Peer Victimization and Depressive Symptoms: The Mediation Role of Loneliness

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Abstract

The aim of this study was to examine the mediator role of loneliness in the relationship between peer victimization and depressive symptoms. The participants of the study were 144 adolescents (66 girls, 78 boys) ranging in age from 11 to 15 years. Hierarchical multiple regression analyses were conducted to test the relations of peer victimization to depressive symptoms through the mediating role of loneliness. The results of the analysis indicated that loneliness fully mediates the relationship between victimization and depressive symptoms. Results are discussed in light of the related literature.

Keywords: Adolescents, loneliness, victimization, depressive symptoms, mediation;

1. Introduction

Peer relationships play a crucial role in the well-being of school aged adolescents. As supportive peer relationships provide a buffer from emotional distress (e.g., Galambos, Leadbeater, & Baker, 2004), poor peer relationships put adolescents at risk of developing psychological problems (e.g., Holt & Espelage, 2005; Alikasifoglu, Erginoz, Erkan, Uysal, & Albayrak-Kaymak, 2007; Hay, Payne, & Chadwick, 2004). Peer bullying in particular may contribute to the development of various psychological problems, one of which is depressive symptoms (Sourander, Helstela, Helenius, & Piha, 2000; Kaltiala-Heino, Rimpela, Marttunen, & Rimpela, 1999) and Turkish adolescents are no exception (e.g., Kepenekci & Cinkir, 2006). For example, Seals and Young (2003) reported that both bullies and victims of bullying were more depressed than students who were neither bullies nor victims of bullying. Victimized adolescents were observed as being more sensitive and quiet, more anxious and insecure; however, such characteristics may cause adolescents to experience difficulties in interpersonal relationships which, in turn, may result in them being further victims of bullying (West & Salmon, 2000). Similarly, Hawker and Boulton (2000) in their review study discussed the adverse effects of victimization on students’ well-being and its relations to self-esteem and positive self-concept. Such adverse effects of victimization were found to be predicting later adjustments of students as well. Due, Damsgaard, Lund, and Holstein (2009) reported based on their longitudinal study with students aged 15 to 27 that especially female victims form low socioeconomic levels who were exposed to bullying during school years were more likely to report depression in young adulthood.

However, not all victimized children develop psychological symptoms. Some victimized students seem to be more at risk. Researchers report that some factors may serve a protective function against peer victimization such as school competence, academic self-efficacy and peer sociability (Paul & Cillessen, 2003), parental and school
support (Stadler, Feifel, Rohrmann, Vermeiren, & Poustka, 2010), friendship quality (Bollmer, Milich, Harris & Maras, 2005). Additionally, particular factors seem to make adolescents react worse to victimization in ways such as being angry and aggressive (e.g., Champion & Clay, 2007; Kochenderfer-Ladd, 2004; Smith & Furlong, 1998) feeling isolated (Newman, Holden, & Delville, 2005), and feeling lonely (e.g., Hawker & Boulton, 2000, Kochenderfer & Ladd, 1996; Paul & Cillessen, 2003).

Among these possible risk factors, loneliness is of interest in the present study due to its established link to both depressive symptoms and peer victimization. Several studies directly or indirectly suggested the patterns of relationships among the perceived social isolation/loneliness, victimization, and depression. However, the relations of loneliness to both peer victimization and depressive symptoms have been examined by separate lines of research. Only a few studies brought these variables together to examine their relative relationships to each other with regard to the adolescent population. In one of these few studies, Kaltiala-Heino and Fröjd (2010) with 2,070 students (15 years old) show that depression as a result of peer victimization create further problems such as social isolation due to its impeding nature of social skills and self-esteem. This study discussed social isolation as both a risk factor, a form of victimization, as well as a reflection of depression itself. These studies examined loneliness and depressive symptoms as consequences of peer victimization that signals adjustment difficulties (e.g., Storch, Milsom, DeBraganza, Lewin, Geffken, & Silverstein, 2007). Peer victims have been described as socially isolated and rejected, and lacking peer support, yet submissive in their relationships and thereby maximizing the likelihood of experiencing distress symptoms (Holt & Espelage, 2005; Hay, Payne, & Chadwick, 2004). Such patterns of relations may be reminiscent of possible role of loneliness as a mediator in the relationship between victimization and depressive symptoms. In fact, some studies reported that loneliness mediates the relationship between social withdrawal and negative peer experiences (Boivin, Hymel, & Bukowski, 1995), low social preference and anxious/depressed symptoms (Fontaine et al., 2009), and peer acceptance and depression (Valas, 1999). However, the literature seems to be lacking a study focusing on the relationship among peer victimization, depressive symptoms, and loneliness.

Therefore, it is likely that victimized lonely students would more at risk of developing depressive symptoms. Such patterns of relations of loneliness to depressive symptoms and peer victimization may be reminiscent of possible role as a mediator. This study aims to examine such mediating role of loneliness in the relationship between peer victimization and depressive symptoms. The study hypothesized that peer victimization would be related to depressive symptoms through loneliness.

2. Method

2.1. Participants and procedure

Participants were 144 (66 girls, 78 boys) Turkish high school students ranging in age from 11 to 15 ($M$ = 12.50; $SD$ = 1.61). According to descriptive analyses of the family incomes, most of the participants (54.9%) came from families with low to medium income levels. The participants of the study were recruited from high schools through a sampling of convenience procedure. After obtaining the necessary permissions and consents for data collection (the data collection protocol adhered to the ethical code of the Declaration of Helsinki), research assistants visited the schools that had agreed to participate in the study. In the presence of school counselors, the questionnaires were distributed to classes that the school administration suggested based on availability.

2.2. Measures

2.2.1. Victimization of School Bullying was measured by adapting an instrument called the “Life in School Checklist,” developed by Arora (1999), also introduced in Sharp & Smith, 1994). The original checklist contained 39 items asking for both negative and positive experiences that occurred during the past week. In the current study, all 39 items were administered but for the analyses only 23 items representing physical bullying (hitting, kicking, taking or damaging belongings), verbal bullying (name calling, insulting, repeated teasing), and indirect bullying (spreading rumors, excluding from the group) were used. A sample item read as “During this week
in school another child called me names.” Students answered the items by marking one of three responses (not at all, once, and more than once). For the present study, exploratory factor analysis with maximum likelihood was conducted in order to test the construct validity and the factor structure of the scale. The Eigen value associated with the acquired one factor was 7.48, accounted for 19 % of the variance in participants’ responses. Total scores were calculated for the analyses and an inter-item reliability of .84 was found. The total score was considered as level of victimization of school bullying (the possible score range is 23 to 69). Higher scores indicate more severe levels of victimization.

2.2.2. The Loneliness and Social Dissatisfaction Scale (Asher & Wheeler, 1985) was adapted by Tarhan (1996). The test retest reliability of the Turkish form of the scale was .92 and the internal consistency of the scale was .89. The validity of the scale was found to be .85 by comparing teacher’s reports with LSDS scores. The scale contains 24 items. The items ask for children’s feelings of loneliness, opinions about their current peer relationships, perceptions of the degree to which provisions for important relationships are being met, and their thoughts about their social competence. 16 items of the scale are centered on the feeling of loneliness and social dissatisfaction. In addition 8 filler items ask for the hobbies and interests of children. Items are answered by selecting one of the five alternatives (5 = always, 4 = usually, 3 = sometimes, 2 = rarely, 1 = never). The inter item reliability coefficient for the sample of the present study was found to be .73.

2.2.3. The Children’s Depression Inventory (CDI; Kovacs, 1981) was adapted to Turkish by Öy (1990; cited in Savaşır & Şahin, 1997) and is a 27-item self-rated depressive symptom scale. It is a self-report measurement of cognitive, affective, and behavioral symptoms of child depression. The inter item reliability for the sample of the present study was found to be .76.

3. Results (Findings)

3.1. The relationships among peer victimization, loneliness and depressive symptoms

In the first step of the analysis, the relationships among peer victimization, loneliness and depressive symptoms were investigated. Based on the results of zero ordered correlation coefficient, victimization was found to be associated with loneliness (r (144) = .32), indicating that students who reported being lonely also reported more severe bullying victimization experiences. Victimization was significantly related to depressive symptoms (r (144) = .18) which indicated that victimized adolescents were more likely to report depressive symptoms. Finally, loneliness was found to be correlated with depressive symptoms (r (144) = .51) indicating that adolescents who reported feeling lonely also reported more depressive symptoms. Also, the possible gender differences among the main variables of the study were examined. The results of one-way ANOVA revealed that there are no gender differences in terms of depression (F (1, 142) = 2.102, p = .149), loneliness (F (1, 142) = 3.58, p = .061) and victimization (F (1, 142) = 1.28, p = .260).

3.2. Mediational role of loneliness in the relationship between victimization and depressive symptoms.

In the second step, the role of loneliness as a mediator between victimization and depressive symptoms were examined. In order to test the mediation role of loneliness, the four steps of Baron and Kenny (1986) were followed. First, depressive symptoms was regressed on victimization and result revealed a significant relationship (t (142) = 2.19, p = .000, β = .18). Second, loneliness was regressed on victimization and the result showed a significant relationship (t (142) = 3.94, p = .000, β = .13). Third, depressive symptoms was regressed on loneliness and again the results indicated a significant relationship between loneliness and depression (t (142) = 7.16, p = .000, β = .51). The results of these three steps indicated that the mediation model meets the requirements as outlined by Baron and Kenny (1986). Finally, the mediational role of loneliness was tested by including victimization in the first block and loneliness in the second block. The criterion variable was depressive symptoms. As expected, victimization was a significant predictor of depressive symptoms (t (142) = 2.19, p = .030, β = .18). In the next block, when loneliness was added to the equation, it predicted significant variance in depressive symptoms (t (141) = 6.69, p = .000, β = .51). However, victimization was no longer a significant predictor of depressive symptoms (t (141) = .27, p = .785, β = .021) which indicates that loneliness fully mediates the relationship between victimization
and depressive symptoms (see Table 1). The result of the Goodman test was also confirmed the mediator role of loneliness ($z = 3.47, p = .0001$).

### Table 1 Hierarchical Regression Analysis: Testing the Meditational Role of Loneliness

<table>
<thead>
<tr>
<th>Step</th>
<th>Dependent Variables</th>
<th>$\beta$</th>
<th>$\Delta R^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Victimization</td>
<td>.18</td>
<td>.033</td>
<td>.03</td>
</tr>
<tr>
<td>Step 2</td>
<td>Victimization</td>
<td>.02</td>
<td>.233</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>Loneliness</td>
<td>.51</td>
<td>.00</td>
<td></td>
</tr>
</tbody>
</table>

#### 4. Discussion

The current study investigated the mediator role of loneliness in the relationship between peer victimization and depressive symptoms in order to understand why some victimized students are more prone to developing depressive symptoms than others. The result revealed that peer victimization is significantly correlated to depressive symptoms through the mediating role of loneliness. That is, the experience of loneliness enhances the negative effect of peer victimization that increases the risk of depression. The results highlighted the importance of loneliness at this age group by showing that peer victimization may lead to depressive symptoms with the presence of perceived loneliness. Previous researchers already suggested that loneliness was a risk factor for increased possibility of developing psychological symptoms (Lau, Chan & Lau, 1999; Hudson, Elek & Grossman, 2000) as well as peer victimization (Berguno, Leroux, McAinsh, & Shaikh, 2004). The results of the study contribute to the existing literature by shedding light on the nature of the relationship between peer victimization and depressive symptoms.

Several implications can be drawn based on the results of the study. First of all, these results provide some cues for promoting several school adjustment issues such as academic adjustment and school persistence. Understanding the underlying mechanism of the relations between peer victimization and depressive symptoms can contribute to the development of prevention and treatment programs for adolescents that can be used by school counseling centers to help peer victimized clients in overcoming their negative reactions toward both peer relations and themselves. Particularly, use of an intervention that tries to increase one’s social skills can be helpful for the students who have a difficulty in development of peer relations. More specifically, counselors may teach their clients some useful social and coping skills to increase the possibility of establishing peer relations. In addition, in the school setting teachers should be alert to signs of peer victimization, loneliness and depression by keeping in mind their relative relationships and to refer students to school counselor. Furthermore, teachers can provide opportunities lonely students to participate in group work in class. Teachers may encourage students to participate in creative and physical group activities such as drawing, movement, music and sports in order to cope with loneliness (Galanaki, 2004, Galanaki & Vasilopoulou, 2007).

In sum, the findings of the study suggest that enriching the social skills and social support systems of the students to decrease the sense of loneliness would help to cope with both peer victimization and other psychological issues. However, the results of the study should be read cautiously due to several caveats of the study. Firstly, the present study was exploratory in nature and relies on the cross-sectional data. Therefore, causality cannot be established. The mediator role of loneliness should be confirmed by longitudinal studies. The study also suffers from the limitations of any study in which researchers use only self-report measures. Thus, a study with a multi-trait-multi-method approach with different informants such as peers and teachers may help to confirm the results of
self-report. Therefore, researchers should consider this study as preliminary. Future research with larger and diverse samples and more sophisticated methodologies is needed.

References


