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The dual mediating effect of mindfulness and hope between gratitude and happiness of high school students in Korea: the moderated mediation effect of the growth mindset

Introduction. In Korea, high school students are very low in happiness because they possess many worries about better university entrance and career development. The purpose of this study was to focus on increasing happiness by examining whether the growth mindset moderates the dual mediating effects of mindfulness and hope between gratitude and happiness.

Study participants and methods. The participants of this research were male (50.6%) and female (49.4%) among 435 high school students, and 86.2% of the participants lived in small and medium-sized cities, Dong and Eup. As for parental occupations, sales, service, and production jobs accounted for the most, at 32.2%. The household income level was medium for 51.0% of the participants, and 64.1% had dual-income parents. The SPSS Win. 25 and the PROCESS macro 3.5. were used for data analysis. Descriptive statistical analysis, reliability analysis, mean comparison analysis, and moderated mediation effect analysis were conducted.

Results. First, there was significant positive correlation between all of the variables. Gratitude and happiness had the highest correlation coefficient ($r=.494$, $p<.01$), followed by mindfulness and happiness ($r=.452$, $p<.01$), and then gratitude and happiness ($r=.451$, $p<.01$). Second, the growth mindset moderates the relationship between gratitude and mindfulness. Third, the growth mindset played a moderated mediating role in the path of gratitude → mindfulness → happiness in both the M and M+SD conditions. Fourth, the growth mindset played a moderated mediating role in the path of gratitude → hope → happiness. Fifth, the growth mindset played a moderated mediating role in the path of gratitude → mindfulness → hope → happiness in M and M+SD conditions.

Practical significance. These results will contribute to developing a model to increase happiness by using growth mindset in high school students.

Keywords: mindfulness, hope, gratitude, happiness, growth mindset

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Introduction

High school students in Korea have a relatively low sense of happiness compared to that of students in other countries. The reason for this stems from the fact that high school students in Korea are under enormous pressure to enter a good university and make decisions about their own career, and therefore carry a higher psychological burden than students of other countries.

On the other hand, many studies have been done to promote happiness. To identify variables related to happiness, studies on the relationship between gratitude and happiness [1], mindfulness and happiness [2], hope and happiness [3], growth mindset and happiness [4] have been conducted. But these studies are limited to only identifying the variables that directly affect happiness, and studies on the various roles of these variables which promote happiness have not been conducted. According to previous studies, the role of the growth mindset as a moderating variable [5], and mindfulness and hope as mediating variables [6; 3] and how they affect happiness, have all been studied. Therefore, it is necessary to verify an integrated model that can enhance the happiness of high school students based on the findings from these previous studies. We need to develop an integrated model that can promote happiness by combining a growth mindset, mindfulness, and hope.

Therefore, this study proposed a way to improve the happiness by examining whether the growth mindset moderates the dual mediating effects of mindfulness and hope between gratitude and happiness for high school students who possess many worries about university entrance results and career development.

The research questions to achieve this purpose are set as the following. First, what is the correlation between gratitude, growth mindset, mindfulness, hope, and happiness? Second, does the growth mindset moderate the relationship between gratitude and mindfulness? Third, does the growth mindset moderate the mediating effect of gratitude on happiness through mindfulness and hope?

Theoretical Background

1. The Relationship between gratitude and happiness

Happiness is an overarching and integrated judgment on all aspects of life, and is an overall evaluation of one's quality of life based on the specific criteria one has chosen [7]. Additionally, happiness is often termed as life satisfaction, having positive emotions, and having relatively no negative emotions [8].

Such happiness was studied as a variable that has a positive effect in a variety of fields. That is, it has been reported that happiness affects marriage [9], income stability [10], outstanding mental health [11], and longevity [12].

One of the variables that affects happiness is gratitude. Tsang [13] defined gratitude as a generalized tendency to recognize the goodwill given by others and to respond with positive emotions from positive experiences and results that have been obtained. Therefore, gratitude is not merely an emotion, but a profound and complex phenomenon that plays a key role in human happiness, and is considered one of the few phenomena that can noticeably change a person's life [14].

Gratitude has been reported to have a positive effect on happiness. As people with a high level of gratitude have a high attribution tendency, it is known that they have the ability to find positive attributes and reinterpret them in a positive way, even in situations that are easy to interpret negatively [15]. Emmons and McCullough [16] also reported that those who exhibit higher levels of gratitude have higher positive emotions and higher life satisfaction than those who do not.

2. Mediating roles of mindfulness and hope

On the other hand, the mediating role of mindfulness and hope can be inferred within the relationship between gratitude and happiness. First, mindfulness is a translation of the Pali word *sati*, and it is about attention and awareness, which are universal abilities inherent within humans. Mindfulness is paying attention in a particular way, especially intentionally, to the present moment, and focusing on practicing non-judgmental attention [17].

Mindfulness originated in Buddhism, but has been further developed, as it is now fused with psychology and pedagogy. In particular, as American psychologist Langer established the theory of mindfulness [18], mindfulness was activated through specific programs located in the West rather than in the East. That is, mindfulness-based stress reduction training (MBSR) programs [19], mindfulness-based psychotherapy, Acceptance Commitment Therapy (ACT) [20], among other programs, have all been developed and reported to be effective in reducing stress and relieving negative emotions.

Hope is defined as a positive expectation for the achievement of a goal [21]. Such hope began to be systematically studied by Snyder et al. [22], who defined hope as a positive motivational state of thinking within which successful pathways and agencies are interactively organized [23]. Additionally, it was stated that the components of hope include the setting of actionable goals, exploring pathways thinking, which is an actionable method to achieve the goal, and having agency-oriented thinking, which is the motivation to continuously practice these methods [24].

People with high hope actively face challenges, focus on success rather than failure, perceive a high level of potential for goal achievement, and maintain a positive emotional state. On the other hand, people with low hope levels do not necessarily perform at their best, focus on failure, pay attention to the possibility of failure, and maintain a negative emotional state [25]. Therefore, hope is a positive quality that holds important meaning for individuals and society in the setting and realization of better goals [24].

These mediating factors of mindfulness and hope have been identified in many studies as acting as mediating variables. In other words, there is a study which reveals how gratitude affects mindfulness [26] and that mindfulness in turn affects happiness [27], thereby indicating that mindfulness plays a mediating role in the relationship between gratitude and happiness. Additionally, there is a study revealing how gratitude affects hope [3] and how hope affects happiness [28]. Therefore, it has been shown that mindfulness and hope have mediating effects in the link between gratitude and happiness, and it is necessary to verify the nature of these mediating effects in high school students.

3. Moderating roles of growth mindset

Bandura and Dweck [29] treated the tacit theory of intelligence, and divided them into two types based on their inherent belief in the variability of intelligence. One is the entity theory, which believes that intelligence is an innate, fixed ability that does not change with any effort. Incremental theory, on the other hand, refers to the belief that intelligence has

variable properties and can be improved. Dweck [4] renamed the entity theory as a fixed mindset and the growth mindset as a growth mindset. In other words, a growth mindset refers to the belief that people can change their intelligence and talents with concentrated effort, or the belief that a fixed mindset cannot be changed [30].

People with a high growth mindset and people with a high fixed mindset respond differently to a variety of situations [4]. People with a high growth mindset tend to be willing to accept challenges, but people with a high fixed mindset tend to avoid challenges. A person with a high growth mindset sees the giving of effort as a path towards mastery, while a person with a high fixed mindset perceives the giving of effort as a futile task.

On the other hand, according to previous research, the relationship with authentic leadership and organizational effectiveness differs according to the growth mindset [5], and the relationship between stress and life satisfaction also differs depending on whether there is the presence of a growth mindset [31]. It was reported that the growth mindset plays a moderating role in the relationship of various variables. Therefore, it is predicted that the effect of gratitude on mindfulness will differ for people with a high growth mindset and people with a low growth mindset. Furthermore, the purpose of this study is to examine whether the paths of gratitude → mindfulness → happiness, gratitude → hope → happiness, and gratitude → mindfulness → hope → happiness also differ depending on the growth mindset, with a specific focus on high school students.

Methods

1. Research model

Based on previous studies, a research model was established in which gratitude plays a moderated mediation role in the path of gratitude → mindfulness → happiness, the path of gratitude → hope → happiness, and the path of gratitude → mindfulness → hope → happiness, as shown in Figure 1.

Figure 1 Research model

2. Research subject and data collection method

The study areas were purposively selected as cities S and D in Korea's Chungnam province. In terms of the specific high school students surveyed, 4 high schools were purposively selected from each of S and D cities while also taking into consideration the male and female ratio, and the questionnaire was distributed to a total of 600 students. 435 copies were used for the final analysis, excluding the unreported and insincere questionnaires.

The survey utilized a process by which the homeroom teacher explained the purpose of the survey to the students, and after obtaining their consents, the questionnaire was distributed and retrieved after completion. Prior to the survey, the survey received IRB approval (HS21-03-03).

The subjects of the survey were male (50.6%) and female (49.4%), and the largest number of residences were in small and medium-sized cities, Dong and Eup (86.2%). As for parental occupations, sales, service and production jobs accounted for the most, at 32.2%. The household income level was average for 51.0% of the participants, followed by enough at 31.3% of the participants. Additionally, as to whether or not the parents were dual-income, 64.1% of the participants responded that they had dual-income parents, accounting for more than half of the participants.

3. Investigation tool

3.1. Gratitude

For the gratitude variable, we used the Korean version of the gratitude scale (K-GQ-6), which was adapted from the gratitude questionnaire (CQ-6) that was developed by McCullough et al. [32]. This scale consists of 6 items, such as, "I have many things to be grateful for in my life." Each item is measured with a 5-points Likert scale, and a higher score indicates higher gratitude. The reliability of the Cronbach's α of the gratitude variable was .830.

3.2. Growth mindset

We used the growth mindset scale developed by Dweck [4], and then divided it into sub-factors of intelligence and personality. In other words, it consists of a total of 8 items with 4 items related to a growth mindset about intelligence, such as, "human intelligence (IQ) is an innate characteristic that cannot be changed (reverse calculation)," and with 4 items of a growth mindset about personality such as, "People have different personalities, but anyone can change their personalities." Each item is measured on a 5-point Likert scale, and a higher score indicates a higher growth mindset. The reliability of the growth mindset was Cronbach α value of .753.

3.3. Mindfulness

For mindfulness, we used a scale developed by Park [33], which was developed to measure the degree of immediate present awareness, attention, non-judgmental acceptance, and decentralized attention to internal and external experiences. This scale consists of 20 items such as, "It is difficult to concentrate on one task or work (reverse calculation items)." Each item is measured on a 5-point Likert scale, and a higher score indicates higher mindfulness. The reliability of the mindfulness variable's Cronbach α value was as high as .900.

3.4. Hope

To measure hope, we used the Korean version of the Hope Scale (K-DHS), which was adapted and validated by Choi et al. [34], which was originally developed by Snyder et al. [22]. The hope scale consists of four items, including agency thinking, which measures whether or not goals are set, such as, "I pursue my goals enthusiastically," and pathway thinking, which measures whether or not there are ways to reach a goal, such as, "There are many ways to solve problems." The items are measured on a 5-point Likert scale, and the higher the score, the higher the level of hope. Hope's reliability Cronbach α value was .862.

3.5. Happiness

For happiness, the shortened happiness scale (COMOSWB) developed and validated by Seo and Koo [35] was used. This scale consists of 3 items measuring personal, relational, and group satisfaction, 3 items measuring positive emotion, 3 items measuring negative

emotion, therefore consisting of 9 items in total. Items measuring satisfaction were measured on a 7-point Likert scale, and items measuring positive and negative emotions were measured on a 5-point Likert scale. A higher score indicated higher happiness. The Cronbach α value of happiness reliability was .852.

4. Data Analysis

In this study, SPSS PC+ Win. Ver. 25.0 and SPSS PROCESS macro Ver. 3.5 were used for analysis. For statistical techniques, frequency analysis, reliability analysis, and Pearson's correlation analysis were all applied. For the analysis of moderating mediating effects, model 83 of the SPSS PROCESS macro was used, and the confidence level was 95%, and the number of bootstrap samples was set at 5,000. The conditions for confirming the conditional effect were set to M and $M \pm SD$, and the independent and moderating variables were analyzed after centering the mean.

Results

1. Correlation and descriptive statistics

As shown in Table 1, there was significant positive correlation between all of the variables as shown in the results of the Pearson correlation analysis. Gratitude and happiness had the highest correlation coefficient ($r=.494$, $p<.01$), followed by mindfulness and happiness ($r=.452$, $p<.01$), and then gratitude and happiness ($r=.451$, $p<.01$).

As a result of frequency analysis, the highest happiness of high school students was measured at 4.3436, and gratitude, growth mindset, mindfulness, and hope all exceeded the median value of 3 points.

Table 1

Correlation analysis and descriptive statistics

	Gratitude	Growth mindset	Mindfulness	Hope	Happiness
Gratitude	1				
Growth mindset	.356**	1			
Mindfulness	.188**	.125**	1		
Hope	.451**	.236**	.205**	1	
Happiness	.494**	.144**	.452**	.360**	1
M	3.5613	3.3195	3.1387	3.367	4.3436
SD	0.73372	0.61035	0.60252	0.63495	1.08364

** $p<.01$

2. Moderated mediating effect of a growth mindset

Model No. 83 of the SPSS PROCESS macro proposed by Hayes [36] was used to investigate whether the growth mindset of high school students plays a moderated mediation role in the pathway of gratitude $\rightarrow$ mindfulness $\rightarrow$ happiness, gratitude $\rightarrow$ hope $\rightarrow$ happiness, and gratitude $\rightarrow$ mindfulness $\rightarrow$ hope $\rightarrow$ happiness. The results are presented in Table 2 and Figure 2.

First, as a result of analyzing whether the growth mindset moderates the relationship between gratitude and mindfulness, the effect of the interaction term between gratitude

and growth mindset on mindfulness was measured at .1112 ($p < .05$), which was statistically significant, and therefore indicated the presence of a moderating effect. That is, the growth mindset showed a moderating effect by increasing the positive effect of gratitude on mindfulness. As shown in Figure 2, high school students with a high growth mindset showed a steeper increase in mindfulness when gratitude increased, compared to high school students with a low growth mindset. Additionally, when looking at the conditional effect, the effect of gratitude on mindfulness in the growth mindset M and M+SD conditions was significant. Therefore, the moderating effect was verified in the condition above on the average value of the growth mindset.

Next, to verify the moderated mediating effect, the conditional and non-conditional indirect effects of the growth mindset were analyzed. As a result of the conditional indirect effect analysis on the path of gratitude $\rightarrow$ mindfulness $\rightarrow$ happiness, the growth mindset moderately mediated the path of gratitude $\rightarrow$ mindfulness $\rightarrow$ happiness in both the M and M+SD conditions. Additionally, as a result of the analysis of non-conditional indirect effects on the path of gratitude $\rightarrow$ hope $\rightarrow$ happiness, the growth mindset moderately mediated gratitude $\rightarrow$ hope $\rightarrow$ happiness. Finally, as a result of analyzing the conditional indirect effect of the growth mindset on the path of gratitude $\rightarrow$ mindfulness $\rightarrow$ hope $\rightarrow$ happiness, the growth mindset moderately mediated the path of gratitude $\rightarrow$ mindfulness $\rightarrow$ hope $\rightarrow$ happiness in M and M+SD conditions. Therefore, the growth mindset played a role in raising the positive effect of gratitude on happiness via mindfulness and hope.

Table 2

The moderated mediating effect of a growth mindset

Variables	Coeffect	SE	t-value	p	LLCI*	ULCI**
Mediating variable model (DV: Mindfulness)						
Constant	3.1211	.0294	106.1379	.0000	3.0633	3.1789
Gratitude	.1263	.0414	3.0486	.0024	.0449	.2078
Growth mindset	.0616	.0496	1.2417	.2150	-.0359	.1592
Gratitude x Growth mindset	.1112	.0511	2.1740	.0302	.0107	.2117
Conditional effects of the gratitude at values of the growth mindset:						
Growth mindset	Effect	se	t-value	p	LLCI*	ULCI**
-.6104	.0585	.0542	1.0790	.2812	-.0480	.1650
.0000	.1263	.0414	3.0486	.0024	.0449	.2078
.6104	.1942	.0495	3.9261	.0001	.0970	.2914
Mediating variable model (DV: Hope)						
Constant	2.9536	.1458	20.2577	.0000	2.6670	3.2401
Gratitude	.3695	.0375	9.8579	.0000	.2959	.4432
Mindfulness	.1317	.0456	2.8852	.0041	.0420	.2214
Dependent variable model (DV: Happiness)						
Constant	1.6445	.3075	5.3475	.0000	1.0400	2.2489
Gratitude	.5517	.0627	8.8041	.0000	.4286	.6749
Mindfulness	.6429	.0696	9.2357	.0000	.5061	.7797
Hope	.2023	.0727	2.7873	.0056	.0595	.3451

Direct effect of gratitude on happiness:					
Effect	se	t-value	p	LLCI*	ULCI**
.5517	.0627	8.8041	.0000	.4286	.6749
Conditional and unconditional indirect effects of gratitude on happiness:					
Conditional indirect effect: Gratitude → Mindfulness → Happiness					
Growth mindset	Effect		Bootse	BootLLCI*	BootULCI**
-.6104	.0376		.0358	-.0304	.1098
.0000	.0812		.0293	.0255	.1410
.6104	.1249		.0415	.0485	.2119
Unconditional indirect effect: Gratitude → Hope → Happiness					
Effect	Bootse		BootLLCI*		BootULCI**
.0748	.0283		.0217		.1321
Conditional indirect effect: Gratitude → Mindfulness → Hope → Happiness					
Growth mindset	Effect		Bootse	BootLLCI*	BootULCI**
-.6104	.0016		.0018	-.0014	.0059
.0000	.0034		.0023	.0002	.0091
.6104	.0052		.0036	.0004	.0144

*LLCI = The lower bound of the bootstrap within the 95% confidence interval

**ULCI = The upper bound of the bootstrap within the 95% confidence interval

Figure 2 The moderating effect of a growth mindset on the relationship between gratitude and mindfulness

Discussion and Conclusion

The discussion based on the results of the study is as follows.

First, there was a significant positive correlation among all variables of gratitude, growth mindset, mindfulness, hope, and happiness. These results were in line with the previously-found positive effects of gratitude on happiness [16], the positive effects of mindfulness on happiness [2], and the positive correlations between gratitude and hope [31]. The positive and significant correlations of gratitude, growth mindset, mindfulness, hope, and happiness therefore provided an appropriate conclusion.

Second, the growth mindset moderated the relationship between gratitude and mindfulness. These results are inferred such that the growth mindset plays a moderating role in previous studies [3; 5] and the role of this growth mindset is similar. Therefore, the effect of gratitude on mindfulness was different between people with a high and low growth mindset, and so the moderated effect of a growth mindset was verified. Based on these results, it is necessary to develop and apply a practical program to enhance the growth mindset of high school students in order to enhance mindfulness and further improve their happiness.

Third, it was further analyzed whether a growth mindset played a moderated mediating role in the path of gratitude → mindfulness → happiness, the path of gratitude → hope → happiness, and the path of gratitude → mindfulness → hope → happiness. This analysis is meaningful, as it is an analysis that has rarely been studied in previous studies. As a result of this analysis, it was verified that the growth mindset moderately mediates the above three paths. In particular, according to the conditions of the growth mindset, the moderated mediating effect was not significant when the growth mindset was low (M-SD), but was significant when the growth mindset was M or higher. In addition, the growth mindset had a moderating effect on increasing the relationship between the variables. It is suggested that various methods or programs which can enhance the happiness of high school students be activated by utilizing the strengths of this growth mindset.

The limitations of this study are: First, this study focused on the analysis of relationships between variables. That is, as a result of the analysis, we found that the presence of a growth mindset, mindfulness, and hope, all played a role in strengthening the relationship between gratitude and happiness. However, research on the timing or method of specific interventions in growth mindset, mindfulness, and hope during counseling and its effects was not conducted, so further research is therefore necessary. Second, this study did not pay attention to the practical effects of the growth mindset, mindfulness, and hope variables. In order to verify their effectiveness, it is necessary to develop a program of growth mindset, mindfulness, and hope, which was mentioned in the discussion, and to verify their effectiveness.

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REFERENCES

1. Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American psychologist*, 60(5), 410.
2. Han, J. K. (2008). The Mediation Effect of the Happiness Factor in the Relationship between Mindfulness Levels and Quality of Life. *Korean Journal of Social and Personality Psychology: Counseling and Therapy*. 20(3), 735-751.
3. Lee, C. S. & Park, J. Y. (2016). The Effects of Acculturative and Family-Related Stress on the Well-being of Immigrant Women in Korea: The Mediating Effect of Hope. *Indian Journal of Science and Technology*, 9(26), Indian Society for Education and Environment. DOI: 10.17485.
4. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House Digital, Inc.
5. Lee, C. S., Jung, M., & Lee, G. (2018). The Moderated Effect of Growth Mindset on the Relationship between Authentic Leadership and Organizational Effectiveness. *International Journal of Pure and Applied Mathematics*, 118(19), 415-426.

6. Wood, A. M., Joseph, S., & Maltby, J. (2009). Gratitude predicts psychological well-being above the Big Five facets. *Personality and Individual differences*, 46(4), 443-447.
7. Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social indicators research*, 5(1-4), 475-492.
8. Diener, E. (1984). Subjective well-being. *Psychological bulletin*, 95(3), 542.
9. Mastekaasa, A. (1994). Marital status, distress, and well-being: An international comparison. *Journal of Comparative Family Studies*, 25, 183-205.
10. Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research*, 57, 119-169.
11. 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*, 39(12), 994-999.
12. 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*, 80(5), 804.
13. Tsang, J. A. (2006). BRIEF REPORT Gratitude and prosocial behavior: An experimental test of gratitude. *Cognition & emotion*, 20(1), 138-148.
14. Emmons, R. A. (2007). Thanks!: How the new science of gratitude can make you happier. Houghton Mifflin Harcourt.
15. Tedeschi, R. G., & Calhoun, L. G. (2004). "Posttraumatic growth: Conceptual foundations and empirical evidence". *Psychological inquiry*, 15(1), 1-18.
16. Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. *Journal of personality and social psychology*, 84(2), 377.
17. Kabat-Zinn, J. (2011). Some reflections on the origins of MBSR, skillful means, and the trouble with maps. *Contemporary Buddhism*, 12(1), 281-306.
18. Langer, E. J., & Moldoveanu, M. (2000). Mindfulness research and the future. *Journal of social issues*, 56(1), 129-139.
19. Kabat-Zinn, J. (1990). *Full catastrophe living: The program of the stress reduction clinic at the University of Massachusetts Medical Center*.
20. Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011). Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour research and therapy*, 49(6-7), 389-398.
21. Stotland, E. (1969). *The psychology of hope*. Jossey-Bass.
22. Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of personality and social psychology*, 60(4), 570.
23. Snyder, C. R., Irving, L. M., & Anderson, J. (1991). Hope and health. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology*. Elmsford, NY: Pergamon Press.
24. Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams III, V. H., & Wiklund, C. (2002). Hope and academic success in college. *Journal of educational psychology*, 94(4), 820.
25. Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. New York: Free press.
26. Cho, S. L. & Kang, M. J. (2016). Influence of Service Employees' Grateful Disposition on Psychological Well-Being and Prosocial Behaviors: Focusing on the Mediating Role of Psychological Resources. *Marketing Research*, 31(1), 57-83. DOI: 10.15830/kmr.2016.31.1.57
27. Shim, J. E. & Yun, H. K. (2008). The Adaptation of Mindfulness on Counselor Education. *The Korean Psychological Association*. 13(2), 307-328.
28. Watkins, P. C. (2013). *Gratitude and the good life: Toward a psychology of appreciation*. Springer Science & Business Media.
29. Bandura, M., & Dweck, C. S. (1985). *The relationship of conceptions of intelligence and achievement goals to achievement-related cognition, affect and behavior*. Unpublished manuscript, Harvard University.
30. Fensterwald, J. (2015). *There's more to a growth mindset than assuming you have it*.
31. Ju, S. M., Kim, S. G., Kim, Y. S., & Lee, C. S. (2020). The effects of stress and self-esteem on life satisfaction of high school students: The moderated mediation model of growth mindset. *International Journal of Psychosocial Rehabilitation*, 24(7), 1753-1762.
32. McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of personality and social psychology*, 82(1), 112.
33. Park, S. H. (2006). Development of the mindfulness scale [dissertation]. [Seoul]: University of Catholic. <http://www.riss.kr/link?id=T11006098>
34. Choi, Y. H. Lee, H. K. & Lee, D. G. (2008). Validation of the Korean version of Snyder's dispositional hope Scale. *Korean Journal of Social and Personality Psychology*, 22(2), 1-16.
35. Seo, E. K. & Koo, J. S. (2011). A Concise Measure of Subjective Well-Being (COMOSWB): Scale Development and Validation. *Korean Journal of Social and Personality Psychology*, 25(1), 96-114.
36. Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

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