



EUN MI SHIN, CHANG SEEK LEE

Depression and happiness of high school students: the dual mediating effects of suicidal ideation and gratitude

Introduction. The happiness of adolescents in Korea is the lowest among OECD countries. In particular, high school students is behind the happiness due to college entrance-oriented education. Academic interest in happiness of high school students is needed. This study examined whether depression significantly affects happiness by way of suicidal ideation and gratitude of high school students in South Korea, and suggests ways to increase happiness through gratitude.

Materials and methods. 4 high schools in S city in Korea were selected as study area for survey and from them 435 participants were purposively selected. Participants was 50.6% for males and 49.4% for females. Grade distribution was 28.7% in 2nd grade and 71.3% in 3rd grade. The statistical methods used in this study were frequency, reliability, correlation, and dual mediating effect analysis using SPSS PC+ Win. Ver. 25 and PROCESS macro Ver. 3.5.

Results. Firstly, depression had a positive association with suicidal ideation ($r=.703, p<.001$), but had a negative association with gratitude ($r=-.305, p<.001$), and happiness ($r=-.656, p<.001$), with the highest correlation coefficient between depression and suicidal ideation ($r=.703, p<.001$). Secondly, the simple mediation effect of gratitude in the link between depression and happiness was observed ($-.0918, -.1532 \sim -.0322$). Thirdly, the dual mediating effect of suicidal ideation and gratitude in the link between depression and happiness was verified ($-.0382, -.0801 \sim -.0225$).

Conclusion. This research could contribute to solving the negative relationship between depression and happiness through the two mediators, suicidal ideation and gratitude. This study provided the basis for a further research to enhance happiness by utilizing gratitude for adolescents with severe depression and high suicidal ideation.

Keywords: depression, suicidal ideation, gratitude, happiness, high school student, dual mediating effect

For Reference:

Shin, E. M., & Lee, Ch. S. (2020). Depression and happiness of high school students: the dual mediating effects of suicidal ideation and gratitude. *Perspektivy nauki i obrazovania – Perspectives of Science and Education*, 48 (6), 324-333. doi: 10.32744/pse.2020.6.25

Introduction

Depression is a state of mind that negatively affects perception, judgment, cognition, thinking, and attitudes to interpersonal relationships [1; 2]. It grows in children as they grow from preschool age to adolescence [3], with a sharp increase between 13 and 15 years old and peaking at 17 and 18 years old [4]. In particular, high school students in Korea are worried about depression because it is the most severe at that age, when their worry about college entrance and employment is at their peak.

Depression experienced in adolescence negatively affects the development of adolescents [5], and results in irreversible consequences such as antisocial behaviors [6], suicidal thoughts and suicide attempts [7; 8]. In addition, depression in adolescence directly affects social competence or interpersonal ability, resulting in maladjustment in academic and companionship, and negatively affecting physical and mental growth [9] and can continue in adulthood where the effects are even more significant [10; 11].

Depression negatively affects happiness. Happiness, human's ultimate purpose, is defined as an overall assessment of one's quality of life based on the criteria he/she chooses [12]. Happiness is also defined as satisfaction with life, positive emotions and a state without relatively negative emotions [13].

Happiness has been identified as a variable with a positive effect on various areas i.e., happiness affects marriage [14], stable income [15], excellent mental health [16], and longevity [17]. Specifically, happy people make more money, are more responsive, are good leaders and negotiators, are more likely to get married, have full marriage life, have more social support, are creative, productive, philanthropic, people-centered, resilient and healthy [18; 19].

To make matters worse, suicidal ideation accelerates the decline in happiness. Suicidal ideation is what an individual immerses in the thought of ending one's life [20]. A person with high suicidal ideation has a six-fold higher risk of attempting suicide later, compared to a person with low suicidal ideation [21]. Suicidal thoughts in adolescence have a serious impact in that they have a negative effect on the life cycle afterwards. Reinherz et al. [22] conducted a longitudinal study on the relationship between adolescents' mental health and suicidal thoughts. It revealed that the group who thought of suicide at the age of 15 showed higher depression, problem behavior, and low self-esteem and interpersonal network, as well as suicidal thought in adulthood, compared to those who did not. Depression was found to be the most powerful predictor of suicidal thought [23]. Thus, in this study we set depression as an independent variable and suicidal ideation as the first mediator.

On the other hand, gratitude is defined as a generalized tendency to recognize the goodwill of others and respond with positive emotions in positive experiences and outcomes given to them with relatively persistent and stable emotional qualities [24]. It is also considered that gratitude is not a simple emotion but a profound and complex phenomenon that plays a key role in human happiness, and one of the few that significantly influences human life [25].

People with higher gratitude tend to build positive self-esteem as compared to those with low gratitude, and to maintain and strengthen prosocial behavior, giving everyone an appreciation in the environment they experience [26]. A person with high gratitude is also grateful for external favorable attention [27], and has an excellent ability to reinterpret

himself in a positive direction even in situations where it is easy to interpret negatively [28]. In this study we set gratitude as the second mediator.

In order for suicidal ideation and gratitude to play a dual mediating role in the link between depression and happiness, the depression, independent variable in this study should have a significant effect on suicidal ideation, and then suicidal ideation should have a significant effect on gratitude, and finally gratitude should have a significant effect on happiness, a dependent variable. Many studies showed that depression has a positive effect on suicidal ideation [29-33]. The gratitude is a protection factor that counteracts suicidal ideation, and is emerging as a psychological strength [34]. In addition, gratitude is related with happiness in many prior researches. People with high gratitude experience more positive emotions such as happiness, psychological well-being, and life satisfaction than those with low gratitude, and less negative emotions such as depression or anxiety [35-38].

The results of these previous studies expect that suicidal ideation and gratitude play a mediating role, and therefore, it is necessary to verify whether they play a dual mediating role in the link between depression and happiness in high school students.

Therefore, this present study examined the dual mediating effect of suicidal ideation and gratitude in the link between depression and happiness of high school students who have a lot of concerns about entrance examinations and employment. Based on the study results this study suggested ways to enhance happiness of high school students, which was reduced by depression.

The following research questions are presented: What is the correlation between depression, suicidal ideation, gratitude, and happiness? Does suicidal ideation and gratitude mediate in the relationship between depression and happiness?

Research method

1. Research Model

Based on prior researches, a research model that depression has a direct effect on happiness (direct effect), and suicidal ideation and gratitude mediate (dual mediating effect) in the link between depression and happiness was set as shown in Figure 1.

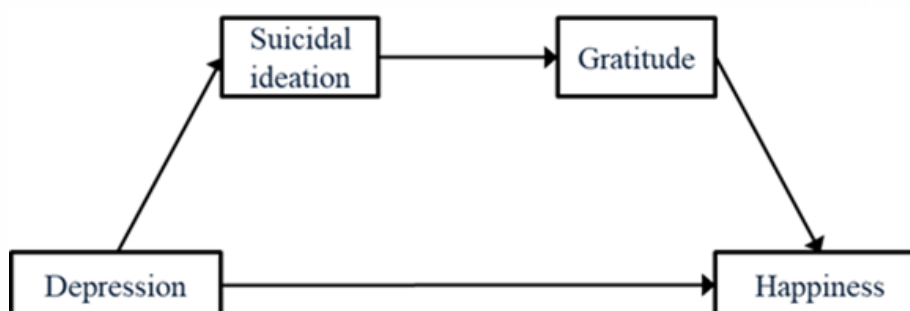


Figure 1 Proposed research model

2. Survey Subject and Data Collection Method

The study area was selected as S city in Chungnam, considering the accessibility of the research area and the applicability of the results to high school students. 4 high schools in S city considering the ratio of men and women were purposively selected for survey.

The survey was conducted by homeroom teacher after explaining the purpose of the survey to participants, obtaining the student's consent, distributing and then collecting the

questionnaire. The period for survey was from April 24 to May 10, 2019. 435 copies were used for the final analysis, excluding the questionnaires with unsatisfactory responses.

The gender distribution of participants was 50.6% for males and 49.4% for females. Grade distribution was 28.7% in 2nd grade and 71.3% in 3rd grade.

3. Research tools

3.1. Depression

Depression scale, a subscales of the SCL-90 which was used by Choi[39] was used in this study, and it consisted of 10 items. Each item had a 5-point Likert scale ranging from 1 (not at all) to 5 (very so), and a higher score indicates higher depression. The internal consistency of depression was high (Cronbach's $\alpha = .906$).

3.2. Suicidal ideation

We used the suicidal ideation scale which was developed by Harlow et al.[40] and translated into Korea by Kim [41]. This scale consists of 5 items each having a 5-point Likert scale ranging from 1 (not at all) to 5 (very so), and the higher the score, the higher the suicidal ideation. The internal consistency of suicidal ideation was high (Cronbach's $\alpha = .907$).

3.3. Gratitude

Gratitude was assessed in this study using the Korean version of the gratitude scale (K-GQ-6), which was developed by McCullough et al. [42] and revised by Kwon et al. [43]. This scale consists of 6 items each having a 5-point Likert scale ranging from 1 (not at all) to 5 (very so), and the higher the score, the higher the gratitude. The internal consistency of gratitude was suitable (Cronbach's $\alpha = .830$).

3.4. Happiness

In order to measure life satisfaction, we used the short-term happiness scale developed by Seo and Gu [44]. Broadly speaking, the scale consists of three questions measuring personal, relational, and collective satisfaction, and six questions asking about the emotions experienced over the a past month. Here, it is noted as a 7-point Likert scale. The higher the score, the higher the satisfaction level of life. The internal consistency of life satisfaction in current study was Cronbach's $\alpha = .873$.

4. Data analysis

In this study, SPSS PC + Win. Ver. 25.0 (SPSS Inc., Chicago, IL, USA) and SPSS PROCESS macro Ver. 3.5 were used for data analysis. The statistical methods were descriptive statistics, reliability analysis, correlation analysis, and dual mediating effect analysis. For analysis of dual mediating effects, model 6 of the SPSS PROCESS macro[45] was used, with 95% confidence level and 5,000 bootstrap samples.

Results

1. Correlation between variables

Table 1 shows the results of Pearson's correlation analysis and descriptive statistics. Depression was positively correlated with suicidal ideation ($r = .703, p < .01$), but was negatively correlated with gratitude ($r = -.305, p < .01$), and happiness ($r = -.656, p < .01$). Suicidal ideation was negatively correlated with gratitude ($r = -.279, p < .01$), and happiness ($r = -.507, p < .01$). Gratitude had significant positive correlation with happiness ($r = .494, p < .01$). The correlation coefficient between depression and suicidal ideation was the highest. These results are consistent with the reports that depression and happiness are negatively correlated from a

study of university students[46], and that high gratitude leads to higher life satisfaction and well-being [47; 48].

The result that depression had a positive effect on suicidal ideation, is that depression is the major cause of suicidal ideation attempts, which degrades the value of life and then makes suicidal ideation. It is judged because people with high depression and suicidal ideation perceives as having no one to appreciate, or as having no happy experience. On the other hand, it is judged that people with high gratitude has a lot of experiences to be grateful from the surroundings, and has a positive effect on happiness because it has a happy feeling rather than unhappiness due to appreciation.

In the mean of each variable, mean of depression and suicidal ideation were lower than the median score (3 points), but mean of gratitude and happiness were higher than the median score.

Table 1

Correlation coefficient, mean and standard deviation between variables

	Depression	Suicidal ideation	Gratitude	Happiness
Depression	1			
Suicidal ideation	.703**	1		
Gratitude	-.305**	-.279**	1	
Happiness	-.656**	-.507**	.494**	1
M	2.6878	2.1016	3.5613	4.3436
SD	.8141	1.02002	.7337	1.0836

** $p < .01$

2. Dual mediating effect of suicidal ideation and gratitude

Results of dual mediating effect analysis are presented in Fig. 2 and Table 2. For the analysis of dual mediating effect, model 6 of PROCESS macro program[45] was used.

Depression had a significant positive influence on suicidal ideation (.8805, $p < .001$), and suicidal ideation had a significant negative effect on gratitude (-.0917, $p < .05$), and then gratitude had a significant effect on happiness (.4738, $p < .01$). Therefore, all the paths from depression to happiness by way of suicidal ideation and gratitude (depression→suicidal ideation→gratitude→happiness) showed significant effect, so suicidal ideation and gratitude mediated in the link between depression and happiness. As a result of verifying the double mediating effect using the bootstrap method, the effect value is -.0382 (-.0801~-.0225) as shown in Table 3, so there is no 0 between the upper and lower bootstrap values. Therefore, the double mediating effect of suicidal ideation and gratitude was proven.

This double mediation effect means that depression directly affects happiness, but it also indirectly affects happiness through suicidal ideation and gratitude. Therefore, these results suggested a way to improve the problem of lowering happiness due to the depression and suicidal ideation of high school students by utilizing the gratitude.

Another concern of this study is the magnitude of the indirect effect. Depression had a negative effect on happiness (total effect: -.8737, $p < .001$), but this negative effect was somewhat reduced by the input of mediating variables (direct effect: -.6976, $p < .001$). Indirect effects of suicidal ideation and gratitude also had a negative effect on happiness (Total indirect effect: -.1001, -.1575~-.0513). Therefore, gratitude alone failed to significantly improve the negative effects of depression on happiness. Therefore, a follow-up study is

needed to explore variables that can further improve the negative effects of depression on happiness.

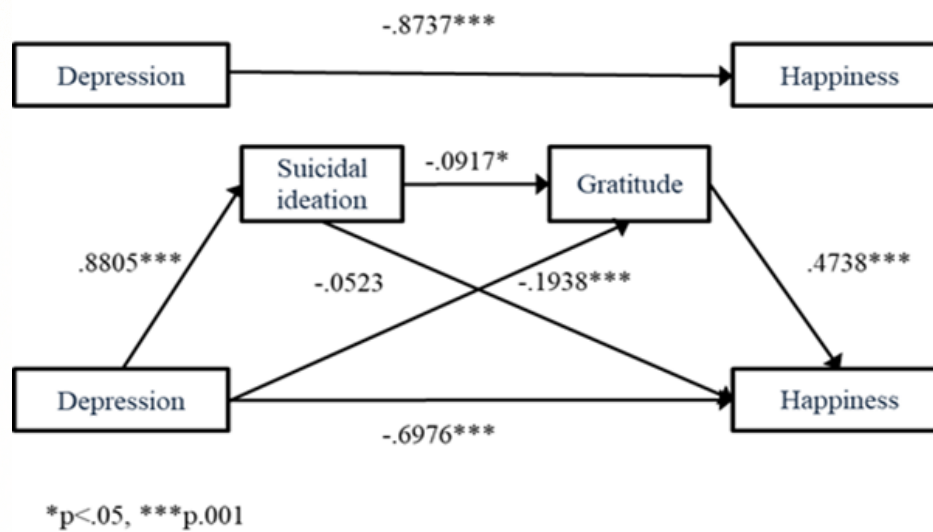


Figure 2 Results of dual mediating effect analysis

Table 2

Results of dual mediating effect analysis

Mediating variable model 1 (DV: Suicidal ideation)						
Variables	coeff	SE	t value	p	LLCI*	ULCI**
Constant	-.2651	.1203	-2.2033	.0281	-.5015	-.0286
Depression	.8805	.0428	20.5543	.0000	.7963	.9647
Mediating variable model 2 (DV: Gratitude)						
Variables	coeff	SE	t value	p	LLCI*	ULCI**
Constant	4.2749	.1161	36.8918	.0000	4.0467	4.5031
Depression	-.1938	.0578	-3.3534	.0009	-.3074	-.0802
Suicidal ideation	-.0917	.0467	-1.9876	.0475	-.1823	.0010
Dependent variable model (DV: Happiness)						
Variables	coeff	SE	t value	p	LLCI*	ULCI**
Constant	4.6411	.2532	18.3317	.0000	4.1435	5.1387
Depression	-.6976	.0672	-11.1177	.0000	-.8210	-.5743
Suicidal ideation	-.0523	.0497	-1.0528	.2930	-.1499	.0453
Gratitude	.4738	.0516	9.1876	.0000	.3725	.5752

*LLCI = lower limit within 95% confidence interval of boot indirect effect

**ULCI = upper limit within 95% confidence interval of boot indirect effect

On the other hand, the results of verifying the simple mediation effect of each of the suicidal ideation and gratitude are also presented in Tables 3. The simple mediating effect of suicidal ideation in the link between depression and happiness was not significant (-.0460, -.1347~.0393). But, the simple mediating effect of gratitude in the link between depression and happiness was significant (-.0918, -.1532~-.0322). Therefore, gratitude mediated in the link between depression and happiness. That is, depression influenced the increase of happiness through gratitude. This means that gratitude has a high effect on happiness. So, it is necessary to study practical ways to improve the happiness of high school students through gratitude.

Table 3

Verification of mediating effect

Total effect of X on Y					
Effect	se	t	p	LLCI*	ULCI**
-.8737	.0483	-18.1054	.0000	-.9686	-.7789
Direct effect of X on Y					
Effect	se	t	p	LLCI*	ULCI**
-.6976	.0627	-11.1177	.0000	-.8210	-.5743
Indirect effect of X on Y					
Paths	Effect	Boot SE	Boot LLCI*	Boot ULCI**	
Total indirect effect	-.1001	.0270	-.1575	-.0513	
Depression→Suicidal ideation→Happiness	-.0460	.0442	-.1347	.0393	
Depression→Gratitude→Happiness	-.0918	.0307	-.1532	-.0322	
Depression→Suicidal ideation→Gratitude→Happiness	-.0382	.0199	-.0801	-.0225	

*LLCI = lower limit within 95% confidence interval of boot indirect effect

** ULCI = upper limit within 95% confidence interval of boot indirect effect

Discussion

In order to examine how suicidal ideation and gratitude affect in the link between depression and happiness, a dual mediating effect was analyzed.

First, as a result of correlation analysis, depression had a positive effect on suicidal ideation, but depression had a negative effect on gratitude and happiness. These results are consistent with the reports that depression and happiness are negatively correlated from a study of university students [46], and that high gratitude leads to higher life satisfaction and well-being [47; 48].

The result that depression had a positive effect on suicidal ideation, is that depression is the major cause of suicidal ideation attempts, which degrades the value of life and then makes suicidal ideation. It is judged because people with high depression and suicidal ideation perceives as having no one to appreciate, or as having no happy experience. On the other hand, it is judged that people with high gratitude has a lot of experiences to be grateful from the surroundings, and has a positive effect on happiness because it has a happy feeling rather than unhappiness due to appreciation.

Second, as a result of verifying the double mediation effect, all the paths from depression to happiness through suicidal ideation and gratitude showed a significance. Therefore, suicidal ideation and gratitude had a double mediating effect in the link between depression and happiness. In other words, depression had a positive effect on suicidal ideation, suicidal ideation had a negative effect on gratitude, and gratitude had a positive effect on happiness. This double mediation effect means that depression directly affects happiness, but it also indirectly affects happiness through suicidal ideation and gratitude. Therefore, these results suggested a way to improve the problem of lowering happiness due to the depression and suicidal ideation of high school students by utilizing the gratitude.

Another concern of this study is the magnitude of the indirect effect. Depression had a negative effect on happiness (total effect: -.8737, $p < .001$), but this negative effect was

somewhat reduced by the input of mediating variables (direct effect: $-.6976$, $p < .001$). Indirect effects of suicidal ideation and gratitude also had a negative effect on happiness (Total indirect effect: $-.1001$, $-.1575 \sim -.0513$). Therefore, gratitude alone failed to significantly improve the negative effects of depression on happiness. Therefore, a follow-up study is needed to explore variables that can further improve the negative effects of depression on happiness.

On the other hand, as a result of examining the simple mediating effect of suicidal ideation in the link between depression and happiness, there was no simple mediating effect. That is the result that suicidal ideation has no significant effect on happiness. On the other hand, gratitude has a simple mediating effect in the link between depression and happiness. That is, depression influenced the increase of happiness through gratitude. This means that gratitude has a high effect on happiness. So, it is necessary to study practical ways to improve the happiness of high school students through gratitude.

Finally, this study grasped how depression affects happiness through the dual mediation effect. However, to overcome the regional limitations of sampling, follow-up studies through sampling nationwide, program development studies to promote happiness through gratitude, and follow-up studies targeted at all age groups other than high school students to expand these findings are needed.

Despite these limitations this study is meaningful in that it could contribute to solving the negative relationship between depression and happiness through the two mediators, suicidal ideation and gratitude.

Acknowledgment

This study was done with the support of a research grant in 2019 from Hanseo University.

REFERENCES

1. Beck, A.T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
2. Joiner Jr, T.E., Alfano, M.S., & Metalsky, G.I. (1993). Caught in the crossfire: Depression, self-consistency, self-enhancement, and the response of others. *Journal of Social and Clinical Psychology, Jun; 12* (2): 113-134. DOI: 10.1521/jscp.1993.12.2.113.
3. Dumas, J.E., & Nilsen, W.J. (2003). *Abnormal child and adolescent psychology*. Pearson College Division.
4. Wenar, C., & Kerig, P. (2000). *Developmental psychopathology. From infancy through adolescence*. Boston: McGraw-Hill.
5. Park, J.H., Lee, S.Y., Kim, S.Y., & Jung, H.Y. (2008). The Effect of Depression on Somatic Symptoms: The Mediating Role of Physical Interpretation. *The Korean Journal of Health Psychology, Dec; 13* (4): 907-921.
6. Kim, J.W., & Oh, K.J. (1993). The Relation between Depression and Delinquency in Adolescents - Focusing on 'Cognitive Deconstruction' as a mediator. *Korean Journal of Clinical Psychology, Nov; 12* (2): 126-141.
7. Lee, B.J., Son, S.O., & Kim, Y.J. (2015). The Effects of School-related Stress on Depression among Adolescents and the Moderating Effects of Self-Esteem. *School Social Work Practice, 31*: 37-58.
8. Ryan, N.D., Puig-Antich, J., & Ambrosini, P., et al. (1987). The Clinical Picture of Major Depression in Children and Adolescents. *Arch Gen Psychiatry, Oct; 44* (10): 854-861. DOI: 10.1001/archpsyc.1987.01800220016003854-861.
9. Lim, J.H. (2009). *The Mediating Effect of Negative Affect Self-Statement on the Relationships between Adolescents Stress and Depressive Symptoms*. [dissertation]. [Seoul]: Sookmyung University; Jun. Available from: <http://www.riss.kr/link?id=T11731179> (accessed 4 December 2020)
10. Kim, H.S. (2008). *The Structural Relationships of Stress, Hopelessness, and Depression to Suicidal ideation in the Elderly and the Adolescents*. [dissertation]. [Seoul]: Dankook University. Available from: <http://www.riss.kr/link?id=T11208238> (accessed 4 December 2020)
11. Birmaher, B., Ryan, N.D., & Williamson, D.E., et al. (1996). Childhood and adolescent depression: A review of the past 10 years. Part I. *Journal of American Academy of Child and Adolescent Psychiatry, Nov; 35*: 1427-1143. DOI:

10.1097/00004583-199611000-00011

12. Shin, D.C., & Johnson, D.M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social indicators research, Mar*; 5 (1-4): 475-492. DOI: 10.1007/BF00352944
13. Diener, E. (1984). Subjective well-being. *Psychological bulletin, May*; 95 (3): 542.
14. Mastekaasa, A. (1994). Marital status, distress, and well-being: An international comparison. *Journal of Comparative Family Studies, 25* (2): 183-205. DOI: 0.3138/jcfs.25.2.183
15. Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research, Feb*; 57: 119–169. DOI: 10.1023/A:1014411319119
16. Koivumaa-Honkanen, H., Kaprio, J., Honkanen, R., Viinamäki, H., & Koskenvuo, M. (2004). Life satisfaction and depression in a 15-year follow-up of healthy adults. *Social psychiatry and psychiatric epidemiology, Dec*; 39 (12): 994-999. DOI: 10.1007/s00127-004-0833-6
17. Danner, D.D., Snowdon, D.A., & Friesen, W.V. (2001). Positive emotions in early life and longevity: Findings from the nun study. *Journal of Personality and Social Psychology, May*; 80: 804–813.
18. Lyubomirsky, S., & Tucker, K.L. (1998). Implications of individual differences in subjective happiness for perceiving, interpreting, and thinking about life events. *Motivation and Emotion, Jun*; 22 (2): 155-186. DOI: 10.1023/A:1021396422190
19. Lyubomirsky, S. (2001). Why are some people happier than others?: The role of cognitive and motivational processes in well-being. *American Psychologist, Mar*; 56: 239–249. DOI: 10.1037/0003-066X.56.3.239
20. Cole, D.E., Protinsky, H.O., & Cross, L.H. (1992). An empirical investigation of adolescent suicidal ideation. *Adolescence, 27* (108): 813.
21. Kuo, W.H., Gallo, J.J., & Tien, A.Y. (2001). Incidence of suicide ideation and attempts in adults: the 13-year follow-up of a community sample in Baltimore, Maryland. *Psychological medicine, Oct*; 31 (7): 1181-1191. DOI: 10.1017/S0033291701004482
22. Reinherz, H.Z., Tanner, J.L., Berger, S.R., Beardslee, W.R., & Fitzmaurice G.M. (2006). Adolescent suicidal ideation as predictive of psychopathology, suicidal behavior, and compromised functioning at age 30. *American Journal of Psychiatry, Jul*; 163 (7): 1226-1232.
23. Cole, D.A. (1989). Psychopathology of adolescent suicide: Hopelessness, coping beliefs, and depression. *Journal of Abnormal Psychology, Aug*; 98 (3): 248. doi: 10.1037/0021-843X.98.3.248
24. McCullough, M.E., Emmons, R.A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality & Social Psychology, Jan*; 82 (1): 112-127. DOI: 10.1037/0022-3514.82.1.112
25. Emmons, R.A. (2007). *Thanks! How the new science of gratitude can make you happier*. New York: Houghton-Mifflin. Aug.
26. Ryan, R.M., Huta, V., & Deci, E.L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of happiness studies, Jan*; 9 (1): 139-170. DOI: 10.1007/s10902-006-9023-4
27. Wood, A.M., Joseph, S., & Maltby, J. (2009). Gratitude predicts psychological well-being above the Big Five facets. *Personality and Individual Differences, Mar*; 46 (4): 443-447. DOI: 10.1016/j.paid.2008.11.012
28. Tedeschi, R.G., & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15* (1): 1-18.
29. Emery, G.D., Steer, R.A., & Beck, A.T. (1981). Depression, hopelessness, and suicidal intent among heroin addicts. *International Journal of the Addictions, Apr*; 16 (3): 425-429.
30. Minkoff, K., Bergman, E., Beck, A.T., & Beck, R. (1973). Hopelessness, depression, and attempted suicide. *American Journal of Psychiatry, April*; 130 (4): 455-459.
31. Petrie, K., Chamberlain, K. (1983). Hopelessness and social desirability as moderator variables in predicting suicidal behavior. *Journal of Consulting and Clinical Psychology, Aug*; 51 (4): 485. DOI: 10.1037//0022-006x.51.4.485
32. Beck, A.T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: the Scale for Suicide Ideation. *Journal of consulting and clinical psychology, Apr*; 47 (2): 343. DOI: 10.1037/0022-006X.47.2.343
33. Wetzell, R.D., Margulies, T., Davis, R., & Karam, E. (1980). Hopelessness, depression, and suicide intent. *The Journal of Clinical Psychiatry, May*.
34. Choi, J.Y., & Rhee, M.K. (2016). Effects of Gratitude, Emotion Dysregulation, Depression on Suicidal Ideation among Incarcerated offenders. *Journal of Welfare for The Correction, 42*: 157-181.
35. Watkins, P.C., Grimm, D.L., & Hailu, L. (1998). Counting your blessings: Grateful individuals recall more positive memories. *Paper presented at the 11th Annual Convention of the American Psychological Society, Denver, CO, USA. Jun*.
36. Fredrickson, B.L., Tugade, M.M., Waugh, C.E., & Larkin, G.R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology, Feb*; 84 (2): 365.
37. Watkins, P.C. (2004). *Gratitude and subjective well-being*. In: Emmons RA, McCullough ME. The psychology of Gratitude. New York: Oxford University Press, Feb; 167.
38. Wood, A.M., Joseph, S., & Linley, P.A. (2007). Coping style as a psychological resource of grateful people. *Journal of social and clinical psychology, 26* (9): 1076-1093. DOI: 10.1521/jscp.2007.26.9.1076
39. Choi, H.K. (1992). *The process of caregiving stress among Korean caregivers for elderly*. [Dissertation]. [USA]: Conel Univ.

40. Harlow, L.L., Newcomb, M.D., & Bentler, P.M. (1986). Depression, self-derogation, substance use, and suicidal ideation: Lack of purpose in life as a mediational factor. *Journal of clinical psychology, Jan; 42 (1): 5-21*. DOI: 10.1002/1097-4679(198601)42:1<5::AID-JCLP2270420102>3.0.CO;2-9
41. Kim, H.S. (2002). Articles : A Study on Epistemology of Korean Elder`s Suicidal Thought. *Journal of the Korea Gerontological Society, Apr; 22 (1): 159-172*.
42. McCullough, M.E., Tsang, J.A., & Emmons, R.A. (2004). Gratitude in intermediate affective terrain: links of grateful moods to individual differences and daily emotional experience. *Journal of Personality and Social Psychology, Feb; 86 (2): 295*. DOI: 10.1037/0022-3514.86.2.295
43. Kwon, S.J., Kin, K.H., & Lee, H.S. (2006). Validation of the Korean Version of Gratitude Questionnaire. *The Korean Journal of Counseling and Psychotherapy, 11 (1): 177-190*.
44. Koo, J.S., & Seo, E.K. (2011). A Concise Measure of Subjective Well-Being(COMOSWB): Scale Development and Validation. *Korean Journal of Social and Personality Psychology, 25 (1): 96-114*.
45. Hayes, A.F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford Publications. May.
46. Park, B.K. (2007). Factors Associated With Adolescents' Suicidal Ideation: Focus on Self-Esteem and Depression as Mediators. *Korean Journal of Human Ecology, Jun; 16 (3): 505-22*. DOI: 10.5934/KJHE.2007.16.3.505
47. Kim, H.S., Song, M.K., & Kim, C.S. (2012). Moderating Model of Gratitude and Social Support on the Relationship between Happiness and Psychological Characteristics in Adolescents. *The Korean journal of health psychology, Mar; 17 (1): 253-270*.
48. Wood, A.M., Maltby, J., Gillett R., Linley, P.A, & Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in personality, Aug; 42 (4): 854-871*. DOI: 10.1016/j.jrp.2007.11.003

Information about the authors

Eun Mi Shin

(South Korea, Seosan city)

Doctor of Counseling, Academic and Research Professor

Department of Child and Adolescent Counseling and Psychology

Hanseon University

E-mail: smslovess@naver.com

ORCID ID: 0000-0003-0526-0920

Scopus ID: smslovess@naver.com

Researcher ID: smslovess@naver.com

Chang Seek Lee

(South Korea, Seosan city)

Doctor of Philosophy, Professor, Department of Health, Counseling and Welfare

Hanseon University

E-mail: lee1246@hanmail.net

ORCID ID: 0000-0002-9222-1953

Scopus ID: lee1246@hanmail.net

Researcher ID: lee1246@hanmail.net