



The Effect of Adolescents' Depression on Suicidal Ideation: Indirect Effects of Mindfulness and Gratitude and the Conditional Direct Effect of Self-Esteem

CH. S. LEE

ABSTRACT

Introduction. Globally, suicide ranks as the fourth leading cause of death, with adolescent suicide representing an increasingly critical issue. A rise in suicidal ideation often precedes actual suicide, and depression is one of the most significant predictors of such ideation. While numerous studies have examined the relationship between depression and suicidal ideation, the persistent rise in suicide rates indicates the need to explore new mechanisms underlying this association. *The present study aimed* to investigate the mediating effects of mindfulness and gratitude, as well as the conditional direct effect of self-esteem, on the relationship between depression and suicidal ideation among adolescents.

Study participants and methods. The participants were 609 middle and high school students in South Korea, selected through purposive sampling. Data were analyzed using SPSS PC+ Win. 25.0 and the PROCESS macro for SPSS (version 4.2). Frequency analysis, reliability analysis, and correlation analysis were conducted using SPSS, while Model 5 of the PROCESS macro was employed to examine indirect and conditional direct effects.

Results. First, correlation analysis revealed that depression was positively correlated with suicidal ideation, while it was negatively correlated with mindfulness, gratitude, and self-esteem. Moreover, mindfulness, gratitude, and self-esteem showed significant positive intercorrelations. Second, the mediating effect of mindfulness on the relationship between depression and suicidal ideation was significant ($B = -0.0430$, 95% CI $[-0.0886, -0.0010]$). The mediating effect of gratitude was also significant ($B = 0.0748$, 95% CI $[0.0380, 0.1137]$). These findings indicate that both mindfulness and gratitude buffer the effect of depression on suicidal ideation. Additionally, the interaction term between depression and self-esteem had a significant negative effect on suicidal ideation ($B = -0.1611$, $p < .001$), suggesting that self-esteem plays a moderating role in attenuating the impact of depression on suicidal ideation.

Practical significance. These findings will be used as protective factors to mitigate suicidal ideation among adolescents experiencing depression, with the goal of enhancing mindfulness, gratitude, and self-esteem.

KEYWORDS

depression, mindfulness, gratitude, suicidal ideation, self-esteem, indirect effect, conditional direct effect

For Citation: Lee, Ch. S. (2025). The Effect of Adolescents' Depression on Suicidal Ideation: Indirect Effects of Mindfulness and Gratitude and the Conditional Direct Effect of Self-Esteem. *Perspektivy nauki i obrazovania = Perspectives of Science and Education*, (6), 493–504. <https://doi.org/10.32744/pse.2025.6.32>

Received: 10 August 2025 | Approved: 02 September 2025 | Published: 31 December 2025



This is an open access article distributed under a Creative Commons Attribution-ShareAlike International License (CC-BY-SA 4.0) that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal

INTRODUCTION

Suicide is a leading global public health concern, particularly among adolescents and young adults. According to the World Health Organization [1], suicide is the fourth leading cause of death among individuals aged 15 to 29, and its ranking is even higher in low- and middle-income countries. Each year, approximately 700,000 people die by suicide, a figure that surpasses deaths from war or homicide. The World Mental Health Survey Initiative [1; 2] further reveals that over 12% of adolescents and young adults report lifetime suicidal ideation, with many progressing to suicide planning and attempts.

Gender differences in suicide-related behaviors are also well-documented. Although female adolescents and young women show higher rates of suicidal ideation and attempts, the actual suicide completion rate is notably higher among males. This gender paradox has been observed across various cultural contexts [1]. The COVID-19 pandemic has further intensified this crisis, negatively affecting adolescent mental health and increasing suicide risk. Consequently, international agencies, including WHO and UNICEF, have called for enhanced national strategies to support youth mental health [3].

In South Korea, the gravity of this issue is particularly pronounced. Suicide has remained the leading cause of death among individuals aged 9 to 24 for nine consecutive years since 2011. In 2023, the national suicide rate reached 27.3 per 100,000 population – an 8.5% increase from the previous year [4]. Moreover, 25.2% of middle and high school students reported experiencing depressive symptoms, with female students (30.7%) showing significantly higher prevalence than males (20.1%). Depression, stress, and hopelessness have been consistently identified as primary risk factors for suicidal ideation among Korean adolescents [5].

Despite growing awareness, existing research tends to examine single psychological factors in isolation. Few studies have comprehensively investigated how protective variables interact to mitigate the harmful impact of depression on suicidal ideation. Specifically, studies that simultaneously explore the mediating roles of mindfulness and gratitude disposition, along with the moderating role of self-esteem, remain scarce – particularly within adolescent populations.

This study addresses these gaps by adopting a multidimensional analytical framework. It aims to examine how mindfulness and gratitude disposition mediate the relationship between depression and suicidal ideation, and how self-esteem moderates this relationship. By doing so, the study seeks to identify practical and empirically grounded strategies to buffer against the detrimental effects of depression and reduce suicide risk among adolescents.

THEORETICAL BACKGROUND

1. The Relationship Between Depression and Suicidal Ideation

Suicidal ideation refers to thoughts about ending one's own life [6], and includes both vague and specific considerations of self-inflicted death regardless of whether a concrete plan is present [7]. In contrast, depression is characterized by a persistent low mood or sadness and a loss of interest or pleasure in most activities, often accompanied by cognitive and physical symptoms [8]. Depression is also defined as a syndrome involving negative perceptions of the self, the world, and the future—commonly referred to as the cognitive triad [9].

Previous studies have consistently identified depression as one of the most significant predictors of suicide and suicidal ideation. In a study involving 255 adolescents, depression showed the highest correlation with suicidal ideation, followed by stress and self-efficacy. It was reported that stress influenced suicidal ideation by mediating both self-efficacy and depression [10]. A study conducted with 359 older adults aged 65 or older residing in Seoul and the surrounding metropolitan area found that depression exerted the strongest influence on suicidal ideation. The more severe the depression, the higher the level of suicidal ideation. Additionally, stress from critical life events was positively associated with suicidal ideation, whereas family support showed a negative association [11]. Another study involving 1,110 adults with disabilities aged 19 and over found that financial hardship and social isolation significantly influenced suicidal ideation through the mediating role of depression. This result underscores the critical mediating role of depression in the pathway to suicidal ideation [12].

Taken together, these findings indicate that depression plays both a direct and indirect role in suicidal ideation. Therefore, it is essential to examine this relationship in greater depth and to explore possible intervention variables that can structurally moderate the influence of depression on suicidal ideation.

2. The Mediating Roles of Mindfulness and Gratitude

This study applied mindfulness and gratitude as potential mediators that could buffer the effect of depression on suicidal ideation. Mindfulness is defined as an accepting awareness of present experiences and encompasses awareness, present-moment attention, and acceptance [13]. It has also been described as a nonjudgmental and present-focused attitude [14]. Mindfulness emphasizes conscious attention to the present moment with an open and nonjudgmental stance, involving acceptance of emotions, thoughts, and experiences as they are [15].

Mindfulness entails the deliberate awareness of current experiences and the sustained attention to specific stimuli, which contributes to enhanced awareness and concentration [16]. It also involves observing one's emotions and thoughts without criticism or suppression [17]. Mindfulness can be cultivated through regular training such as meditation, which improves attentional focus and cognitive flexibility [18]. It has been shown to offer various mental health benefits, including stress reduction, improved neurological regulation, and the enhancement of positive emotions [19]. Thus, mindfulness is characterized by present-moment attention, nonjudgmental awareness, inner acceptance, and self-observation, and can be strengthened through meditative practices and training.

Several previous studies have explored the mediating role of mindfulness. For example, a study on patients with high suicide risk and depressive symptoms found that Mindfulness-Based Cognitive Therapy (MBCT) reduced the association between depressive symptoms and suicidal ideation, with decentering mediating this effect [20]. Another study on female university students revealed that mindfulness mediated the relationship between perceived stress and suicidal ideation, especially among those with high levels of depression [21]. Additionally, among adolescents aged 12 to 17, mindfulness was found to mediate the relationship between parental competence and suicidal ideation, thereby weakening the link between family environment and suicide risk [22].

Gratitude, as an emotional state, refers to a sense of thankfulness in response to benefits received from others or from transcendent sources [23]. It is understood as a combination of transient emotions and stable traits, and involves recognizing the positive aspects of life [24]. Gratitude can also be defined both as a momentary emotional response and as a dispositional tendency to appreciate and value benevolence [25]. Individuals high in gratitude tend to experience more positive emotions and greater life satisfaction, which may stem from the role of gratitude in reducing stress and enhancing psychological resilience [26].

Gratitude has also been shown to enhance trust and intimacy in interpersonal relationships. Expressing gratitude fosters mutual interaction and plays a critical role in maintaining cooperative relationships [27]. Moreover, individuals with high levels of gratitude demonstrate better self-control and are more likely to engage in health-promoting behaviors such as regular exercise and sleep, possibly because gratitude helps sustain long-term goals and inhibits impulsivity [28].

Several studies have examined the mediating role of gratitude in the relationship between depression and suicidal ideation. A study of Chinese adolescents found that gratitude mediated the relationship between childhood emotional abuse and adolescent suicidal ideation [29]. Another study reported that among high school students, gratitude and suicidal ideation served as dual mediators in the relationship between depression and subjective well-being, suggesting that gratitude reduces depressive symptoms and weakens suicidal ideation, thereby enhancing positive psychological states [30]. Similarly, research with late adolescents found that gratitude mediated the relationship between basic psychological needs satisfaction, depression, and suicidal ideation. Gratitude was shown to function as a psychological resource that buffers against suicidal ideation by strengthening positive mental capacities [31].

Although some research has investigated the mediating effects of mindfulness and gratitude in the relationship between depression and suicidal ideation, the number of such studies remains limited. Therefore, further in-depth exploration is warranted to clarify their roles and mechanisms within this framework.

3. The Moderating Role of Self-Esteem

Next, the moderating effect of self-esteem was examined. Self-esteem refers to the extent to which individuals evaluate their own worth and abilities positively, and it has been found to play a crucial role in shaping a positive self-image and is closely associated with psychological well-being [32]. It encompasses both global self-esteem—the overall evaluation of one’s value—and physical self-esteem—perceptions related to one’s body—which together significantly influence quality of life and psychological status [33]. Furthermore, self-esteem is a psychological trait that can be strengthened through social support and experiences of achievement, and it serves as an important source of motivation for academic and occupational success [34].

Individuals with high self-esteem tend to believe in their ability to achieve goals, trust their own judgments and decisions [35], and exhibit greater emotional stability under stress, which enhances their psychological resilience and increases the frequency of positive emotions [36]. Moreover, those with high self-esteem are more likely to maintain positive interpersonal relationships characterized by trust and cooperation, thereby contributing to greater perceived social support and relationship satisfaction [37]. These findings suggest that high self-esteem is associated with strengths in self-efficacy, psychological stability, and interpersonal functioning.

Although prior research has identified the moderating role of self-esteem in various psychological constructs, few studies have explored its moderating effect on the relationship between depression and suicidal ideation. Moreover, there is a notable gap in research combining the mediating effects of mindfulness and gratitude with the moderating role of self-esteem—particularly in the form of conditional direct effects. Therefore, the present study aims to investigate whether mindfulness and gratitude mediate the relationship between depression and suicidal ideation, and whether self-esteem serves as a moderator in this process.

RESEARCH METHODS

1. Research Model

To examine whether mindfulness and dispositional gratitude mediate the relationship between depression and suicidal ideation, and whether self-esteem moderates this relationship, Model 5 of the PROCESS macro for SPSS, as proposed by Hayes [38], was employed. This model is specifically designed to test indirect effects alongside conditional direct effects. The conceptual research model is presented in Figure 1. Additionally, gender and school level were included as covariates, given their potential influence on both the mediators and the outcome variable.

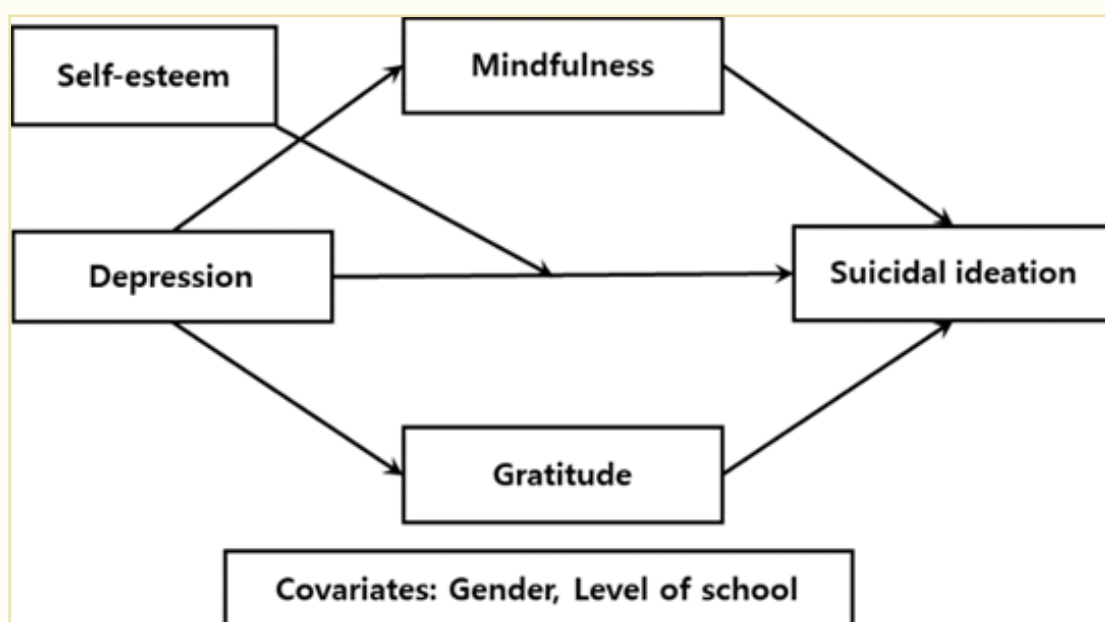


Figure 1 Conceptualized research model

2. Participants and Data Collection Methods

The survey for this study was conducted in the Chungnam (South Chungcheong) province of South Korea. A stratified sampling method was employed to select three middle schools and three high schools from three cities or counties within the region. Within each selected school, three classes were purposively sampled to ensure a balanced distribution by gender and grade level, resulting in a total of 650 students initially selected.

Data were collected through an offline, in-person survey. The researcher visited each school, explained the purpose of the study to the principals and homeroom teachers, and obtained their consent prior to data collection. The researcher then explained the purpose of the survey to the students and obtained written informed consent before distributing the questionnaires. Completed surveys were collected immediately after completion. As a token of appreciation, students who participated were given a gift worth approximately 5,000 KRW (about 4 USD). After excluding cases with insincere responses, data from 608 students were used in the final analysis.

The demographic characteristics of the participants were as follows: 58.9% were male and 41.1% were female. Regarding residential area, 80.7% lived in small or medium-sized cities, 17.2% in rural areas, and 2.1% in metropolitan areas. In terms of household income, 46.7% reported a middle-income level, and 35.7% reported slightly above-average income. The sample included 49.0% middle school students and 51.0% high school students.

3. Measurement Instruments

3.1. Depression

Depression was measured using a subscale of the Symptom Checklist-90 (SCL-90), adapted into Korean by Choi [39]. The scale consists of 10 items, and each item is rated on a 5-point Likert scale ranging from 1 ("Not at all true") to 5 ("Very true"), with higher scores indicating greater levels of depression. The reliability of the scale was high, with a Cronbach's alpha of .902.

3.2. Mindfulness

Mindfulness was assessed using the scale developed by Feldman et al. [40], designed to measure awareness, attention, and acceptance. The scale includes 12 items and each item was rated on a 5-point Likert scale, with higher scores reflecting higher levels of mindfulness. The Cronbach's alpha for the scale was .653, indicating an acceptable level of internal consistency.

3.3. Gratitude

Gratitude was measured using the Korean version of the Gratitude Questionnaire-6 (K-GQ-6), originally developed by McCullough et al. [41] and translated by Kwon et al. [42]. This scale includes 6 items and was rated on a 5-point Likert scale ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"), with higher scores indicating greater levels of gratitude. The reliability of the scale was satisfactory, with a Cronbach's alpha of .858.

3.4. Self-Esteem

Self-esteem was measured using Rosenberg's [43] Self-Esteem Scale, which consists of 10 items including both positively and negatively worded statements. Each item was rated on a 5-point Likert scale, with higher scores indicating higher levels of self-esteem. The scale demonstrated good reliability, with a Cronbach's alpha of .863.

3.5. Suicidal Ideation

Suicidal ideation was assessed using the scale developed by Harlow et al. [44], translated into Korean by Kim [45], and later employed by Kim and Lee [46]. The scale consists of 5 items and responses were recorded on a 5-point Likert scale from 1 ("Not at all true") to 5 ("Always true"), with higher scores indicating greater suicidal ideation. The reliability of the scale was high, with a Cronbach's alpha of .922.

3.6. Control Variables

Gender and school level (middle vs. high school) were included as covariates in the analysis.

4. Data analysis

Data analysis was conducted using SPSS PC+ Win. version 25.0 and the PROCESS macro for SPSS version 4.2. SPSS was used to perform frequency analysis, reliability analysis, and correlation analysis. The PROCESS macro (Model 5) was employed to test indirect and conditional direct effects.

The indirect effect and conditional direct effect were tested using the bootstrap method. All confidence intervals reported in the output were based on a 95% confidence level, and percentile bootstrap confidence intervals were generated using 5,000 bootstrap samples. In the conditional effect tables, the values of the moderator (W) were set at the mean and ± 1 standard deviation from the mean. Additionally, depression and self-esteem were mean-centered prior to analysis.

RESEARCH RESULTS

1. Correlations and Descriptive statistics

To examine the relationships among depression, self-esteem, mindfulness, gratitude, and suicidal ideation, Pearson's bivariate correlation analysis was conducted. The results are presented in Table 1.

Depression showed significant negative correlations with self-esteem ($r = -.726$, $p < .01$), mindfulness ($r = -.501$, $p < .01$), and gratitude ($r = -.403$, $p < .01$), while it was positively correlated with suicidal ideation ($r = .666$, $p < .01$). Self-esteem was positively correlated with mindfulness ($r = .541$, $p < .01$) and gratitude ($r = .519$, $p < .01$), but negatively correlated with suicidal ideation ($r = -.540$, $p < .01$). Mindfulness had a significant positive correlation with gratitude ($r = .423$, $p < .01$) and a significant negative correlation with suicidal ideation ($r = -.318$, $p < .01$). Gratitude also showed a significant negative correlation with suicidal ideation ($r = -.380$, $p < .01$).

Overall, the correlation coefficients among the variables were below .70, indicating no multicollinearity concerns.

To verify the assumption of normality, skewness and kurtosis values were examined. None of the variables exceeded the absolute threshold of 3 for skewness or 7 for kurtosis, indicating that all variables satisfied the criteria for a normal distribution [47].

Table 1

Correlations and Descriptive Statistics

	1	2	3	4	5
1. Depression	1				
2. Self-esteem	-.726**	1			
3. Mindfulness	-.501**	.541**	1		
4. Gratitude	-.403**	.519**	.423**	1	
5. Suicidal ideation	.666**	-.540**	-.318**	-.380**	1
M	2.5315	3.3996	3.1844	3.8406	1.8184
SD	.84622	.70207	.46939	.73831	.97161
Skewness	.378	-.234	.354	-.297	1.215
Kurtosis	.034	.048	1.133	-.521	.860
**p<.01					

2. Indirect effect and conditional direct effect

To examine whether mindfulness and gratitude mediate the relationship between depression and suicidal ideation, and whether self-esteem moderates this relationship, Model 5 of the PROCESS macro for SPSS. The main findings are presented in Figure 2, Table 2, Figure 3, and Table 3.

In the first mediation model, depression had a significant negative effect on mindfulness ($B = -0.2771$, $p < .001$), and mindfulness had a significant positive effect on suicidal ideation in the outcome model ($B = 0.1553$, $p < .001$), confirming the mediating effect of mindfulness.

In the second mediation model, depression had a significant negative effect on gratitude ($B = -0.3616$, $p < .001$), and gratitude had a significant negative effect on suicidal ideation in the outcome model ($B = -0.2070$, $p < .001$), confirming the mediating effect of gratitude.

In the outcome model, depression significantly predicted suicidal ideation ($B = 0.6564$, $p < .001$), whereas the moderator, self-esteem, did not have a significant main effect. However, the interaction term between depression and self-esteem had a significant negative effect on suicidal ideation ($B = -0.1611$, $p < .001$). These results indicate that self-esteem serves as a buffering variable that weakens the impact of depression on suicidal ideation.

Given the significance of the moderating effect, conditional effects were further examined. At three levels of self-esteem (M , $M \pm 1SD$), all conditional effects of depression on suicidal ideation were statistically significant. Furthermore, the magnitude of the effect decreased as the level of self-esteem increased, demonstrating a clear buffering effect.

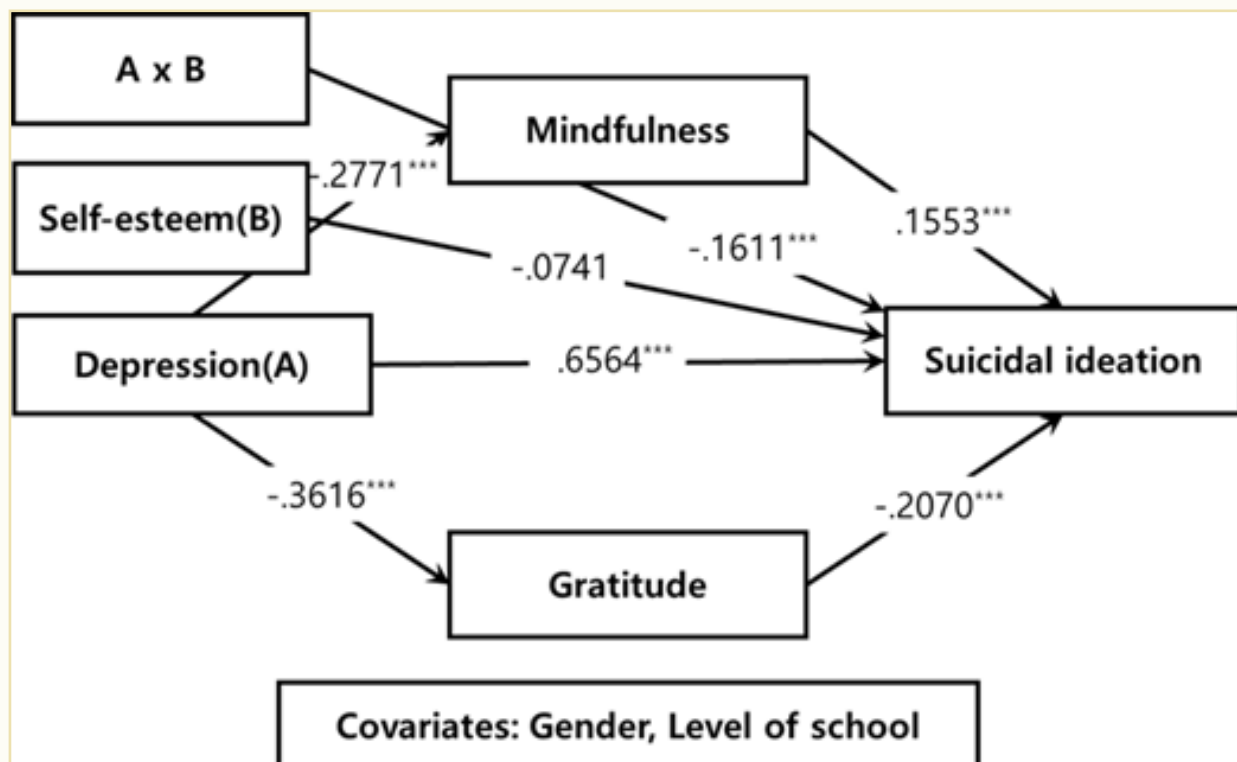


Figure 2 Statistical Model of the Conditional Direct Effect of Self-Esteem

Since the moderating effect of self-esteem was found to be statistically significant, a graphical representation was constructed to examine the nature of the interaction. The results indicated that as depression increased, suicidal ideation also increased; however, the slope of this relationship was less steep in the high self-esteem group compared to the low self-esteem group. This suggests that the strength of the association between depression and suicidal ideation varied depending on the level of self-esteem.

Table 2

Moderating effect of mindfulness

Classification		Mediating variable model (DV: Mindfulness)			Mediating variable model (DV: Gratitude)			Dependent variable model (DV: Suicidal ideation)		
		Coeffect	SE	t value	Coeffect	SE	t value	Coeffect	SE	t value
Constant	3.307	.0642	51.5441***	3.807	.107	35.5908***	2.0186	.2961	6.8178***	
IV	Depression	-.2771	.0196	-14.1448***	-.3616	.0327	-11.0735***	.6564	.0506	12.9628***
Mediator	Mindfulness			.1553	.0755	2.0582*				
Mediator	Gratitude			-.2070	.0467	-4.4297***				
Moderator	Self-esteem			-.0741	.0659	-1.1251				
Interaction item	Depression× Self-esteem			-.1611	.0384	-4.192***				
Covariates	Gender	-.0497	.0345	-1.4426	.1063	.0574	1.8500	.1192	.0604	1.9759*
	Level of school	-.0341	.0337	-1.0112	-.0761	.0562	-1.3537	-.091	.0589	-1.5459
Model summary	R ²	.2630	.1731	.4833						
	F	71.8577***	42.1490***	80.1757***						

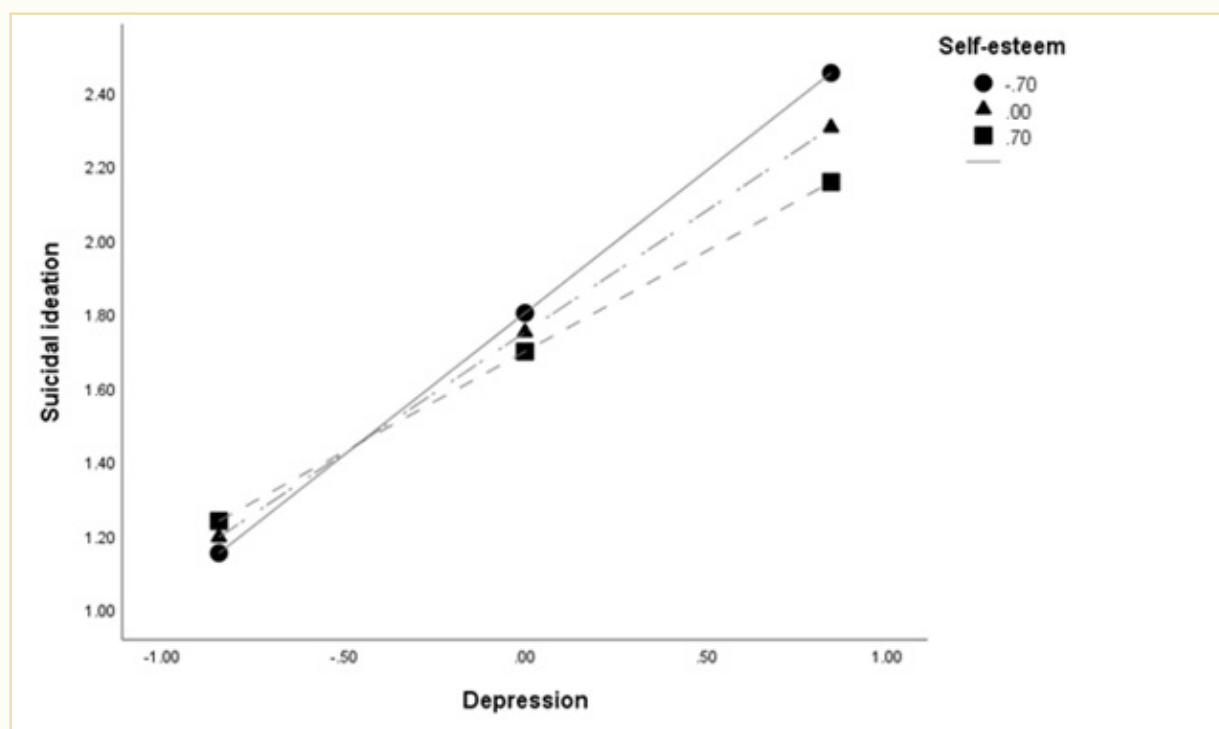
Conditional effects of the focal predictor at values of the moderator

Self-esteem	Effect(B)	se	t value	LLCI*	ULCI**
-.7025(M-1SD)	.7696	.0553	13.9202***	.661	.8781
.0000(M)	.6564	.0506	12.9628***	.5569	.7558
.7025(M+1SD)	.5432	.0594	9.1432***	.4265	.6599

* $p < .05$, ** $p < .01$, *** $p < .001$

*LLCI = Lower limit of the 95% percentile bootstrap confidence interval

**ULCI = Upper limit of the 95% percentile bootstrap confidence interval

**Figure 3** Moderating Effect of Self-Esteem

The results of the conditional direct and indirect effect analyses are presented in Table 3. The findings for the conditional direct effects were consistent with those reported in the previous table. Specifically, at the three levels of self-esteem (M , $M \pm 1SD$), all conditional direct effects were statistically significant. As self-esteem increased, the magnitude of the direct effect decreased, indicating a buffering effect.

In addition, the indirect effects of mindfulness and gratitude were analyzed. The indirect effect of mindfulness was significant ($B = -0.0430$), as the 95% bootstrap confidence interval did not include zero (-0.0886 to -0.0010). Similarly, the indirect effect of gratitude was also significant ($B = 0.0748$), with a 95% bootstrap confidence interval ranging from 0.0380 to 0.1137 , which also excluded zero. These results indicate that both mindfulness and gratitude serve as mediators that attenuate the effect of depression on suicidal ideation.

Table 3

Conditional Direct and Indirect Effects

Conditional direct effects and indirect of X on Y				
Self-esteem	Effect(B)	se	LLCI*	ULCI**
-.7025(M-1SD)	.7696	.0553	.6610	.8781
.0000(M)	.6564	.0506	.5569	.7558
.7025(M+1SD)	.5432	.0594	.4265	.6599
Indirect effect(s) of X on Y				
	Effect(B)	BootSE	BootLLCI*	BootULCI**
Total	.0318	.0258	-.0196	.0829
Mindfulness	-.0430	.0223	-.0886	-.0010
Gratitude	.0748	.0194	.0380	.1137
*LLCI = Lower limit of the 95% bootstrap confidence interval				
**ULCI = Upper limit of the 95% bootstrap confidence interval				

DISCUSSION AND CONCLUSION

1. Discussion

The findings of this study can be discussed as follows.

First, correlation analysis was conducted to examine the relationships among depression, self-esteem, mindfulness, gratitude, and suicidal ideation. Depression was found to have significant negative correlations with self-esteem, mindfulness, and gratitude, and a significant positive correlation with suicidal ideation. These results suggest that depression significantly predicts suicidal ideation, consistent with prior research showing that individuals with higher levels of depression are more vulnerable to suicidal thoughts [11]. Additionally, self-esteem was positively correlated with mindfulness and gratitude, and negatively correlated with suicidal ideation, supporting the notion that higher self-esteem functions as a psychological protective factor against suicidal ideation [43].

Mindfulness also showed a significant positive correlation with gratitude and a negative correlation with suicidal ideation, indicating that the ability to respond flexibly and non-judgmentally to one's present emotions and thoughts may buffer against suicidal ideation [20]. Gratitude was significantly negatively correlated with suicidal ideation, suggesting that this positive emotional trait, which enhances life meaning and positive affect, may serve as a preventive factor against suicidal thinking [26].

Second, this study examined the mediating effects of mindfulness and gratitude and the moderating effect of self-esteem on the relationship between depression and suicidal ideation. The results indicated that both mindfulness and gratitude mediated the relationship between depression and suicidal ideation, while self-esteem served as a moderator. Specifically, mindfulness and gratitude helped offset the effect of depression on suicidal ideation, while self-esteem weakened this effect.

Mindfulness allows individuals to observe their emotions and thoughts in the present moment with acceptance and without judgment, functioning as a mechanism that regulates negative automatic thoughts associated with depression through cognitive decentering [20]. This mechanism is particularly important in preventing depressive states from directly leading to suicidal ideation by promoting cognitive flexibility. Gratitude, on the other hand, reflects a tendency to recognize and appreciate the positive aspects of life, serving as an emotional resource that buffers against hopelessness and social disconnection—two key precursors of depression and suicidal ideation [26].

Moreover, self-esteem moderated the relationship between depression and suicidal ideation. When self-esteem was high, the negative impact of depression on suicidal ideation was significantly attenuated, indicating that self-esteem acts as a psychological buffer by sustaining individuals' sense of self-worth and agency during crises [43]. These results support the diathesis-stress model, which posits that the causal pathway between depression and suicidal ideation may differ depending on levels of psychological vulnerability such as self-esteem [37].

Taken together, these findings underscore the importance of an integrated approach that incorporates multiple positive psychological resources in suicide prevention interventions. In particular, interventions that target the emotional mediating functions of mindfulness and gratitude, as well as the buffering role of self-esteem, may offer more effective and tailored strategies for reducing suicidal ideation.

2. Conclusion

This study applied the theoretical framework of positive psychology to the field of suicide prevention, aiming to understand the pathway from depression to suicidal ideation through the lens of emotional resources and self-concept. This integrative approach is expected to contribute meaningfully to the promotion of adolescent mental health in both counseling settings and educational interventions.

Limitations and Directions for Future Research are as follows.

First, since this study was based on a cross-sectional survey conducted with middle and high school students in South Korea, causal inferences among the variables are limited. Future research should adopt longitudinal designs to more accurately examine the temporal causal relationships among depression, mindfulness, gratitude, self-esteem, and suicidal ideation.

Second, as the sample was drawn through non-probability sampling from a specific region, the generalizability of the results may be limited. Future studies should expand external validity by including adolescents from diverse regions and cultural backgrounds.

ACKNOWLEDGEMENT

This study was done with the support of a research grant in 2025 from Hanseo University

REFERENCES

1. World Health Organization. (2021). *Suicide worldwide in 2019: Global health estimates*. WHO. <https://www.who.int/publications/i/item/9789240026643>
2. Nock, M. K., Borges, G., Bromet, E. J., et al. (2013). Suicide and suicidal behavior. *Epidemiologic Reviews*, 30(1), 133–154. <https://doi.org/10.1093/epirev/mxn002>
3. UNICEF & WHO. (2022). *The State of the World's Children 2022: Children's mental health*. Available at: <https://www.unicef.org/reports/state-worlds-children-2022> (accessed 12 June 2025)
4. Ministry of Health and Welfare. (2024). *2023 Suicide mortality statistics report*. Ministry of Health and Welfare.
5. Shim, M. Y., Kim, K. H., & Kwon, S. J. (2003). Risk and protective factors for suicidal ideation in Korean adolescents: Moderating effects of gender and developmental stage. *Korean Journal of Psychology*:

- Development*, 16(4), 139–155.
6. Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47(2), 343–352. <https://doi.org/10.1037/0022-006X.47.2.343>
7. Silverman, M. M., Berman, A. L., Sanddal, N. D., O'Carroll, P. W., & Joiner, T. E. (2007). Rebuilding the tower of Babel: A revised nomenclature for the study of suicide and suicidal behaviors. *Suicide and Life-Threatening Behavior*, 37(3), 248–263. <https://doi.org/10.1521/suli.2007.37.3.248>
8. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
9. Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4(6), 561–571. <https://doi.org/10.1001/archpsyc.1961.01710120031004>
10. Kim, H. S. (2009). The relationship between stress, self-efficacy, depression, and suicidal ideation in adolescents. *Korean Journal of Youth Studies*, 20(1), 203–225.
11. Lee, S. Y. (2011). Reasons for living and their moderating effects on Korean adolescents' suicidal ideation. *Death Studies*, 35(8), 711–728. <https://doi.org/10.1080/07481187.2011.553316>
12. Yu, H. Y. (2023). *The effects of material hardship, social loneliness on suicidal ideation among people with disability and the mediating role of depressive symptoms*. Seoul National University.
13. Germer, C. (2004). What is mindfulness. *Insight journal*, 22(3), 24–29.
14. Fletcher, L., & Hayes, S. C. (2005). Relational frame theory, acceptance and commitment therapy, and a functional analytic definition of mindfulness. *Journal of rational-emotive and cognitive-behavior therapy*, 23, 315–336. <https://doi.org/10.1007/s10942-005-0017-7>
15. Dreyfus, G. (2013). *Is mindfulness present-centered and non-judgmental?* Mindfulness.
16. Anālayo, B. (2020). *Attention and mindfulness*. Springer.
17. Peters, J. R., Eisenlohr-Moul, T. A., Upton, B. T., & Baer, R. A. (2013). Nonjudgment as a moderator of the relationship between present-centered awareness and borderline features: Synergistic interactions in mindfulness assessment. *Personality and Individual Differences*, 55(1), 24–28. <https://doi.org/10.1016/j.paid.2013.01.021>
18. Niemiec, R. M. (2013). *Mindfulness and character strengths*. Boston, MA: Hogrefe Publishing. Retrieved from https://pubengine2.s3.eu-central-1.amazonaws.com/preview/99.110005/9781616763763_preview.pdf
19. Chiesa, A., & Serretti, A. (2010). A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychological medicine*, 40(8), 1239–1252.
20. Barnhofer, T., Crane, C., Brennan, K., Duggan, D. S., Crane, R. S., Eames, C., ... & Williams, J. M. G. (2015). Mindfulness-based cognitive therapy (MBCT) reduces the association between depressive symptoms and suicidal cognitions in patients with a history of suicidal depression. *Journal of consulting and clinical psychology*, 83(6), 1013–1020.
21. Kapoor, S., Anastasiades, M., et al. (2017). *Perceived stress, depressive symptoms, and suicidal ideation in undergraduate women with varying levels of mindfulness*. Archives of Women's Mental Health.
22. Nieto-Casado, F. J., Antolín-Suárez, L., Rodríguez-Meirinhos, A., & Oliva, A. (2022). Effect of parental competences on anxious-depressive symptoms and suicidal ideation in adolescents: Exploring the mediating role of mindfulness. *Children and youth services review*, 138, 106526. <https://doi.org/10.1016/j.childyouth.2022.106526>
23. Sansone, R. A., & Sansone, L. A. (2010). Gratitude and wellbeing: the benefits of appreciation. *Psychiatry (edgmont)*, 7(11), 18–22.
24. Watkins, P. C., & Scheibe, D. (2017). *Gratitude. In Subjective well-being and life satisfaction*. Taylor & Francis. Retrieved from <https://www.taylorfrancis.com/chapters/edit/10.4324/9781351231879-10/gratitude-philip-watkins-daniel-scheibe>
25. Emmons, R. A., & Mishra, A. (2011). Why gratitude enhances well-being: What we know, what we need to know. *Designing positive psychology: Taking stock and moving forward*, 248, 262.
26. 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), 377–389. <https://doi.org/10.1037/0022-3514.84.2.377>
27. Algoe, S. B., Haidt, J., & Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion*, 8(3), 425–429. <https://doi.org/10.1037/1528-3542.8.3.425>
28. DeSteno, D., Li, Y., Dickens, L., & Lerner, J. S. (2014). Gratitude: A tool for reducing economic impatience. *Psychological Science*, 25(6), 1262–1267. <https://doi.org/10.1177/0956797614529979>
29. Kwok, S. Y., Gu, M., & Cheung, A. (2019). A longitudinal study on the relationship among childhood emotional abuse, gratitude, and suicidal ideation of Chinese adolescents. *Child abuse & neglect*, 94, 104031. <https://doi.org/10.1016/j.chiabu.2019.104031>
30. Mi, S. E., & Seek, L. C. (2020). Depression and happiness of high school students: the dual mediating effects of suicidal ideation and gratitude. *Perspectives of Science and Education*, 6 (48), 324–333.
31. Lin, C. C. (2021). The effects of gratitude on suicidal ideation among late adolescence: A mediational chain. *Current Psychology*, 40(5), 2242–2250. <https://doi.org/10.1007/s12144-019-0159-x>
32. Ugiagbe, I. M. (2024). An interpretative phenomenological analysis (IPA) study of the integration and career

- progression of internationally educated nurses (IENs) in UK healthcare: the lived experience of UK registered nurses with Nigeria heritage in the London region. *Journal of Hospital Management and Health Policy*, 8. <https://doi.org/10.21037/jhmhp-24-19>
33. Nicolosi, S., Ortega Ruiz, R., Sgrò, F., Lipoma, M., & Benítez Sillero, J. D. D. (2024). Psychometric Validation of the Revised Physical Self-Perception Profile: An Italian Context Study. *Behavioral Sciences*, 14(12), 1229. <https://doi.org/10.3390/bs14121229>
 34. Arora, K., Gupta, R. K., Gupta, U., Babber, S., & Moza, I. (2024). Impact of Social Media on Self-Esteem Among Nursing Students. *Indian Journal of Child Health*, 11(9), 88–92. <https://doi.org/10.32677/ijch.v11i9.4896>
 35. Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44. <https://doi.org/10.1111/1529-1006.01431>
 36. Kargina, N. V., & Melnychuk, I. V. (2024). *Features of providing psychological assistance to persons with a low level of psychological well-being: opportunities and limitations*.
 37. Virlia, S., Pudjibudojo, J. K. K., & Rahaju, S. (2024). Resilience in Bullying Victims: The Role of Emotion Regulation and School Climate with Self-Esteem as a Mediator. *Journal of Educational, Health, and Community Psychology (JEHCP)*, 13(4), 1476–1499. <https://doi.org/10.12928/jehcp.v13i4.28963>
 38. Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
 39. Choi, H. K. (1992). *The process of caregiving stress among Korean caregivers for elderly*, Unpublished doctoral dissertation, Conel Univ. USA
 40. Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J. P. (2007). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of psychopathology and Behavioral Assessment*, 29, 177–190. <https://doi.org/10.1007/s10862-006-9035-8>
 41. McCullough, M. E., Emmons, R. A., & Tsang, J. (2004). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112–127. <https://doi.org/10.1037/0022-3514.82.1.112>
 42. Kwon, S. J., Kim, K. H., & Lee, H. S.. (2006). Validation of the Korean version of gratitude questionnaire. *Korean Journal of Health Psychology*, 11(1), 177–190.
 43. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
 44. Harlow, L. L., Newcomb, M. D., & Bentler, P. M. (1986). Depression, self-derogation, substance use, and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of clinical psychology*, 42(1), 5–21. [https://doi.org/10.1002/1097-4679\(198601\)42:1<5::AID-JCLP2270420102>3.0.CO;2-9](https://doi.org/10.1002/1097-4679(198601)42:1<5::AID-JCLP2270420102>3.0.CO;2-9)
 45. Kim, H. S. (2002). A study on factors related to suicidal ideation among Korean elderly. *Korean Journal of Gerontology*, 22(1), 159–172.
 46. Kim, Y. J., & Lee, C. S. (2014). The mediating effect of hope in the relationship between stress and suicidal ideation in adolescents. *Journal of Digital Convergence*, 12(6), 539–547. <https://doi.org/10.14400/JDC.2014.12.6.539>
 47. West, S. G., Finch, J. F., & Curran, P. J. (1995). *Structural equation models with nonnormal variables: Problems and remedies*.

Author

Chang Seek Lee

(South Korea, Seosan city)
 Professor, Ph.D., Chairman
 Department of Social Welfare
 E-mail: lee1246@hanmail.net
 ORCID ID: 0000-0002-9222-0953

Author contribution

Chang Seek Lee: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Project administration, Funding acquisition

© Chang Seek Lee, 2025

The author declared no conflicts of interest