

The role of self-esteem in the relationship between depression and suicidal ideation of Korean adolescents

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Abstract: The present study aims to explore the role of self-esteem in the relationship between depression and suicidal ideation. Data were collected from 396 adolescents through a probability sample of the population via a stratified multistage probability sampling design based on geographic area (Metro city, Middle city, rural areas), gender (male, female) and school grade (middle school, high school, university). The data for the study were analyzed via a cluster analysis and a multiple regression analysis. The main outcomes of the study were summarized as follows. First, the risk types of adolescent suicide from depression and suicidal ideation are classified into three types - crisis group (40.5%), dangerous group (10.2%) and stable group (49.3%), from which the self-esteem of adolescents in the dangerous group being the lowest. Second, self-esteem buffered the effects of depression on suicide ideation. Consequently, Korean adolescents' suicide ideation due to depression was higher when self-esteem was lower, and vice versa.

[Kim, Yun Jeong. **The role of self-esteem in the relationship between depression and suicidal ideation of Korean adolescents.** *Life Sci J* 2014;11(7s):494-498] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 105

Keywords: Self-esteem; suicide ideation; depression; buffering effect; cluster analysis; risk types of suicide

1. Introduction

Suicide is recognized as a critically social and public concern, and is one of the leading causes of death for individuals of all age groups. According to 'Youth Statistics: 2013', which was recently surveyed jointly by the Ministry of Gender Equality & Family and the Statistics Korea, 11.2% of adolescents (aged 13-24 years) have experienced suicidal impulse in 2012. In particular, since 2008, suicide has been the most frequent cause of domestic youth deaths (Statistics Korea, 2013); however, such cases are not engendered solely by problems among adolescents and their families, but also stem from social problems. In contrast to suicide in adults, adolescent suicide has important characteristics of high impulsivity and thus, it is likely to be enacted at any time (Kim and Noh, 2003). Above all, suicidal ideation is soaring in adolescents during their life cycle (Horwits, Hill and King, 2011); hence, this study focused on the research of adolescent suicidal ideation.

Suicide is a complex behavior, which likely results from the interaction of several different factors (McGirr, Renaud, Bureau, Seguin, 2008). Among the psychological characteristics related to adolescent suicide, many researchers (Choquet, Kovess, Poutignat, 1993; Eskin, 1995; Park, 2009; Zhang and Jin, 1996) have focused on depression, self-esteem and suicide ideation. For example, Choi, Kim, Park, Park (2011) argued that the suicidal impulse group experienced lower self-esteem (OR=3.27) and higher depression (OR=12.38) compared to the non-suicidal impulse group.

Primarily, depression was the most important risk factor for adolescent suicide (Andrews, Lewinson,

1992; Lee, Jung, Kim, 2012; Park, 2006; Park, 2009; Rotheram-Borus and Trautman, 1988); yet, not all depressed individuals have suicidal attempts (Galit, Doru James, 1999). Suicides due to depression are reduced, mediated or buffered by individual resources, and one aspect of resources that received a great deal of attention is self-esteem.

Many psychologists have claimed that the problem of self-esteem has been underlying the issues of neurosis and maladjustment, in the context of which young people with low self-esteem portray a depressed and unstable emotional state as well as a low level of academic achievement (Rosenberg, 1965).

Therefore, it is argued that the relationship between depression and suicide may be moderated by self-esteem (Galit, Doru James, 1999). Lower self-esteem is a risk factor for suicidal ideation (Park, 2006; Marcenko, Fichman, & Friedman, 1999), whereas higher self-esteem is a protective factor of adolescent suicidal ideation (Park, 2009). That is, suicidal adolescents tend to have lower self-esteem (Galit, Doru James, 1999; Kienhorst, DE Wilde, van den Bout, Diekstra, Wolters, 1990; Overholser, Adams, Lehnert, Brinkman, 1995), and both female and male suicide attempters conveyed a lower level of self-esteem than non-attempters of the same gender (Tomori and Zalar, 2000). Moreover, Korean adolescents demonstrating a lower sense of self-esteem while feeling a strong sense of depression also had higher rates of suicidal tendencies (Lee et al., 2012). In addition, Park (2006) proposed that depression and self-esteem mediate the relation of an eco-systematic risk factor and suicidal ideation; Kim

(2008) also suggested the effects of self-esteem as a factor for preventing youth suicide. Thus, quite a few previous studies have supported the protective role of self-esteem against suicidal ideation; however, none but Park (2009) has studied the mediating effects of self-esteem in the relationship between depression and suicidal ideation.

Reflecting the preceding studies that examine the protective effects of self-esteem, the present study aims to explore the role of self-esteem in the relation between depression and suicidal ideation among Korean adolescents. More specifically, first, the difference of self-esteem between adolescent suicide risk types from depression and suicidal ideation was investigated. Next, in the case of a clear difference between suicide risk types, the buffering effect of self-esteem was examined in the relation between depression and suicidal ideation among Korean adolescents.

2. Material and Methods

2.1. Procedures

Data were collected from a probability sample of the population via a stratified multistage probability sampling design based on geographic area (Metro city, Middle city, rural areas), gender (male, female) and school grade (middle school, high school, university). When surveying the adolescents, both teachers and professors provided support. After removing the questionnaires that lacked complete data, 396 questionnaires were used.

2.2. Material

Suicide ideation was measured using Harlow et.al (1986). It was translated and revised by Kim (2002) using a 5-item, 5-point Likert-type scale along with a higher score indicating greater suicide ideation. Cronbach's alpha of the scale was .894 in the present study.

Depression was measured by using the SCL-90 10-item scale, which was translated by Choi (1992). The original depression instrument is a 4-point Likert-type scale, which revised the 5-point Likert-type scale, where a higher score indicated a greater depression. Cronbach's alpha of the scale was .909.

Self-esteem was measured using a brief 10-item widely used scale of Rosenberg's self-esteem (Rosenberg, 1965). According to the 5-point Likert-type scale, a higher score indicated greater self-esteem. Cronbach's alpha of the scale was .846.

2.3. Socio-demographic characteristics of the adolescent

Adolescents in the present study consisted of slightly more women than men, totaling 56.2%. The

mean age of the 396 respondents who participated in the study was 17.33 years (SD = 3.18 years); 38.1% were between 12-15 years and 31.5% were over 20 years. 37.4% were middle school students, 29.8% high school students and 31.5% university students. 51.0% did not have a religion and 32.0% were Christian. 39.4% lived in metro cities and 36.6% lived in rural areas.

Table 1. Socio-demographic Characteristics (n=396)

		N	%	M(SD)
gender	Male	173	43.7	-
	Female	222	56.2	
Age	12-15 yr	150	38.1	17.33(3.18)
	16-19 yr	120	30.4	
	Over 20yr	124	31.5	
School	Middle	148	37.4	-
	High	118	29.8	
	University	130	32.8	
Religion	Buddhism	29	7.4	-
	Christian	126	32.0	
	Catholic	38	9.6	
	No	201	51.0	
Residence	Metro city	156	39.4	-
	Small city	95	24.0	
	Rural	145	36.6	

2.4. Analysis

Descriptive statistics were used to analyze the participants' socio-demographic characteristics, level of suicide ideation, depression and self-esteem. A cluster analysis was conducted in order to identify adolescent suicide risk type; a multiple regression analysis was conducted to define the buffering effects of self-esteem between depression and suicide ideation. In order to fully understand the interactive effects, the regression model should include all of the independent variables (Aikan & West, 1991). Therefore, in the present study, depression, self-esteem and depression \times self-esteem variables were entered as independent variables.

The data for the study were analyzed as a cluster analysis, one-way-ANOVA and multiple regression analysis using a Statistical Package for the Social Sciences (SPSS/WIN 18.0); $P < .05$ was considered to indicate a statistical significance.

3. Results

The major findings of this study were as follows. First, adolescent suicide risk types were divided by depression and suicidal ideation, which were identified as the crisis group, dangerous group and stable group. 159 (40.5%) of the total number of

youths belong to the crisis group, which is not safe from the risk of suicide, accounting for a mean of 2.91 in depression and a mean of 2.25 in suicidal ideation. 40 (10.2%) of the total number of youths belong to the dangerous group, which is critically dangerous in the risk of suicide, accounting for a mean of 4.09 in depression and a mean of 3.04 in suicidal ideation. Finally, 194 (49.3%) of the total number of youths belong to the stable group, which is to some extent safe from the risk of suicide, accounting for a mean of 2.01 in depression and a mean of 1.19 in suicidal ideation (Table 2, Figure 1).

Table 2. Adolescent suicide risk type

	Crisis	Dangerous	Stable
N	159	40	194
(%)	(40.5)	(10.2)	(49.5)
Depression Mean	2.25	4.09	2.01
Suicidal ideation Mean	2.91	3.04	1.19

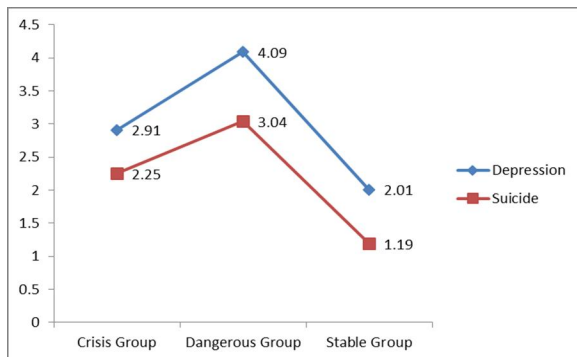


Figure 1. Adolescent suicide risk type

According to the analysis regarding the difference between the self-esteem of each type (Table 3), the dangerous group showed the lowest self-esteem score of 2.76, followed by the crisis group of 3.30, and the stable group of 3.86.

Table 3. Self-esteem of each type

		N	M(SD)	F	Duncan's
self-esteem	Crisis group	159	3.30(.505)	101.399***	b
	Dangerous group	40	2.76(.529)		a
	Stable group	194	3.86(.509)		c

***p<.001

Second, because the differences in self-esteem were verified between the suicide risk types from depression and suicidal ideation, it was examined for the buffering role of self-esteem in the suicidal ideation due to depression. As a result, self-esteem buffered the effect of depression on suicide

ideation. Furthermore, Korean adolescent suicide ideation due to depression was higher when self-esteem was lower; yet, suicide ideation due to depression was lower when self-esteem was higher (Table 4, Figure 2).

Table 4. Buffering effects of self-esteem in the relationship between depression and suicide ideation (N=396)

	Suicide Ideation		
	b	β	t
Depression	.523	.552	10.449***
Self-esteem	.154	.124	-2.368*
Depression \times Self-esteem	-.105	-.080	-2.072*
Durbin-Watson	1.917		
F value	101.608***		
R ²	.435		

*p<.05, ***p<.001

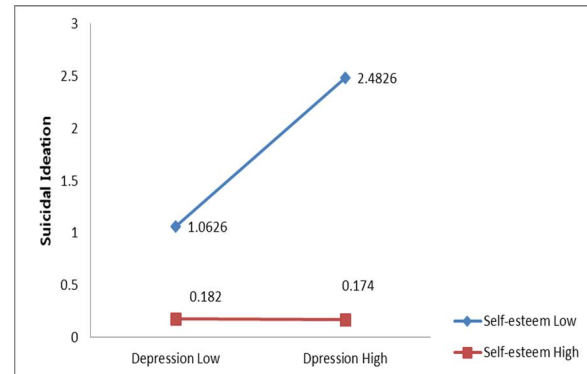


Figure 2. Buffering effects of self-esteem in the relationship between depression and suicide ideation

4. Discussion

The present study aimed to explore the role of self-esteem in the relation between depression and suicidal ideation among Korean adolescents. Data were collected from the probability multistage sampling design based on geographic area (Metro city, Middle city, rural areas), gender (male, female), and school grade (middle school, high school, university). After removing the questionnaires, which lacked complete data, 396 questionnaires were used.

The main outcomes of the study were summarized as follows.

First, according to adolescent depression and suicidal ideation, three types have been identified: crisis group, dangerous group and stable group. The fact that more than 50% of the total youth account for the crisis group and dangerous group of high risk with regard to suicide raises an alert to the Korean society, which shows an ever-increasing rate of youth

suicide. In particular, the dangerous group conveyed the lowest self-esteem that is known to reduce suicidal ideation, which is consistent with the findings of previous studies (Galit et al., 1999; Kienhorst et al., 1990; Kim a, 2008; Lee et al., 2012; Overholser et al., 1995) that claimed that suicidal adolescents tend to have lower self-esteem.

Second, the role of self-esteem was examined in the relationship between depression and suicidal ideation in order to reduce adolescent suicidal ideation. Consequently, it was shown that youth depression increases suicidal ideation, but decreases suicidal ideation. This factor is consistent with the finding of Park (2009), that self-esteem has a role of mediation to mitigate the suicidal ideation of depressed adolescents.

Self-esteem is the value granted to an individual self: high self-esteem implies that one regards oneself as a valuable person; a positive way of thinking for one's given situation may reduce the risk of extreme action (Kim b, 2008). Therefore, it implies the importance of enhancing self-esteem rather than reducing depression in order to decrease adolescent suicidal ideation and ultimately, to prevent youth suicide. Accordingly, education for the whole person is proposed for youths in order for them to value themselves by identifying their strengths (resilience) in order to improve their self-esteem.

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4/28/2014