



Association between Perceived Parenting Style and Adolescents' Attitudes toward Suicide

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Objectives: Adolescent suicide, a major cause of adolescent death, is affected by various factors, including attitudes toward suicide. This study investigated the association between parenting style and adolescents' attitudes toward suicide and the mediating role of attitude toward suicide between parenting style and suicidal ideation.

Methods: We surveyed 1,071 adolescents from eight middle schools in Incheon, Korea. The survey included sociodemographic information, attitudes toward suicide, perception of parenting style, depression severity, and suicidality.

Results: Students in the authoritarian parenting group had a more permissive attitude toward suicide compared with the democratic and permissive parenting groups. These students considered that suicide is justified in certain situations and that choosing suicide is an individual's right. They also had a negative attitude toward talking about suicide or intervening in others' suicide. This association remained statistically significant after adjusting for the impact of confounding factors that could affect attitudes toward suicide, except for suicidal processes and preparedness to prevent suicide. In the mediation analysis, we observed that some factors of the attitudes toward suicide mediated between authoritarian parenting attitudes and suicidal ideation, namely, suicide as a right, preventability, suicide as normal/common, preparedness to prevent suicide, and resignation.

Conclusion: This study revealed the significant impact of parenting style on children's attitudes toward suicide. Educating parents about the appropriate parenting attitudes—sympathetic and rational—can help prevent youth suicide.

Key Words: Suicidal ideation; Parenting; Adolescents; Attitude.

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INTRODUCTION

According to the World Health Organization 2016 statistical reports, suicide is the second leading cause of death in individuals between the ages of 10 and 24 years worldwide [1]. In the USA, adolescent and young adult suicide rates have been increasing since 2000; the suicide rate was 14.46 per 100,000 people in 2017 [2]. Korea's suicide rate, although declining, remains the highest among the Organization for Economic Cooperation and Development countries; in 2009, it was at 33.8 per 100,000 people, whereas the latest data show a rate of 26.6 per 100,000 people [3-5]. According to the 2018 Korea National Statistical Office report, the most common cause of youth deaths is intentional self-inflicted death (suicide), which accounts for 36% of all deaths [5]. This rate is more than twice

as high as that of traffic accidents (14.0%), the second most common cause of death [5].

Suicide rates are decreasing among other age groups but increasing among adolescents, and as such, appropriate interventions are needed [3]. Suicide risk factors among adolescents include depression, maladjustment at school, impulsivity, abuse, family relationship problems, friendship problems, internet addiction, insomnia, and drinking [6,7]. Studies have reported that adolescents' attitudes toward suicide affect their suicidal behavior [8].

At the individual level of analysis, studies have shown a positive association between the two: Individuals with any kind of suicidal behavior have more tolerant and understanding attitudes toward suicide [9]. This relation was confirmed by a 25-year longitudinal study in New Zealand with a birth cohort of more than 1,000 children [10]. A study of attitudes toward suicide in 423 Slovenian teens also found that permissive attitudes are positively associated with the majority of

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suicide risk factors [9], suggesting that permissive attitudes toward suicide are more likely to be a risk factor for suicidal behavior. Factors that can influence attitudes toward suicide include family type, gender, religion, and socioeconomic status (SES).

Adolescents undergo major transformations in their propensity to evaluate and understand intricate situations and aspire to become autonomous and unique individuals [11]. The relationship between parents and children is among the most prominent factors affecting the social interactions, attachment, moral reasoning, education, and problematic behaviors of adolescents [12,13]. Indeed, parenting affects the mental health of adolescents. Therefore, parenting styles can be expected to affect adolescents' suicidal behaviors and attitudes toward suicide. A study of Hong Kong teenagers revealed that negative parenting styles are associated with suicidal behaviors [14]. Hong Kong adolescents who considered their parents' upbringing style to be authoritarian were reported to have more suicidal ideations and attempts compared with those who considered their parents' upbringing as democratic. Other studies have established that when adolescents describe their parents as showing the requisite care and affection, the risk of suicide is alleviated, whereas when parents are recognized as watchful or authoritarian, the risk of suicide increases significantly [14-17]. A study of 604 Portuguese adolescents showed that parenting style affects the formation of secure attachment and confirmed the mediating role of parental attachment in the association between parenting style and suicidal ideation [18]. However, research on the relevance of parenting style to adolescents' attitudes toward suicide is lacking.

Thus, we hypothesized that if adolescents perceive their parents' attitudes negatively, they may have a more accepting and understandable attitude toward suicide. Additionally, we analyzed whether attitudes toward suicide can be a mediator of the effects of parenting attitude on suicidal behavior.

METHODS

Participants

All middle schools located in Jung-gu District, Incheon, participated in the study, and all eighth-grade students from one of eight middle schools were enrolled. Of the 1,357 participants, 286 who did not reliably complete the survey were excluded, resulting in a final sample of 1,071 participants. When comparing the included ($n=1,071$) and excluded ($n=286$) students, we observed statistically significant differences in sex, suicidal ideation, and depression severity (Supplementary Table 1 in the online-only Data Supplement). In the excluded group, the proportion of girls, percentage of students

who ever had suicidal ideation, and mean depression scores were lower compared with the included group. No statistically significant differences were noted between the two groups in other variables, such as the number of family members, religion, SES, suicide plans, and suicide attempts.

Procedure

We asked the students to complete a questionnaire that contained items on their attitude toward suicide and parenting after their homeroom teacher provided an explanation of the study during class. The Institutional Review Board of Inha University Hospital (registration number 2018-06-032) approved the study protocol and waiving of informed consent.

Measurement

We gathered basic demographic information, such as gender, family type, religion, and SES, along with details on family psychiatric history, suicide ideation, suicide plans, and suicide attempts. The participants were asked to rank their family's economic condition compared with others. The participants' suicidality was assessed by the suicidality subscale of the Korean Version of the Composite International Diagnostic Interview (K-CIDI version 2.1): "Have you ever seriously thought about committing suicide?" "Have you ever made a plan to commit suicide?" and "Have you ever attempted suicide?"

Attitudes Towards Suicide scale

The attitudes towards suicide (ATTS) scale was developed by Renberg and Jacobsson to assess attitudes toward suicide [19]. Kodaka et al. [20], in their study on suicide assessment, recommended the ATTS scale as the most available and relevant tool. We used a Korean version of the ATTS with 37 items on attitudes toward suicide [21]. Answers were rated on a five-point Likert scale: 1=I strongly disagree, 2=I do not agree, 3=I cannot decide, 4=I agree, and 5=I strongly agree. We adopted the 10-factor model suggested by Renberg and Jacobsson that included 34 ATTS items after excluding three items with low factor loadings or low communality. The ten factors were as follows: suicide as a right, incomprehensibility of suicide, non-communication, preventability of suicide, tabooing, suicide as normal/common, suicide as a process, relation-caused preparedness to prevent suicide, and suicide as a solution or resignation (Supplementary Table 2 in the online-only Data Supplement) [19].

Parental Authority Questionnaire

The Parental Authority Questionnaire, developed by Buri [22] based on Baumrind's parenting attitude theory, consists of three sub-metrics of self-reporting measures for youth respondents: permissive, authoritarian, and democratic. We used

the translated and validated Korean version of this scale and classified the attitudes into the three groups according to the present study results [23]. Permissive parenting is when parents have with little control over their children's behavior and allows the latter to do as they wish. Authoritarian parenting is when parents strictly control their children's behavior in their desired direction. Democratic parenting is a warm, reasonable, and consistent way for parents to guide their children [22].

Center for Epidemiologic Studies Depression Scale-Revised (CESD-R)

The Center for Epidemiologic Studies Depression Scale (CESD) was developed by Radloff [24] in 1977 to assess depression. It was revised in 2004 to assess depressive symptoms consistent with the DSM-IV [25]. In 2016, Lee et al. [26] assessed the psychometric properties of the Korean version and validated it.

Statistical analysis

All data were analyzed using SPSS 19.0 (IBM Corp., Armonk,

NY, USA). Chi-squared tests were conducted to assess the differences in demographic factors by parenting attitude group. We conducted one-way analyses of variance and post-hoc analyses to analyze the depression score and attitudes toward suicide, depending on the parenting attitude perceived by teenagers.

The severity of depression has a significant effect on attitudes toward suicide [9]. Moreover, economic status, family type, gender, and religion also affect attitudes toward suicide [8]. Thus, we used these factors as confounders in the analysis of covariance to control for their effects. To determine whether attitudes toward suicide mediate between parenting attitudes and suicidal ideation, we performed a series of regression analyses as mediation analysis, as suggested by Baron and Kenny [6].

RESULTS

Sociodemographic characteristics

Table 1 shows the participants' sociodemographic charac-

Table 1. Demographic and clinical characteristics of the pro-democracy, authoritarian, and permissive groups

Characteristic, n (%)	Pro-democracy (n=776)	Authoritarian (n=177)	Permissive (n=118)	Total (n=1071)	p-value	Post-hoc
Sex					0.623	
Male	383 (49.4)	82 (46.3)	59 (50.0)	524 (48.9)		
Female	393 (50.6)	95 (53.6)	59 (50.0)	547 (51.1)		
Number of family					0.971	
≤3	144 (18.6)	32 (18.2)	20 (17.0)	196 (18.3)		
4	407 (52.5)	91 (50.9)	59 (50.0)	557 (52.0)		
5≥	225 (28.9)	54 (30.5)	39 (33.0)	318 (29.6)		
Religion					0.980	
Yes	322 (41.5)	75 (42.4)	49 (41.5)	446(41.6)		
No	454 (58.5)	102 (57.6)	69 (58.5)	625 (58.4)		
Socioeconomic status					<0.001	**
High	341 (43.9)	52 (29.4)	37 (31.4)	430 (40.2)		
Middle	301 (38.8)	65 (36.7)	53 (44.9)	419 (39.1)		
Low	134 (17.3)	60 (33.9)	28 (23.7)	222 (20.7)		
Suicide idea					<0.001	**
Absent	602 (77.6)	83 (46.9)	80 (67.8)	765 (71.4)		
Present	174 (22.4)	94 (53.1)	38 (32.2)	306 (28.6)		
Suicidal plan					<0.001	**
Absent	720 (92.8)	141 (79.7)	103 (87.3)	964 (90.0)		
Present	56 (7.2)	36 (20.3)	15 (12.7)	107 (10.0)		
Suicidal attempt					<0.001	**
Absent	736 (94.8)	147 (83.0)	105 (89.0)	988 (92.2)		
Present	40 (5.2)	30 (17.0)	13 (11.00)	83 (7.8)		
K-CESD-R, mean (SD)	8.21 (12.29)	19.10 (18.80)	12.44 (15.08)	10.47 (14.46)	0.001	**

*the mean difference between the pro-democracy and authoritarian groups is statistically significant ($p < 0.05$), †the mean difference between the pro-democracy and permissive groups is statistically significant ($p < 0.05$), ‡the mean difference between the authoritarian and permissive groups is statistically significant ($p < 0.05$). K-CESD-R: Korean-Center for Epidemiologic Studies Depression Scale-Revised

teristics. The sample consisted of 49.4% boys and 50.6% girls. Their mean K-CESD-R score was 10.47 points (SD 14.46). Among the participants, 72.5%, 16.5%, and 11.0% considered their parents' attitudes as democratic, authoritarian, and permissive, respectively. We observed no significant differences in gender, number of family members, or religion by parenting attitude. However, differences in the depression scores between the groups were statistically significant. In the authoritarian parenting group, the mean depression score was the highest, and the proportion of students who had thought of, planned, and attempted suicide was also the highest. The highest percentage of respondents in the democratic group reported having a higher SES, whereas the highest percentage of respondents in the other groups had a middle SES.

Comparison of attitudes toward suicide among adolescents raised under the three parenting styles

We performed a one-way analysis of variance and a post

hoc analysis for each factor of attitudes toward suicide. Table 2 shows the mean scores of attitudes toward suicide among the three parenting groups. Statistically significant differences were found in the mean values of the three parenting groups for all the factors of attitudes toward suicide.

Compared with their peers with democratic and permissive parents, students who felt that their parents' parenting style was authoritarian scored high for suicide as a right, non-communication, tabooing, suicide as normal/common, suicidal process, suicide as relationship-caused, and resignation, and low in incomprehensibility of, preventability of, and preparedness to prevent suicide. Thus, students in this group considered suicide as a reasonable choice and regarded it as an individual's right. Additionally, they were reluctant to talk about suicide or intervene in others' suicide. They also found it difficult to prevent others from planning suicide. The percentage of respondents who were ready to prevent others from dying by suicide was also lower than that of the other groups.

Table 2. Comparison of the adolescents' attitudes toward suicide among three parenting styles

Factor	Pro-democracy (mean ± SD)	Authoritarian (mean ± SD)	Permissive (mean ± SD)	p-value	Post-hoc
Suicide as a right	2.95 ± 0.61	3.30 ± 0.67	3.12 ± 0.53	< 0.001	*†
Incomprehensibility	3.34 ± 0.88	2.85 ± 0.94	3.03 ± 0.88	< 0.001	*†
Non-communication	3.22 ± 0.49	3.38 ± 0.61	3.28 ± 0.48	0.001	*
Preventability	4.07 ± 0.68	3.58 ± 0.79	3.88 ± 0.73	< 0.001	*†‡
Tabooing	2.56 ± 0.63	2.80 ± 0.79	2.71 ± 0.68	< 0.001	*
Normal-common	2.99 ± 0.79	3.46 ± 0.78	3.19 ± 0.76	< 0.001	*†‡
Suicidal process	3.03 ± 0.83	3.27 ± 0.86	3.18 ± 0.77	0.002	*
Relation caused	2.59 ± 0.71	2.87 ± 0.79	2.63 ± 0.69	< 0.001	*
Preparedness to prevent	3.80 ± 0.78	3.51 ± 0.86	3.64 ± 0.79	< 0.001	*
Resignation	1.83 ± 1.00	2.31 ± 1.18	3.88 ± 1.06	< 0.001	*†

*the mean difference between the pro-democracy and authoritarian groups is statistically significant (p < 0.05), †the mean difference between the pro-democracy and permissive groups is statistically significant (p < 0.05), ‡the mean difference between the authoritarian and permissive groups is statistically significant (p < 0.05)

Table 3. Comparison of the adolescents' attitudes toward suicide among three parenting styles after adjusting confounders*

Factor	Pro-democracy (mean ± SD)	Authoritarian (mean ± SD)	Permissive (mean ± SD)	p-value	Post-hoc
Suicide as a right	2.99 ± 0.02	3.18 ± 0.05	3.10 ± 0.06	< 0.001	†
Incomprehensibility	3.29 ± 0.03	3.08 ± 0.06	3.09 ± 0.08	0.003	†‡
Non-communication	3.23 ± 0.02	3.38 ± 0.04	3.28 ± 0.05	0.002	†
Preventability	4.03 ± 0.02	3.74 ± 0.05	3.91 ± 0.06	< 0.001	†§
Tabooing	2.57 ± 0.02	2.78 ± 0.05	2.71 ± 0.06	0.002	†
Normal-common	3.03 ± 0.03	3.31 ± 0.06	3.15 ± 0.07	< 0.001	†
Suicidal process	3.07 ± 0.03	3.15 ± 0.06	3.15 ± 0.07	0.360	
Relation caused	2.59 ± 0.03	2.87 ± 0.06	2.64 ± 0.07	< 0.001	†
Preparedness to prevent	3.76 ± 0.03	3.65 ± 0.06	3.68 ± 0.07	0.163	
Resignation	1.88 ± 0.04	2.13 ± 0.08	2.08 ± 0.09	0.004	†

*confounders: CESD-R score, sex, religion, socio-economic status, family numbers, †the mean difference between the pro-democracy and authoritarian groups is statistically significant (p < 0.05), ‡the mean difference between the pro-democracy and permissive groups is statistically significant (p < 0.05), §the mean difference between the authoritarian and permissive groups is statistically significant (p < 0.05)

Meanwhile, students in the democratic parenting group expressed that suicide was difficult to understand and prevent, but that they were willing to prevent others from dying by suicide. Additionally, they viewed the claim that suicide is acceptable in certain situations.

To adjust for the influence of factors that reportedly affect attitudes toward suicide, including depression, gender, SES, and religion, we included these factors as confounders and analyzed them using analysis of covariance (Table 3). Differences in the mean of most factors of attitudes toward suicide remained statistically significant between the democratic and

authoritarian groups, except for suicidal processes and preparedness to prevent suicide. The permissive group differed significantly from the democratic group only in the incomprehensibility factor, and from the authoritarian group only in the preventability factor. We found no statistically significant differences in other factors between the groups.

Mediation analyses

To test the mediation effect of attitudes toward suicide on the association between parenting attitude and suicidal ideation, we conducted a first regression on the influence of par-

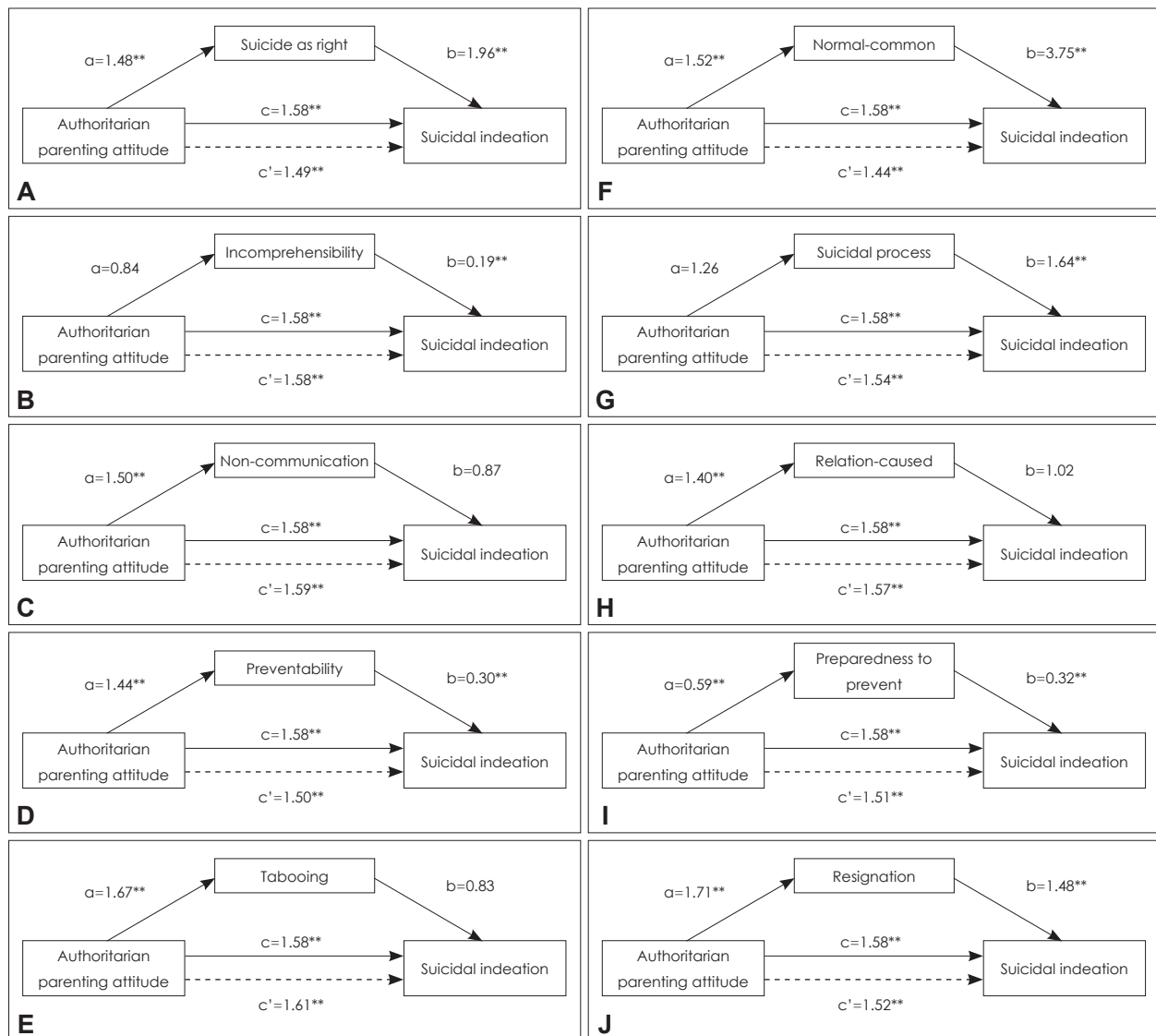


Fig. 1. Mediation model of authoritarian parenting attitude, attitudes towards suicide, and suicidal ideation. A through J in figure shows the results of a mediated analysis of 10 factors of attitude toward suicide. A: suicide as a right, B: incomprehensibility, C: non-communication, D: preventability, E: tabooing, F: normal-common, G: suicidal process, H: relation-caused, I: preparedness to prevent, J: resignation. Logistic regression coefficients are as follows: $\text{Exp}(B) = a \times \text{authoritarian parenting attitude}$, for the association of authoritarian parenting attitude with factor of attitude toward suicide; $\text{Exp}(B) = b \times \text{factor of attitude toward suicide}$, for the association of factor of attitude toward suicide with suicidal ideation; $\text{Exp}(B) = c \times \text{authoritarian parenting attitude}$, for total effect (association of pro-democracy score with suicidal ideation); $\text{Exp}(B) = c' \times \text{authoritarian parenting attitude}$ for direct effect (association of authoritarian parenting attitude with suicide ideation). * $p < 0.05$, ** $p < 0.01$.

enting attitude on suicidal ideation, followed by a second regression on the influence of parenting attitude on attitudes toward suicide. A third regression examined attitudes toward suicide and suicidal ideation. Results of the mediation analysis showed that some factors of attitudes toward suicide mediated between authoritarian parenting attitudes and suicidal ideation. The mediating factors included suicide as a right, preventability of suicide, suicide as normal/common, preparedness to prevent suicide, and resignation.

Fig. 1 shows a model of the mediated analysis of parenting style, attitudes toward suicide, and suicidal ideation. Fig. 1A displays the results of the mediation analysis of the factor of suicide as a right. When the factor of suicide as a right was evaluated as a mediator, it showed a positive relation with authoritarian parenting attitude ($\beta_{1a}=1.48$, $p<0.001$) and suicidal ideation ($\beta_{1b}=1.96$, $p<0.001$). When suicide as a right was introduced into the model, the effect of authoritarian parenting attitude on suicidal ideation decreased (from $\beta_{1c}=1.58$, $p<0.001$ to $\beta_{1c}=1.49$, $p<0.001$). Therefore, suicide as a right showed a partial mediation effect on the path of authoritarian parenting attitude and suicidal ideation. Suicide as normal/common and resignation also had a positive relation with authoritarian parenting and suicidal ideation. Preventability of and preparedness to prevent suicide had a negative relation with authoritarian parenting. When these factors—suicide as a right, preventability of suicide, suicide as normal/common, preparedness to prevent suicide, and resignation—were introduced to the model, the effect of authoritarian parenting on suicidal ideation decreased. Therefore, these factors showed a partial mediation effect on the path of authoritarian parenting and suicidal ideation. The other factors were not statistically significant, namely, incomprehensibility of suicide, non-communication, tabooing, suicide as a process, and suicide as relationship-caused.

DISCUSSION

The present study examined the associations between the perceived parenting style and attitudes toward suicide among adolescents through a survey of 1,071 middle school students in Incheon, Korea. We found that the students in the authoritarian parenting group had a more accepting attitude toward suicide and considered suicide as difficult to prevent compared with their peers in the democratic and permissive parenting groups. We also found that some factors of attitudes toward suicide could act as mediators between parenting attitudes and suicidal ideation, including suicide as a right, preventability of suicide, suicide as normal/common, preparedness to prevent suicide, and resignation.

We divided respondents into groups according to their per-

ception of their parents' parenting attitudes. The association between parenting style and suicidal ideation observed in our study is consistent with that in previous research. The risk of suicide is reportedly higher among students who perceived their parents' parenting attitude as strict, strongly controlling, and unsympathetic [14,17]. In our study, 53.11% of the students in the authoritarian group reported that they had thought seriously about suicide more than once compared with 28.57% in the total sample. This trend was also observed in terms of suicide plans and attempts.

Adolescents who perceived their parents' parenting style as authoritarian had more permissive attitudes toward suicide. If adolescents considered their parents as extremely strict, completely uninterested in them, unsympathetic, or irrational, they tended to consider suicide as acceptable, common, and difficult to prevent. Even when the effects of covariates were corrected, the associations between most factors of attitudes toward suicide and parenting style were statistically significant, but not for the attitudes of suicide resulting from impulsive behavior and being prepared to prevent suicide. We also noted statistically significant differences between the democratic group and authoritarian group in most factors of attitudes toward suicide, and only few significant differences with the permissive group. This difference may be because the democratic and permissive groups were not strictly divided, as reported in previous studies, given that Korean teenagers tend to perceive the permissive attitude of allowing them to do whatever they wanted as democratic [23]. Notably, the adolescents in the authoritarian and permissive parenting groups also showed few differences in their attitudes toward suicide. Studies that analyzed the impact of parental attitudes on adolescent mental health and suicidal behavior have showed that the difference between authoritarian and permissive styles is not significant [17,27], which is in line with our results, although these previous works did not clearly state the reasons for their results. Further study is needed on the possible effects of authoritarian parenting versus permissive parenting on adolescents.

Several studies have shown how parenting style affects adolescents' suicidal ideation. One study reported that parenting style affects the formation of attachment for adolescents, and that attachment with parents affects suicidal ideation. Adolescents with insecure attachments tend to solve their problems negatively or aggressively [18]. Among previous studies investigating the impact of parenting style on adolescents' mental health, Rey [27] found that controlling parenting is accompanied by a high level of depressive symptomatology. Self-determination theory suggests that parenting that supports autonomy and is characterized by high involvement and structure is accompanied by more positive psycho-

social results [28]. Some studies have shown that children's acceptance and recognition of problems change depending on their parents' attitudes. Additionally, parenting style affects the development of children's moral reasoning. If parents tend to empathize emotionally and have a warm parenting attitude, then their children tend to have higher moral reasoning levels and show prosocial moral reasoning and prosocial behavior [29]. These tendencies may also affect children's attitudes toward suicide. In an overly strict or unsympathetic home environment, teenagers may struggle to express their thoughts or the difficulties they face and feel it unnecessary to intervene in other people's situations. Further, because they tend to choose more aggressive ways to solve problems, they can have a more accommodating attitude toward suicide and a passive attitude toward preventing others from dying by suicide.

Further analysis showed that some factors of attitudes toward suicide acted as mediators between parenting attitudes and suicidal ideation. The attitudes that could serve as mediators included an accepting attitude toward suicide, universalization of suicide, suicide as preventable, and taboo in talking about suicide. As discussed above, under strict, unsympathetic, and authoritarian parenting attitudes, adolescents may form an accepting attitude toward suicide, a reluctance to talk about suicide, and an attitude that suicide cannot be prevented. Adolescents who have an accepting attitude toward suicide have a higher risk of choosing suicide as a solution to their problems. Having an attitude that suicide cannot be prevented and reluctance to talk about it can discourage adolescents from talking to others or seeking help when they intend to die by suicide. Therefore, educating parents and adolescents to develop an accurate perception of suicide is essential in preventing suicide. Parenting attitudes should also be included in parents' education. Additionally, if teenagers are in a negative parenting environment, careful observation and active intervention for their suicidal behavior are needed.

This study is the first to analyze the association between parenting attitudes and attitudes toward suicide in the adolescent population and to explore how this association affects suicidal ideation. Although there has been one study on the association between adult attitudes toward suicide and parents' parenting attitudes, the sample size was small and only included students at a medical school in Japan [30], and the impact of this association on suicidal ideation was not examined. Our study has the advantage of a larger sample size and advanced investigation of the mediating effects of ATTS between parenting style and suicidal ideation.

The present study has several limitations. First, we evaluated parenting without classifying the main caregivers as mothers or fathers. In parenting attitudes, results may differ depend-

ing on whether it concerns the father or mother. Future studies should investigate and analyze the parenting attitudes of both parents individually, which can help provide the necessary education for each parent. Second, parenting attitudes were evaluated as perceived by teenagers. However, the reliability of this assessment is not diminished compared with a questionnaire evaluating parenting behavior [23]. Third, the generalizability of our findings is limited because the study included only eighth-graders in a particular region. Nonetheless, our findings are consistent with previous studies in showing that authoritarian parenting attitudes and permissive attitudes toward suicide increase the risk of suicide [8,14]. Therefore, although cultural effects should be considered, the results are meaningful in that they confirm the association between parenting style and attitude toward suicide and that this association affects suicidal ideation. Finally, suicidal behavior was assessed by self-report questions, not through direct clinical interviews, and as dichotomous variables. The questions to assess suicidal ideation, suicide plans, or suicide attempts over a lifetime might be broad, as a person's risk for suicide is dynamic and changes over time. Future studies should conduct a more detailed evaluation of suicidal behaviors.

In conclusion, the parenting style perceived by adolescents significantly influenced their attitudes toward suicide, which affected their suicidal ideation. Therefore, educating parents on sympathetic, democratic, and rational parenting attitudes can help reduce the adolescent suicide rate.

Supplementary Materials

The online-only Data Supplement is available with this article at <https://doi.org/10.5765/jkacap.200032>.

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Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

Author Contributions

Conceptualization: Seo-Hyun Choi, Won-Hyoung Kim, Hyeyoung Kim. Data curation: all authors. Investigation: all authors. Project administration: Sang-Eun Lee, Chai Won Lee, Hyeyoung Kim. Supervision: Jeong Seop Lee, Hyeyoung Kim. Validation: Won-Hyoung Kim, Jae-Nam Bae, Hyeyoung Kim. Writing—original draft: Seo-Hyun Choi. Writing—review & editing: Hyeyoung Kim.

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