers’ social support has significantly positive influence on SWB, but its influential degree is influenced by age, presenting that as preschool teachers’ age increases, social support’s influence on SWB becomes better. In order to concretely demonstrate such age’s moderation effect, we divided preschool teachers into two

groups, the elder group, and the youngster group. Aiming at preschool teachers' social support and SWB, we divided preschool teachers into the elder group and the youngster group, and proceeded regression analysis for the two groups. As shown in Fig. 5, 6, and 7.

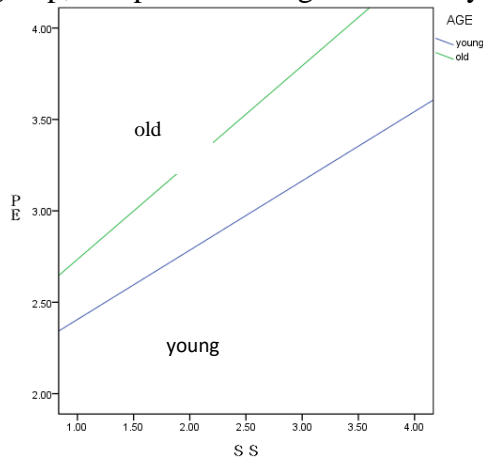


Fig. 5 The emotion's regression analysis of influence of youngster and preschool teachers groups' social support on positive emotions
Note: PE= positive emotion, SS= social support.

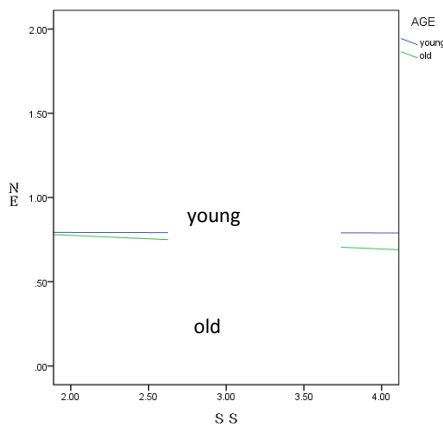


Fig. 6 The emotion's regression analysis of influence of youngster and preschool teachers groups' social support on negative emotions
Note: NE= negative emotion, SS= social support.

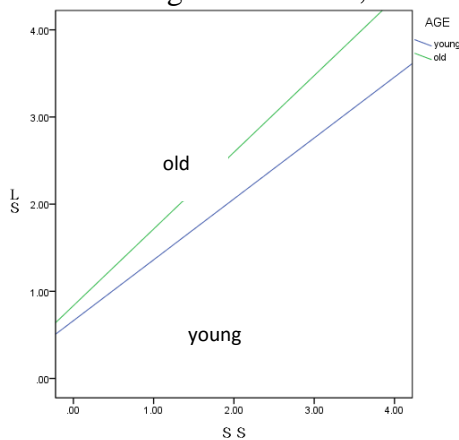


Fig. 7 The emotion's regression analysis of influence of youngster and preschool teachers groups' life satisfaction on positive emotions
Note: LS= life satisfaction, SS= social support.

According to Fig. 5, 6, and 7, it can be found that preschool teachers' positive emotions, and life satisfaction are higher than young preschool teachers'. The elder preschool teachers' social support can raise positive emotions and life satisfaction, and reduce negative emotions' intensity, better than the young preschool teachers'.

DISCUSSION AND CONCLUSIONS

We used Harman's Single Factor Test to detect problem of common method variance (CMV). If any CMV problems take place, statistic technology must be used to eliminate CMV problems. And, relationship examination becomes insignificant after adjusted for common method variance. At this point, scarce questionnaire survey notices such condition, and it leads to wrong statistic results. Anyhow, this research does not find CMV problems, so it is not necessary for adjustment. Besides, spurious correlations are shared among variables in a study due to this common method used in collecting data.

Based on SEM principle, when proceeding full structural model, we must take measurement model test, for full structural model analysis exerts the item combination's score as the observed variables. If measurement model's item factor loading is too low, and individual item reliability is not good, full structural model analysis will not work. In this research, it is found that social support and SWB's measurement model fits to the data, while CR's and AVE's values are higher than 0.6, demonstrating that the measurement model fit is good. Therefore, social support includes emotional support and substantial support dimension. SWB contains life satisfaction, positive emotion, and negative emotion dimensions, which set up a foundation beneficial to the subsequent full structural model analysis.

Preschool teachers' social support has positive correlation with SWB. As social support increases, SWB will get higher. From the angle of buffer theory, it is explained that social support has effect of lessen the stress. In other words, social support certainly can improve stress coming from work, and lessen negative emotions resulting from pressures, so that positive emotions and SWB are enhanced. To start from social exchange theory, when the educate givers are situated in an environment with high social support, their positive emotions are deemed to be elevated. The reason why such condition exists are due to support from positive energy, so that the educate givers can possess courage to overcome all challenges, resulting in positive emotions to lessen negative emotions, and further fostering life satisfaction as well as preschool teachers' SWB. Consequently, in a complete social support system, both emotional support or substantial support can certainly raise preschool teachers' SWB.

In regard of the influence of preschool teachers' social support on SWB, age has significant moderation effect. The elder preschool teachers perform better in using social support to elevate positive emotions, life satisfaction, and reduce negative emotions than the young preschool teachers. Such finding corresponds to socio-emotional selectivity theory. It means that since the young preschool teachers pursue social goals different from the elder preschool teachers', they know less in exertion of social support to acquire SWB. Also, the research results correspond to the psychologists, Snyder and Lopez's (2007) and Sternberg's (2001) description that, the elder preschool teachers have better ability to solve problems, pass judgment on the quality of the ideas or take decisions in the real world. To have an idea of employing social support tips lie in exerting the personal needed social support in a correct position in order to elevate SWB. In the meantime, the elder preschool teachers know forgetting the unhappy memories, and preserve good memories selectively in order to extract

SWB. Moreover, such finding also shows that in Chinese people's culture of "respecting the elders", the older preschool teachers can enjoy higher position and more social resources, leading to easy acquirement of social support to raise SWB.

According to the research findings, as social support is raised, SWB gets higher. In this sense, preschool teachers must know how to establish communication channels, such as Line, Facebook, and other social channels, and share and communicate with one another in the interpersonal interaction process. More importantly, teaching is by no means fighting individually, and preschool teachers should know how to make a good use of resources to expand their living circle, build up personal social support network system, and maintain friendly and benign interaction, so that SWB can be elevated. For the kindergartens, teacher empowerment activities should be hosted, and teacher community should be set up to help preschool teachers learn and gain social support, expand interpersonal relationship network. Also, elder preschool teachers' performance in promoting positive emotions and life satisfaction, and reducing negative emotions are better than young school teachers. This finding reminds us that in teacher empowerment activities, we have to encourage the elder preschool teachers to share tips of social support and SWB. In addition, in teacher community, we should also encourage the elder preschool teachers to lead other teachers to share their own social support with one another. Certainly, the kindergartens must put an emphasis on the work situations, actively care preschool teachers' dilemma in work and provide formal social support, so that preschool teachers can obtain respect and affiliation in work field for SWB raising. For such social support, in addition to care and work assistance given by the kindergarten, it should be connected to the social network to providing off-campus resources, including teacher's psychological consultancy, important educational information, and etc. In fact, in the educational system in Taiwan, preschool teachers' position is the lowest, and they are those who are neglected most frequently. In this case, the government should improve the work conditions for preschool teachers, and host study seminars for them to overcome the dilemma in work, such as how to cope with the new-generation parents that are hard to achieve good communication, or how to acquire beneficial resources, and so on.

REFERENCES

- Antonovsky, H. F. (1974). Commitment in an Israeli Kibbutz. *Human Relation*, 27(3), 303-319.
- Ben-Shahar, T. (2007). *Happier: Learn the secrets to daily joy and lasting fulfillment*. New York, NY: McGraw Hill.
- Broadhead, W. E., Gehlbach, S. H., DeGruy, F. V., & Kaplan, B. H. (1988). The Duke-UNC functional social support questionnaire: Measurement of social support in family medicine patients. *Medical Care*, 26, 709-723.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: support for socioemotional selectivity theory. *Psychology and aging*, 7(3), 331.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E. (2000). Subjective well-being: The science of happiness, and a proposal for a national index. *American Psychologist*, 55, 34-43.
- Diener, E. D., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, (1), 1-43.

- Diener, E., & Emmons, R. A. (1985). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*, 1105-1117.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment, 49*, 71-75.
- Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of cross-cultural psychology, 31*(4), 419-436.
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual review of psychology, 54*(1), 403-425.
- Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of Personality and Social Psychology, 69*(1), 130-141.
- Gardner, P. J. (2011). Natural neighborhood networks-important social networks in the lives of older adults aging in place. *Journal of Aging Studies, 25*, 263-271.
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: a meta-analytic review. *PLoS Medicine, 7*(7), 1-20.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York, NY: Harcourt Brace.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.
- Hupcey, J. E. (1998). Clarifying the social support theory-research linkage. *Journal of Advanced Nursing, 27*, 1231-1241.
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research, 110*(3), 837-861.
- Huxhold, O., Fiori, K. L., & Windsor, T. D. (2013). The dynamic interplay of social network characteristics, subjective well-being, and health: The costs and benefits of socio-emotional selectivity. *Psychology and Aging, 28*(1), 3.
- Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. New York, NY: Russell Sage Foundation.
- Kliem, S., Möble, T., Rehbein, F., Hellmann, D. F., Zenger, M., & Brähler, E. (2015). A brief form of the Perceived Social Support Questionnaire (F-SozU) was developed, validated, and standardized. *Journal of clinical epidemiology, 68*(5), 551-562.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.
- Lin, N. (1986). Conceptualizing social support. In N. Lin, A. Dean, & W. M. Ensel (Eds.), *Social support, life events, and depression* (pp.17-30). New York, NY: Academic Press.
- Oh, H. J., Ozkaya, E., & LaRose, R. (2014). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior, 30*, 69-78.
- Pedersen, S. S., Spinder, H., Erdman, R. A. M., & Denollet, J. (2009). Poor perceived social support in implantable cardioverter defibrillator (ICD) patients and their partners: Cross-validation of the multidimensional scale of perceived social support. *Psychosomatics, 50*, 461-467.
- Pinquart, M., & Sörensen, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis. *Psychology and aging, 15*(2), 187-224.

- Popliger, M., Toste, J. R., & Heath, N. L. (2009). Perceived social support and domain-specific adjustment of children with emotional and behavioural difficulties. *Emotional and Behavioural Difficulties*, 14(3), 195-213.
- Suh, E. M., & Oishi, S. (2011). Subjective well-being across cultures. *Online Readings in Psychology and Culture*, 10(1), 1-6.
- Snyder, C. R., & Lopez, S. J. (2007). *Positive psychology: The scientific and practical explorations of human strengths*. Thousand Oaks: Sage publications.
- Sternberg, R. J. (2001). Reply to the book review on Practical Intelligence in Everyday Life. *Intelligence*, 30, 117-118.
- Taylor, S. E. (2011). Social support: A review. In M. S. Friedman (Ed.), *The handbook of health psychology* (pp. 189–214). New York, NY: Oxford University Press.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of health and social behavior*, 52(2), 145-161.
- Tonsing, K., Zimet, G. D., & Tse, S. (2012). Assessing social support among South Asians: The multidimensional scale of perceived social support. *Asian Journal of Psychiatry*, 5, 164-168.
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678-691.
- 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.
- Wood, A. M., & Tarrier, N. (2010). Positive clinical psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review*, 30(7), 819–829.