

## Forgiveness as a Moderator of the Association between Victimization and Suicidal Ideation

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The present study examined the relationships between victimization, suicidal ideation and forgiveness. 962 Chinese middle school students were evaluated using the Chinese versions of the Olweus Bully/Victim Questionnaire (OBVQ), the Positive and Negative Suicide Ideation scale (PANSI) and the Forgiveness Questionnaire (FQ). High victimization and low forgiveness were found to predict increased suicidal ideation. Victimized students with high level of forgiveness reported less suicidal ideation than students with low level of forgiveness. Forgiveness was found to moderate the association between victimization and suicidal ideation and could be a protective factor against suicidal ideation in victimized students.

**Key words:** Forgiveness, Moderator, Suicidal ideation, Victimization.

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**B**ullying is a common problem among school-aged youth. Studies have shown that the frequent experience of being bullied is associated with higher suicidal ideation among youth [1]. However, little is known about the protective factors that may moderate the relationship between victimization and suicidal ideation. This knowledge is important for the development of appropriate measures to reduce the level of suicidal ideation in victims.

The current study examines forgiveness as a possible moderator between victimization and suicidal ideation. Forgiveness refers to the willingness of victims to relinquish their previous pain and decrease their anger and resentment toward their offenders [2]. The relationship between forgiveness and suicide has been relatively unexamined [3,4].

### METHODS

This cross-sectional study was conducted among 7th- and 8th-grade students recruited from four middle schools in Shaoyang, Hunan that were randomly selected from the registry of middle schools provided by the local bureau of education. The sample size was calculated under the following assumptions: 95% desired level of confidence, 3% acceptable margin of error, and 18% estimated prevalence of suicidal ideation among middle school students.

This study was approved by the ethics committee of Central South University. The study participants were

assured of the anonymity and confidentiality of the answers that they provided. After informed consent was obtained for this study from the participating students and their parents as well as from the principals and teachers of the students' schools, the participants completed self-reported questionnaires about victimization, forgiveness, and suicidal ideation in the classroom during a school session which was of 45 minutes duration.

The questionnaires used items from the Chinese version of the Olweus Bully/Victim Questionnaire (OBVQ) to measure experiences of victimization [5]. The subscale for victimization consists of six items that assess the frequency of different types of victimization, including direct victimization (4 items, such as experiences of physical harm, threats, name-calling, or the forcible loss of belongings) and indirect victimization (2 items, such as the spreading of rumors or rejection from a social group). For each item, students were asked how often someone had behaved toward them in a specific way during the current school term. The following responses to the items were available: never (coded as 0), once or twice (coded as 1), sometimes (coded as 2), approximately once a week (coded as 3), and several times a week (coded as 4). A victimization score was computed by summing the six different items; thus, higher victimization scores reflected more frequent victimization. The subscale had good internal consistency and test-retest reliability [5].

The Chinese version of the Positive and Negative Suicide Ideation (PANSI) inventory was used to assess

suicidal ideation in adolescents. This inventory includes 14 items and two dimensions: positive suicidal ideation (six items) and negative suicidal ideation (eight items). A 5-point Likert scale is used to record the response frequencies for each of these items. This inventory has good psychometric properties and demonstrates both high internal consistency reliability (0.92) and high content validity [6].

Forgiveness was assessed by the Forgiveness Questionnaire (FQ). This metric consists of 12 items that assess each respondent's willingness to forgive his or her offenders [7]. The subjects respond to these items on a 7-point Likert scale with responses that range from "totally disagree" to "totally agree". According to a report by Tong, the FQ has good internal consistency (0.80) and construct validity [7].

## RESULTS

In total, 962 middle school students participated in this study (556 boys and 406 girls; 525 7th-grade students. The participants' ages ranged from 11 to 16 years; Mean (SD) 13.2 (0.9).

Forty two percent of the study participants admitted to having been directly bullied during the current school term, 45.5% of the respondents reported being indirectly bullied. As shown in **Table I**, boys reported elevated level of victimization ( $P=0.000$ ), whereas girls tended to have higher level of both forgiveness ( $P=0.001$ ) and suicidal ideation ( $P=0.02$ ). Older participants reported more suicidal ideation than younger respondents ( $r=0.078$ ,  $P=0.02$ ). Frequent victimization was associated with high level of suicidal ideation ( $r=0.21$ ,  $P=0.001$ ), whereas high level of forgiveness were associated with lower level of victimization ( $r=-0.16$ ,  $P=0.001$ ) and lower level of suicidal ideation ( $r=-0.21$ ,  $P=0.001$ ). All of the scales used in this study demonstrated adequate internal reliability with alpha coefficients for these scales higher than the acceptable level of 0.7.

A hierarchical regression analysis was conducted to examine two issues: (a) the effect of victimization and

forgiveness on suicidal ideation scores and (b) whether forgiveness moderates the relationship between victimization and suicidal ideation. Before conducting this analysis, all of the relevant independent variables and interaction terms were centered (by subtracting the mean from each value) to reduce the risk of multicollinearity [8]. The effects of gender and age were controlled by entering the respondents' genders and ages in step 1 of all of the analyses.

In the first step, the main effects from gender ( $P=0.01$ ) and age ( $P=0.014$ ) were both statistically significant. In the second step, both victimization and forgiveness significantly predicted suicidal ideation. In particular, higher frequency of victimization predicted higher suicidal ideation scores ( $P=0.001$ ), and individuals who possessed higher level of forgiveness reported lower level of suicidal ideation ( $P=0.001$ ). In the final step, the interaction effect of forgiveness and suicidal ideation was statistically significant ( $P=0.02$ ), indicating that forgiveness moderated the relationship between victimization and suicidal ideation. To examine how forgiveness influences the victimization-suicidal ideation relationship, the moderating effect of forgiveness was plotted at two levels: low forgiveness (at least one standard deviation below the mean) and high forgiveness (at least one standard deviation above the mean) (**Fig. 1**) [8]. Victimization was more strongly related to suicidal ideation for victims with low level of forgiveness, and victimized students who had low level of forgiveness reported greater level of suicidal ideation than did victimized students who had high level of forgiveness.

## DISCUSSION

In accordance with the results of previously published studies [9, 10], approximately half of the students who participated in this study reported having been victimized. These results confirm that victimization is extremely prevalent and that the negative effects of bullying on its victims are very serious. Thus, more effective interventions to stop bullying are needed.

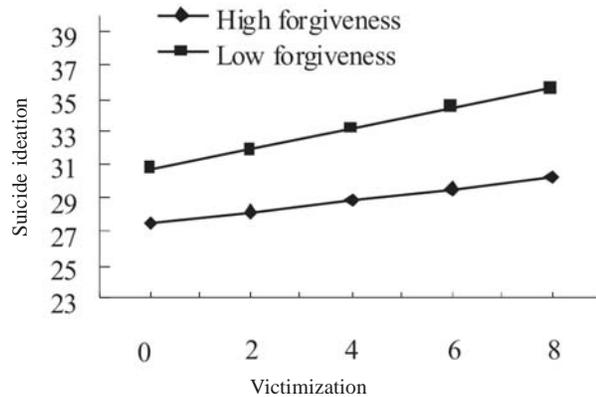
**TABLE I** SEX DIFFERENCES AND CORRELATIONS OF THE QUESTIONNAIRE RESPONSES

Variables	Girls	Boys	1	2	3	4
Victimization	3.69	4.91	1.00	0.21***	-0.16***	-0.05
Suicidal ideation	29.62	28.47		1.00	-0.21***	0.08*
Forgiveness	54.59	52.15			1.00	-0.05
Age						1.00

$N=962$ ; \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ .

## WHAT THIS STUDY ADDS?

- Forgiveness moderates the association between victimization and suicidal ideation. The victimized students with high level of forgiveness report less suicidal ideation than the students with low level of forgiveness.



**FIG. 1** Forgiveness as a moderator between victimization and suicidal ideation.

However, bullying is difficult to combat, and a certain proportion of students will inevitably be bullied. As predicted, the results of this investigation found that forgiveness was negatively related to suicidal ideation. Moreover, forgiveness moderated the relationship between victimization and suicidal ideation. These findings suggest that forgiveness is a protective factor that can moderate the suicidal ideation of victims.

Why would forgiveness have this type of function? After suffering a transgression, people experience a stress reaction known as unforgiveness, which involves a range of negative emotions, such as anger, hostility, fear, anxiety, and depression [11]. This reaction may increase suicidal ideation. Forgiveness is defined as an emotional juxtaposition [11] in which the negative emotions of unforgiveness are replaced with the positive emotions of forgiveness, such as sympathy, compassion, and love. Thus, forgiveness may constitute an emotion-focused coping strategy that helps victims modulate the negative emotions that are caused by unforgiveness [12] and ultimately reduces the level of suicidal ideation. In addition, the emotional changes that are involved in forgiveness are expected to energize reconciliation efforts [13] and inhibit retaliatory aggression. This line of reasoning suggests that victims who can forgive their offenders are more likely to maintain positive interpersonal relationships [14] and to obtain more social support [15]. Thus, these forgiving victims have better mental health and lower level of suicidal ideation.

Similar to most investigations, this study has certain

limitations, such as its cross-sectional and self-reported methodology. In addition, this study only controlled for the effects of gender and age and we have not looked into other factors like academic failures, family support or psychiatric disorders which may also influence suicidal tendency.

This study suggests that the promotion of increased level of forgiveness may be a good method of reducing level of suicidal ideation among victims. In recent years, the clinical value of forgiveness has been demonstrated in cancer patients, substance abusers, abused individuals, and victims of interpersonal transgressions [15]. However, this issue has not yet been examined in the context of school bullying [11]. Given that bullying is one of the most common forms of interpersonal conflict and that forgiveness is a positive coping strategy for interpersonal transgressions, it is necessary and reasonable to reduce the suicide risk for victims of school bullying by administering forgiveness interventions to these victims.

Future research should control for other well-established suicide risk factors (such as depression and history of suicide).

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## REFERENCES

1. Young MD, Bennett MD. Bullying and suicide. A review. *Int J Adolesc Med Health*. 2008;20:133-54.
2. North J. Wrongdoing and forgiveness. *Philosophy*. 1987;62:499-508.
3. Hui EKP, Chau TS. The impact of a forgiveness intervention with Hong Kong Chinese children hurt in interpersonal relationship. *Br J Guid Coun*. 2009;37:141-56.
4. Sansone RA, Kelley AR, Forbis JS. The relationship between forgiveness and history of suicide attempt. *Ment Health Relig Cult*. 2011;1:1-7.
5. Zhang WX, Wu JF, Jones K. Modification of the Chinese version Olweus bullying/victimization questionnaire. *Psychological Development and Education*. 1999;15:18-22.
6. Wang XZ, Gong HL, Kang XR, Liu WW, Dong XJ, Ma YF. Reliability and validity of Chinese revision of

- positive and negative suicide Ideation in high school student. *China Journal of Health Psychology*. 2011;19:964-6.
7. Tong BL. Forgiveness state of middle school students and research on psychological intervention. Guizhou: Jiangxi Normal University, 2009. p. 20-1.
  8. Aiken LS, West SG. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage; 1991.
  9. Brunstein Klomek A, Marrocco F, Kleinman M, Schonfeld IS, Gould MS. Bullying, depression, and suicidality in adolescents. *J Am Acad Child Adolesc Psychiatry*. 2007;46:40-9.
  10. Baldry AC. The impact of direct and indirect bullying on the mental and physical health of Italian youngster. *Aggressive Behavior*. 2004;30:343-55.
  11. Egan LA, Todorov N. Forgiveness as a coping strategy to allow school students to deal with the effects of being bullied: theoretical and empirical discussion. *J Soc Clin Psychol*. 2009;28:198-222.
  12. Worthington EL, Scherer M. Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: theory, review, and hypotheses. *Psychol Health*. 2004;19:385-405.
  13. Worthington EL, Drinkard DT. Promoting reconciliation through psychoeducational and therapeutic interventions. *J Marital Fam Ther*. 2000;26:93-101.
  14. McCullough ME. Forgiveness as human strength: theory, measurement, and links to well-being. *J Soc Clin Psychol*. 2000;19:43-55.
  15. Worthington EL, Witviliet CV, Pietrini P, Miller AJ. Forgiveness, health, and well-being: a review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *J Behav Med*. 2007;30:291-302.
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