

# Relationship between Social Support and Life Satisfaction among College Students: The Mediation of Hope

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**Abstract**—This study explored the mediation effect of hope on social support and life satisfaction. Four hundred and sixteen Chinese College students participated in the study and completed the Social Support Rating Scale (SSRS), Adult Dispositional Hope Scale (ADHS), and Satisfaction with Life Scale (SWLS). The analysis of correlation showed that social support was positively correlated with hope and life satisfaction. The correlation coefficients were 0.48 and 0.40, respectively. Hope was positively correlated with life satisfaction with a correlation coefficient of 0.36. The results of the mediation effect confirmed that social support affected life satisfaction through hope. Specifically, the value of mediating effect was 0.17, accounting for 33.33% of the total effect. Therefore, the increase in social support can improve the level of hope, which further influences college students' life satisfaction.

**Index Terms**—social support, hope, life satisfaction

## I. INTRODUCTION

With the development of modern life, the quality of life is more and more critical. Life satisfaction refers to a cognitive and global evaluation of the quality of one's life as a whole [1]. Life satisfaction is based on extended cognition and evaluation of people in their lives. It is an overall evaluation of life quality as an essential part of happiness. As an important indicator of life quality and mental health, life satisfaction is affected by many factors such as self-esteem, gratitude, and social support.

Social support could be regarded as resources and help provided by others, such as coping assistance, resource exchange, and even personality traits [2]. There are many social support types, such as instrumental support, informational support, and appraisal support [3]. Emotional support involves the expression of encouragement, understanding, trust, and concern. Instrumental support incorporates help and service from others. Informational support is associated with advice and information in front of pressures and difficulties. Appraisal support contains the provision of information for self-assessment.

Social support is a positive predictor of life satisfaction, confirmed by many scholars in [4]-[6]. Social support

could positively impact life satisfaction in adolescents and college students [5], [6]. According to the buffering theory, social support plays a buffering role when individuals face life pressures and challenges [7]. For one thing, social support reduces the depressive symptoms and improves the psychological quality of life by making individuals feel loved by others and linked to social networks [8]. For another, social support is negatively correlated with depression, anxiety, and stress [9], which contributes to relieve the negative emotions of students [10]. Social support helps students deal with stress by providing essential resources, such as material support and emotional support. Students with good social support often have more resources to face pressures and challenges, which is conducive to their adaptation to life and the improvement of life satisfaction. Thus, social support may positively affect the life satisfaction of college students.

Many studies have tested the influencing mechanisms between social support and life satisfaction. Hope may be one of the mediating factors. As an individual intrinsic factor, hope refers to a positive motivational state based on the interaction between the path to success (the plan to the goal) and the motivation (the power to the goal) [11]. It has two parts: pathway thinking and agency thinking. Pathway thinking involves the plan to the goal, while agency thinking entails the motivation to achieve the goal and the perception of one's ability. Hopeful people are more likely to know how to achieve their goals and change plans when encountering difficulties. Hope is influenced by living environment and experience, such as social support. Social support is a predictor of hope [12]-[14]. Teenagers and college students usually have a high level of hope in life with help, support, and encouragement from parents, teachers, or friends [13], [14].

Like self-efficacy, hope is associated with mental health as a positive psychological force [15]. Scholars in [16] have found a negative relationship between agency thinking and depression among college students. The influence of hope on depression symptoms through forgiveness is also significant [17]. As a positive cognition of the future, hope plays an essential role in alleviating the impact of maladaptive perfectionism on anxiety in early adolescents [18] and reducing the impact of despair on suicide risk among college students [19]. The influence of hope on life satisfaction is confirmed by [20], [21]. In the

previous study, hope influenced college students' belief in their ability to achieve goals, promoted academic performance, and improved their positive emotions and life satisfaction because achieving worthwhile goals made them happy [21].

On the one hand, people with social support are usually hopeful. On the other hand, hope can positively affect life satisfaction. Students with social support have the confidence to overcome challenges and form a positive evaluation of their ability, which contributes to increasing the possibility of achieving goals. From this point, life is meaningful to them, and their self-evaluation is very positive, so they are delighted with life. Therefore, social support may positively affect life satisfaction through hope.

As a particular group, college students are in a transition stage of psychological development. Although protection factors are vital for their mental health and academic performance, current studies rarely consider the mediation effect of hope on social support and life satisfaction. This study constructed a mediation model to examine the relationship between social support, hope, and life satisfaction. Based on previous studies, this study proposed the following assumptions:

- (a) Social support could significantly affect life satisfaction.
- (b) Social support could significantly affect hope.
- (c) Hope could significantly affect life satisfaction.
- (d) Hope could mediate the relationship between social support and life satisfaction.

## II. METHODOLOGY

### A. Participants

Four hundred and sixteen college students from two universities in Macau and Shandong Province of China entered the study and completed the questionnaires. There were 146 males and 270 females, with an average age of 21.69 years ( $SD=2.67$ ).

### B. Measure

*Social Support Rating Scale (SSRS)*. SSRS compiled by Xiao (1994) measured social support [22]. It has ten items comprised of three dimensions: objective support, subjective support, and support utilization. The consistency of each item ranges from 0.89 to 0.94. The score of the total scale represents the degree of social support.

*Adult Dispositional Hope Scale (ADHS)*. ADHS compiled by Snyder *et al.* (1991) measured hope [23]. The scale has 12 items with two dimensions: agency thinking and pathway thinking. The Chinese version is tested with good reliability and validity, and the Cronbach's  $\alpha$  of the two dimensions are 0.80 and 0.83, respectively [24]. It uses a 4-point scoring from "1-completely incorrect" to "4-completely correct". The higher people evaluate, the higher level of hope is.

*Satisfaction With Life Scale (SWLS)*. SWLS compiled by Diener, Emmons, Larsen, and Griffin (1985) measured life satisfaction [25]. The Chinese version is verified with

good reliability and validity, and the Cronbach's  $\alpha$  of the scale is 0.78 [26]. The scale consists of 5 items to evaluate the recognition of life quality. It uses a 7-point scoring from "1-completely disagree" to "7-completely agree".

### C. Data Analysis

This study used SPSS 25.0 and Amos 24.0 to process the data and analyze the mediation model. Harman's single-factor test found that the maximum factor explained 26.99% of the total variation, which was less than 40%, indicating no severe deviation of homologous methods in this survey. The mediation role of hope was tested by the method proposed by Wen, Hou, and Zhang (2005) [27].

The following indicators are represented as the goodness of fit: Chi-square statistics, Goodness of Fit Index (GFI) above 0.95, Comparative Fit Index (CFI) above 0.95, Incremental Fit Index (IFI) above 0.95, Normed Fit Index (NFI) above 0.95, Standardized Root Mean Square Residual (SRMR) of 0.08 or less, and Root Mean Square Error of Approximation (RMSEA) of 0.06 or less [28].

## III. RESULTS

### A. Descriptive and Correlation Analysis

Table I showed the statistical results of social support, hope, and life satisfaction. The correlation analysis showed that social support was positively correlated with hope ( $r=0.48$ ,  $P<0.01$ ) and life satisfaction ( $r=0.40$ ,  $P<0.01$ ). Hope was positively correlated with life satisfaction ( $r=0.36$ ,  $P<0.01$ ).

TABLE I. DESCRIPTIVE AND CORRELATION RESULTS

Variable	M $\pm$ SD	1	2	3
1 Social support	3.80 $\pm$ 0.65	1		
2 Hope	2.83 $\pm$ 0.40	0.48**	1	
3 Life satisfaction	4.56 $\pm$ 1.19	0.40**	0.36**	1

Note: \* $P<0.05$ , \*\* $P<0.01$ , \*\*\* $P<0.001$ .

### B. The Mediating Effect of Hope

This study used item parceling strategies to reduce parameter estimation bias and improve the commonality by dividing life satisfaction items into two parcels as indicators with an item-to-construct balance approach [29]. There were two stages to evaluate the mediating model. The first stage analyzed the direct effect of social support on life satisfaction, and the second stage tested the mediation model by adding hope as the mediating variable.

The results of first stage showed the goodness of fit of model 1 (Table II):  $\chi^2/df=4.236$ ,  $GFI=0.984$ ,  $CFI=0.982$ ,  $IFI=0.983$ ,  $NFI=0.977$ ,  $SRMR=0.040$ ,  $RMSEA=0.088$ . According to the standards of previous research, the model fitting was acceptable [30]. Path coefficients revealed the positive prediction of social support on life satisfaction ( $\beta=0.51$ ,  $P<0.001$ ).

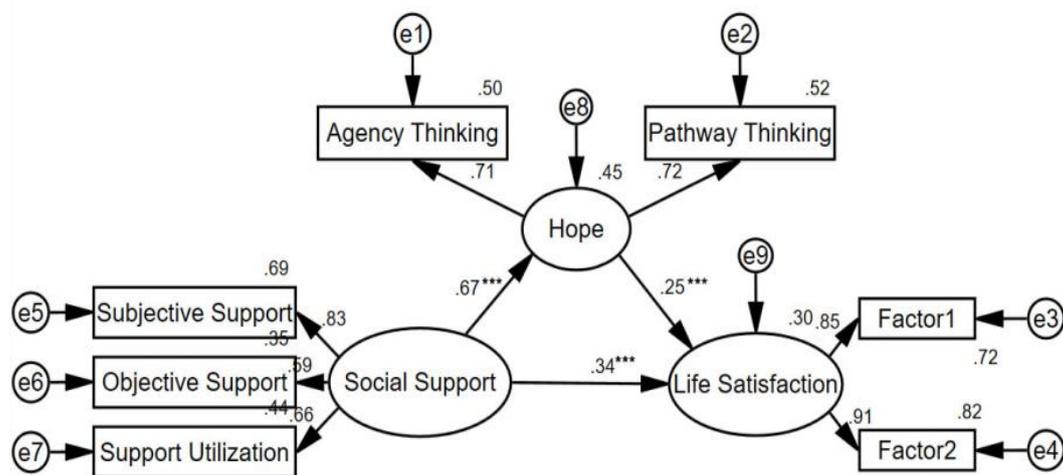
The analysis of second stage revealed the mediation effect with goodness fit indexes of Model 2 (Table II):  $\chi^2/df=2.325$ ,  $GFI=0.983$ ,  $CFI=0.985$ ,  $IFI=0.985$ ,  $NFI=0.975$ ,  $SRMR=0.033$ ,  $RMSEA=0.062$ . The model fitted the data well. Fig. 1 presented the path coefficients.

Social support positively predicted hope ( $\beta=0.67$ ,  $P<0.001$ ). Hope positively predicted life satisfaction ( $\beta=0.25$ ,  $P<0.001$ ). Social support positively predicted life satisfaction ( $\beta=0.34$ ,  $P<0.001$ ). The result of bootstrap analysis with 5000 samples collected showed that the 95% confidence interval of the indirect effect (social support→hope→life satisfaction) was [0.035, 0.297], which did not contain 0.

This finding confirmed the significant mediation effect of hope on social support and life satisfaction. Because the impact of social support on life satisfaction was still significant, hope had a partial mediation effect. Therefore, social support could not only directly affect life satisfaction but also indirectly affect life satisfaction through hope. The direct and indirect effects were 0.34 and 0.17 ( $0.67*0.25$ ), respectively. The mediating effect accounted for 33.33% of the total effect ( $0.17/0.51$ ).

TABLE II. MODEL FITTING INDEX

Model	$\chi^2/df$	GFI	CFI	IFI	NFI	SRMR	RMSEA
Model 1	4.236	0.984	0.982	0.983	0.977	0.040	0.088
Model 2	2.325	0.983	0.985	0.985	0.975	0.033	0.062



Note: \* $P<0.05$ , \*\* $P<0.01$ , \*\*\* $P<0.001$ .

Figure 1. Mediation effect model

#### IV. DISCUSSION

This study verified the relationship between social support and life satisfaction among college students. The results revealed that social support was positively correlated with life satisfaction. Specifically, social support could increase college students' life satisfaction, which was consistent with previous studies.

To Xiao (1994), social support includes objective support, subjective support, and support utilization [22]. Objective support is the actual assistance that people get, which contains essential resources for people to meet their social, physiological, and psychological needs. Subjective support is the emotional support closely related to people's subjective feelings, including the emotional experience and satisfaction of being respected, supported, and understood. Support utilization is the situation of people using social support. Although some people can get supports from others, they do not accept or use them. Social support is mutual. When people provide support for others, they may get support in return. According to the buffering theory of social support, people with good social support usually experience less external pressure in the face of challenges and difficulties [7]. The main effect theory holds that social support contributes to improving mental health and increasing positive emotions, further

increasing life satisfaction [31]. Social support is regarded as a vital resource to deal with stress by giving people direct material, informational, and emotional support. In other words, social support protects people from the negative impact of stress. Besides, people in a warm social environment are prone to gain the meaning of life and work hard to achieve their goals, resulting in a high life satisfaction level. In the environment of collectivism in China, social relations have become a vital part of people's life. The level of social support can directly affect people's mental health.

The work confirmed the positive effect of social support on hope. Hope refers to the cognition, emotion, and motivation for the future, including the belief in the possibility of achieving important goals. As an individual intrinsic factor, hope is a positive motivational state based on the interaction between the path to success (the plan to the goal) and the motivation (the power to the goal) [11]. The living environment and experience can influence the level of hope. As an essential resource, social support increases the possibility of achieving goals. Students with a high social support level are usually hopeful [13], [14]. They are more likely to know how to approach the target and change plans when they encounter difficulties.

The work confirmed the positive effect of hope on life satisfaction. According to the hope theory, hope has a

positive impact on mental health [32]. Hope interventions have been found to improve the life satisfaction of adult survivors who experienced childhood loss [33]. Scholars in [34] have demonstrated the highest correlation coefficient between hope and life satisfaction in 24 Character Strengths (such as gratitude, modest, and zest), which plays a vital role in enhancing positive emotions, interpersonal relationships, and confidence [35]. Hopeful students tend to experience a positive feeling of self-affirmation and believe in their abilities, thus generating positive motivation to achieve their goals. The realization of the goal promotes their pursuit of the next goal and makes them feel satisfied with life. Therefore, college students with good social support have more confidence and affirmation in overcoming life difficulties, resulting in more satisfaction and happiness.

Analysis of the structural model confirmed the mediation effect of hope. Specifically, social support could affect life satisfaction through hope. Students with good social support have more resources and confidence to overcome the challenges. They believe in their abilities and make efforts to achieve their goals. Even in difficult situations, they manage to get close to their goals, which helps increase the likelihood of achieving them. Life is meaningful and hopeful for them, and their self-evaluation is very positive, so they are satisfied with life.

However, there are some limitations in this study. Firstly, it is cross-sectional research unable to provide the result of causality. Secondly, this study only focuses on the mediation role of hope and neglects other influencing factors (such as self-esteem and optimism) in the relationship. Thirdly, the self-report measurements are subjective, which may affect the results. Nevertheless, this study examined the influencing mechanism between social support and life satisfaction, contributing to understanding the relationship between them and putting forward suggestions for mental health. This discovery is of great practical significance to the mental health work of college students. It suggests that teachers may promote the life satisfaction of college students through social support and hope intervention.

## V. CONCLUSION

In this study, social support, hope, and life satisfaction were positively related to each other. First, social support could increase life satisfaction. Second, college students with social support were hopeful. Third, hopeful students tended to be satisfied with life. Fourth, social support improved life satisfaction by increasing the level of hope. However, these conclusions are based on the analysis of a limited sample. Therefore, the reliability and validity of conclusions should be verified further in the future.

## CONFLICT OF INTEREST

The author declares no conflict of interest.

## AUTHOR CONTRIBUTIONS

The author's contribution to this work includes: conducting research, analyzing data and writing the paper.

## ACKNOWLEDGMENT

The research was conducted with support and suggestion from teachers and students of the City University of Macau. The author thanks all the participants for their enthusiasm and dedication. With their help, the author designed and completed the study.

## REFERENCES

- [1] W. Pavot and E. Diener, "The satisfaction with life scale and the emerging construct of life satisfaction," *The Journal of Positive Psychology*, vol. 3, pp. 137-152, March 2008.
- [2] R. Schwarzer and N. Knoll, "Functional roles of social support within the stress and coping process: A theoretical and empirical overview," *International Journal of Psychology*, vol. 42, pp. 243-252, August 2007.
- [3] C. P. H. Langford, J. Bowsher, J. P. Maloney, and P. P. Lillis, "Social support: A conceptual analysis," *Journal of Advanced Nursing*, vol. 25, pp. 95-100, July 1997.
- [4] H. Miao, H. Sun, X. He, Z. Zhang, Q. Nie, and C. Guo, "Perceived social support and life satisfaction among young Chinese adolescents: the mediating effect of psychological suzhi and its components," *Current Psychology*, vol. 28, pp. 1-11, October 2020.
- [5] M. Ma, "The relationship between social support and life satisfaction among Chinese and ethnic minority adolescents in Hong Kong: The mediating role of positive youth development," *Child Indicators Research*, vol. 25, pp. 1-21, April 2019.
- [6] U. İ. Yalçın, "Social support and optimism as predictors of life satisfaction of college students," *International Journal for the Advancement of Counselling*, vol. 33, pp. 79-87, June 2011.
- [7] S. Cohen and T. A. Wills, "Stress, social support, and the buffering hypothesis," *Psychological Bulletin*, vol. 98, pp. 310-357, 1985.
- [8] M. M. Alsubaie, H. J. Stain, L. A. Webster, and R. Wadman, "The role of sources of social support on depression and quality of life for university students," *International Journal of Adolescence and Youth*, vol. 24, pp. 484-496, January 1993.
- [9] J. Brailovskaia, P. Schönfeld, X. C. Zhang, A. Bieda, Y. Kochetkov, and J. Margraf, "A cross-cultural study in Germany, Russia, and China: Are resilient and social supported students protected against depression, anxiety, and stress," *Psychological Reports*, vol. 12, pp. 265-281, August 2018.
- [10] J. Eldeleklioglu, "The relationship between the perceived social support and the level of depression and anxiety in university students," *Kuram ve Uygulamada Egitim Bilimleri*, vol. 6, pp. 742-752, September 2006.
- [11] C. R. Snyder, "Hope theory: Rainbows in the mind," *Psychological Inquiry*, vol. 13, pp. 249-275, November 2002.
- [12] C. M. Archer, X. Jiang, I. B. Thurston, and R. G. Floyd, "The differential effects of perceived social support on adolescent hope: Testing the moderating effects of age and gender," *Child Indicators Research*, vol. 12, pp. 2079-2094, January 2019.
- [13] N. E. Mahon and A. Yarcheski, "Parent and friend social support and adolescent hope," *Clinical Nursing Research*, vol. 26, pp. 224-240, April 2017.
- [14] G. Xiang, Z. Teng, H. Chen, and C. Guo, "The influence of perceived social support on hope: A longitudinal study of older-aged adolescents in China," *Children and Youth Services Review*, vol. 119, December 2020.
- [15] K. Bai, S. Kohli, and A. Malik, "Self-efficacy and hope as predictors of mental health," *Indian Journal of Positive Psychology*, vol. 8, pp. 631-635, December 2017.
- [16] Z. Li, Y. Wang, X. Mao, and X. Yin, "Relationship between hope and depression in college students: A cross-lagged regression analysis," *Personality and Mental Health*, vol. 12, pp. 170-176, February 2018.
- [17] K. Kaleta and J. Mróz, "The relationship between basic hope and depression: Forgiveness as a mediator," *The Psychiatric Quarterly*, vol. 91, pp. 877-886, May 2020.
- [18] A. Karababa, "The moderating role of hope in the relationship between maladaptive perfectionism and anxiety among early adolescents," *The Journal of Genetic Psychology*, vol. 181, pp. 159-170, April 2020.

- [19] E. C. Chang, "Hope and hopelessness as predictors of suicide ideation in Hungarian college students," *Death Studies*, vol. 41, pp. 455-460, March 2017.
- [20] Q. Nie, Z. Teng, G. G. Bear, C. Guo, Y. Liu, and D. Zhang, "Hope as mediator between teacher-student relationships and life satisfaction among Chinese adolescents: A between-and within-person effects analysis," *Journal of Happiness Studies*, vol. 20, pp. 2367-2383, October 2018.
- [21] K. L. Rand, M. L. Shanahan, I. C. Fischer, and S. K. Fortney, "Hope and optimism as predictors of academic performance and subjective well-being in college students," *Learning and Individual Differences*, vol. 81, July 2020.
- [22] S. Y. Xiao, "The theoretical basis and research applications of 'Social Support Rating Scale'," *Journal of Clinical Psychiatry*, vol. 4, pp. 98-100, 1994.
- [23] C. R. Snyder, C. Harris, J. R. Anderson, S. A. Holleran, L. M. Irving, S. T. Sigmon, and P. Harney, "The will and the ways: Development and validation of an individual-differences measure of hope," *Journal of Personality and Social Psychology*, vol. 60, pp. 570-585, 1991.
- [24] C. R. Chen and H. Y. Shen, "Reliability and validity of adult dispositional hope scale," *Chinese Journal of Clinical Psychology*, vol. 17, pp. 24-26, 2009.
- [25] E. D. Diener, R. A. Emmons, R. J. Larsen, and S. Griffin, "The satisfaction with life scale," *Journal of Personality Assessment*, vol. 49, pp. 71-75, June 2010.
- [26] C. Q. Xiong and Y. L. Xu, "Reliability and validity of the satisfaction with life scale for Chinese people," *China Journal of Health Psychology*, vol. 17, pp. 948-949, 2009.
- [27] Z. L. Wen, J. T. Hou, and L. Zhang, "A comparison of moderator and mediator and their applications," *Acta Psychologica Sinica*, vol. 37, pp. 268-274, 2005.
- [28] L. T. Hu and P. M. Bentler, "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives," *Structural Equation Modeling: A Multidisciplinary Journal*, vol. 6, pp. 1-55, November 2009.
- [29] Y. Wu and Z. L. Wen, "Item parceling strategies in structural equation modeling," *Advances in Psychological Science*, vol. 19, pp. 1859-1867, 2011.
- [30] P. Barrett, "Structural equation modelling: Adjudging model fit," *Personality and Individual Differences*, vol. 42, pp. 815-824, May 2007.
- [31] I. Kawachi and L. F. Berkman, "Social ties and mental health," *Journal of Urban Health*, vol. 78, pp. 458-467, September 2001.
- [32] M. Cleary, J. M. Sayers, V. Lopez, M. M. Shattell, and M. Cleary, "Hope and mental health nursing," *Issues in Mental Health Nursing*, vol. 37, pp. 692-694, September 2016.
- [33] L. C. Mefford, K. D. Phillips, and M. L. Chung, "Childhood loss experiences, religiousness/spirituality, and hope as predictors of adult life satisfaction," *Issues in Mental Health Nursing*, pp. 1-11, October 2020.
- [34] N. Park, C. Peterson, and M. E. Seligman, "Strengths of character and well-being," *Journal of Social and Clinical Psychology*, vol. 23, pp. 603-619, October 2004.
- [35] J. Gillham, Z. Adams-Deutsch, J. Werner, K. Reivich, V. Coulter-Heindl, M. Linkins, and M. E. Seligman, "Character strengths predict subjective well-being during adolescence," *The Journal of Positive Psychology*, vol. 6, pp. 31-44, Feb. 2011.

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