2007

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Peer Victimization, Depression, and Suicidality in Adolescents

ANAT BRUNSTEIN KLOMEK, PhD, FRANK MARROCCO, PhD, MARJORIE KLEINMAN, MS, IRVIN SAM SCHONFELD, PhD, MPH, AND MADELYN S. GOULD, PhD, MPH

The association between specific types of peer victimization with depression, suicidal ideation, and suicide attempts among adolescents was examined. A self-report survey was completed by 2,342 high-school students. Regression analyses indicated that frequent exposure to all types of peer victimization was related to high risk of depression, ideation, and attempts compared to students not victimized. Infrequent victimization was also related to increased risk, particularly among females. The more types of victimization the higher the risk for depression and suicidality among both genders. Specific types of peer victimization are a potential risk factor for adolescent depression and suicidality. It is important to assess depression and suicidality among victimized students in order to develop appropriate intervention methods.

Peer victimization is a prevalent problem among high school students (Brunstein Klomek, 2007; Nansel, Overpeck, Pilla, Ruan, Simons-Marten, & Scheidt, 2001). Approximately 10 to 20% of high school students in the U.S. report moderate or frequent victimization (Klomek et al., 2007; Nansel et al., 2001). Nansel and colleagues’ national study assessed five specific types of victimization: belittling about religion/race; belittling about looks/speech; hitting, slapping, or punching; rumor spreading or lying about the target; and sexual comments/gestures (Nansel et al., 2001). The prevalence of these types of victimization among adolescents ranged from 8 to 20%; the most common being belittling about looks/speech and the least prevalent being belittling about religion or race (Nansel et al., 2001). Being bullied via e-mail or the Internet (cyber victimization) is the newest type of victimization (Patchin & Hinduja, 2006; Ybarra, 2004; Ybarra & Mitchell, 2004). The prevalence of this type of victimization varies, from 4 to 35% in adolescent samples (Patchin & Hinduja, 2006; Ybarra & Mitchell, 2004).

The classification and definition of specific types of victimization varies among studies (Wolke & Stanford, 1999), making comparisons among studies difficult (Hawker,
Peer victims are found to manifest more depressive symptoms compared to non-victims (Brunstein Klomek, 2007; Craig, 1998; Crick & Grotputer, 1996; Fekkes, Pijpers, & Verloove-Vanhorick, 2004; Hawker & Boulton, 2000; Kumpulainen & Rasanen, 2000; Kumpulainen, Rasanen, & Henttenen, 1999; Mills, Guerin, Lynch, Daly, & Fitzpatrick, 2004; Neary & Joseph, 1994; Slee, 1995; van der Wal et al., 2003; Williams, Chambers, Logan, & Robinson, 1996). In a meta-analysis, peer victimization was most strongly related to depression in comparison to other types of maladjustment (Hawker & Boulton, 2000). Compared to nonvictims, victims are also found to exhibit high levels of suicidal ideation (Brunstein Klomek, 2007; Hold, Finkelhor, & Kantor, 2006; Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999; Rigby & Slee, 1999; Roland, 2002; van der Wal et al., 2003) and are more likely to have attempted suicide (Brunstein Klomek, 2007; Cleary, 2000; Eisenberg, Neumark-Sztainer, & Story, 2003; Kim, Koh, & Levanthal, 2005; Mills et al., 2004).

Studies have found significant interactions between gender and victimization with regard to depression and suicidality risk; the results, however, are not consistent. Kim et al. (2005) found that female but not male students who were victimized were at significantly greater risk for suicidal ideation. Similarly, Kaltiala-Heino et al. (1999) found that severe ideation was associated with frequent victimization only among girls and there was no gender interaction for depressive symptoms. van der Wal et al. (2003) found that among both genders indirect victimization was associated with depression and suicidal ideation. Direct victimization, however, was associated with depression and suicidal ideation among girls but not boys. In our earlier study (Brunstein Klomek et al., 2007), we found a different threshold at which bullying was associated with depression and suicidality among females and males. Among females, victimization at any frequency increased the risk of depression, ideation, and attempts. Among males only frequent victimization increased the risk of depression and ideation.
Slee, 1999; Roland, 2002; Slee, 1995; van der Wal et al., 2003). Only a few studies have examined the association between specific types of peer victimization with depression (Crick & Grootpeter, 1996; Prinstein et al., 2001). Specific types of peer victimization examined include weight-based teasing (Eisenberg et al., 2003; Janssen, Craig, Boyce, & Pickett, 2004) and sexual victimization (Gidycz & Koss, 1989). To our knowledge, no study has examined the association between specific types of peer victimization with suicidality.

The purpose of the current research was to examine the association between specific types of peer victimization with depression, suicidal ideation, and suicide attempts among a large sample of American high school students. Specifically, we examined the prevalence of six specific types of peer victimization; the association of these types of victimizations with depression, suicidal ideation, and suicide attempts by gender; and the co-occurrence of multiple types of peer victimization.

**SUBJECTS AND METHODS**

**Participants**

This study targeted adolescents aged 13 through 19 years, enrolled in ninth through twelfth grade in six high schools in Nassau, Suffolk, and Westchester counties in New York State. Five schools were public co-educational schools and one was a parochial all-boys school. These schools were part of a study examining whether asking about suicidality during a screening program creates distress or increases suicidal ideation (Gould et al., 2005). This study included 2,341 of 3,635 students (64.4% participation rate) from the fall of 2002 through the spring of 2004. Reasons for nonparticipation included parental refusals (61.9%), student refusals (14.3%), and absences (23.7%). The ethnic distribution of the participating sample was 80.3% White, 5.1% Black, 7.3% Hispanic, 3.8% Asian, and 3.5% other. A total of 58.1% of the students were boys (the inclusion of an all-male parochial school explains the high percentage of boys). The mean (SD) age of participating students was 14.8 (1.2) years. There were no significant differences between participants and nonparticipants in sex, age, and race/ethnicity.

Students were recruited with a waiver of parental consent for parents and active written assent for youth. The recruitment procedures were based on those used in our earlier study (Gould, Velting, Kleinman, Lucas, Thomas, & Chung, 2004) and were developed in response to what the schools considered would best meet the needs of their communities. The current study received an IRB approval of a waiver of consent, based on Federal Regulations (Title 45; Part 46, Article 46.116(d)). Two mailings with an information sheet describing survey content and procedures, a response form, and a stamped response envelope were sent to parents 6 and 4 weeks before survey administration, providing parents opportunities to refuse their children’s participation and giving them ample pertinent information about the project. Students’ written assent was obtained immediately before the survey.

The study procedures, consistent with the Family Educational Rights and Privacy Act and the Protection of Pupil Rights Amendment, were approved by the IRB of the New York State Psychiatric Institute/Columbia University Department of Psychiatry.

**Measures**

A self-report questionnaire assessed depression, suicidal ideation, suicide attempts, and peer victimization. The assessment time frame was the past 4 weeks, with the exception of measuring lifetime suicide attempts.

**Demographic Questionnaire.** The demographic questionnaire elicited information with regard to age, grade, gender, racial/ethnic background, and household composition.

**Depression.** The Beck Depression Inventory (BDI-IA, version I amended; Beck & Steer, 1993) assessed cognitive, behavioral, affective, and somatic components of depression. Loss of libido was not assessed. The BDI has been used in over 200 studies, including those with adolescents samples (Rob-
erts, Lewinsohn, & Seeley, 1991; Strober, Green, & Carlson, 1981; Teri, 1982). Each response ranged from 0 (symptoms not present) to 3 (symptom is severe), with a maximum total score of 60. A cut-off point of 16 was employed to dichotomize BDI scores. This cut-off has correctly classified 81% of adolescent psychiatric patients with major depressive disorder (Strober et al., 1981) and has been recommended to detect possible depression in normal populations (Beck & Steer, 1993). The internal consistency reliability (as measured by Cronbach’s alpha) of the BDI-IA is .89 (Beck, Steer, Ball, & Ranieri, 1996).

**Suicidal Ideation.** The Suicide Ideation Questionnaire (SIQ-JR) assesses suicidal thoughts and is designed for large-scale, school-based screening of adolescents (Reynolds, 1988). The 15-item SIQ-JR uses a 7-point Likert-type scale, ranging from 0 (I never had this thought) to 6 (This thought was in my mind almost every day), assessing the frequency of specific suicidal thoughts during the past month. It assesses thoughts related to death and dying, passive and active suicidal ideation, and suicidal intent. Reliability of the SIQ-JR is high, ranging from .91 to .96 (Keane, Dick, Bechtold, & Manson, 1996; Reynolds, 1988; Reynolds & Mazza, 1999) for internal consistency and from .87 to .93 for test-retest reliability (Reynolds & Mazza, 1999). The SIQ-JR has demonstrated criterion validity (King et al., 1993; Reynolds, 1988, 1990; Reynolds & Mazza, 1999), construct validity in clinical samples (King, Ghaziuddin, McGovern, Brand, Hill, & Naylor, 1996; King, Hill, Naylor, Evans, & Shain, 1993; King, Katz, Ghaziuddin, Brand, Hill, & McGovern, 1997; Sibthorpe, Drinkwater, Gardner, & Bammer, 1995; Siemen, Warrington, & Mangan, 1994), and predictive validity (Keane et al., 1996). Suicidal ideation was considered serious if the adolescent scored 31 or higher on the SIQ-JR; or scored 5 or 6 on two or more of the six “critical” SIQ-JR items (Reynolds, 1988); or responded with either of the two most serious response options of the BDI suicide item.

**Suicide Attempt History.** Seven questions asking about lifetime and recent suicide attempts were derived from the depression module of the Diagnostic Interview Schedule for Children (DISC-IV; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000) and an earlier suicide screen (Shaffer et al., 2004). These items have demonstrated good construct validity (Gould et al., 1998; Shaffer et al., 2004). The assessment of an attempt included questions about occurrences, injuries sustained, medical care sought, and hospitalization (Meehan, Lamb, Saltzman, & O’Carroll, 1992). The adolescent was considered to have a history of an attempt if he or she reported any past attempt, regardless of timing, injury, or medical attention.

**Specific Types of Peer Victimization.** Several questions regarding victimization were derived from the WHO study on youth health (Nansel et al., 2001). Questions about victimization were preceded with the following explanation. “We say a student is being bullied when another student or group of students says or does nasty and unpleasant things to him or her. It is also bullying when a pupil is teased repeatedly in a way he or she doesn’t like. But it is not bullying when two students of about the same strength quarrel or fight.” Victimization was assessed by six questions asking respondents to report the frequency with which they were victimized in different ways. The different types of victimization assessed were: “Made fun of you because of your religion or race”; “Made fun of you because of your looks or speech”; “Hit, slapped, or punched you”; “Spread rumors or mean lies about you”; “Made sexual jokes, comments, or gestures to you”; “Used e-mail or Internet to be mean to you.” The frequency items were coded on a 5-point scale ranging from not at all to most days. Respondents were classified as never victimized, victimized less than weekly, or victimized frequently (at least 3 to 4 times in the past 4 weeks).

**Statistical Analysis**

Chi-square analyses were conducted to examine gender differences in the prevalence of specific types of peer victimization. A se-
eries of logistic regression models was con- 
ducted to examine the association between 
specific types of victimization (less than weekly 
and frequently) with depression, serious suicide 
alidation, and suicide attempts (as dichotomized 
outcomes). The category “never victimized” was the reference group in these 
analyses. These regression analyses were first 
conducted separately for males and females 
and were adjusted for schools and grade. In-
teractions between gender and the specific 
types of victimization were examined in addi-
tional models. A power analysis revealed suf-
ficient power (greater than .80) to detect po-
tential interactions.

Another series of logistic regression 
analyses was conducted to examine the rela-
tion of each of the three outcome measures 
to the co-occurrence of the different types of 
victimization. A count of the number of the 
different types of victimization was created 
for each respondent. The maximum count 
was 5 or 6 types of victimization. We com-
bined having been victimized in 5 or 6 ways 
in order to avoid small ns. For this analysis 
we combined frequent and infrequent victim-
ization within each type of victimization. Re-
spondents who were never victimized served 
as the reference group in the logistic regres-
sion. In addition, within the victimization 
groups we conducted tests for linear trends 
(Fleiss, Levin, & Paik, 2003).

We chose not to include random ef-
effects for school or class in the regression 
analyses because the sample clusters (school) 
and the randomization unit (class within 
school) had little impact on the outcomes or 
correlates (gender, depression, serious suicide ideation/behavior, peer victimization), as in-
dicated by the intraclass coefficients (ICCs), 
which were all close to zero (ICCs < .06). 
Moreover, meaningful differences between 
results of random effects regression models 
and our analysis were not anticipated because 
there were many units of randomization (181 
classes) of relatively small average size (Mur-
ray, 1998). Analyses were conducted using 
the SPSS software package, version 12. Re-
sults were considered significant at \( \alpha < .05 \).

RESULTS

Frequency of Specific Types 
of Victimization

The most common experience of being bullied involved having one’s looks or 
speech belittled ([infrequently] less than weekly, 20.4%; frequently, 9.1%) (Table 1). Being bullied via e-mail or the Internet oc-
curred with the lowest frequency (infrequently, 
5%; frequently, 2.3%).

Males were more likely than females to 
be belittled because of religion or race and to 
be bullied by being hit, slapped, or punched 
(\( \chi^2 = 41.15, p < .001 \); \( \chi^2 = 47.53, p < .001 \), re-
spectively) (Table 1). Females were more 
likely than males to be the subject of rumors 
(\( \chi^2 = 26.10, p < .001 \)); sexual jokes, comments, 
or gestures (\( \chi^2 = 28.31, p < .001 \)); and mean-
ness by use of e-mail or the Internet (\( \chi^2 = 
18.99, p < .001 \)).

All types of victimizations were signifi-
cantly correlated (Table 2) but they were not 
redundant, given the modest sizes of the cor-
relations. We therefore examined the associa-
tion of specific types of peer victimization 
with depression, serious suicidal ideation, and 
suicide attempts by gender (see Table 3).

Belittled About Religion or Race. This 
type of victimization was significantly associ-
ated with depression and suicide attempts for 
females, but was not significantly associated 
with serious suicidal ideation (SSI) among fe-
males. Among males, being bullied frequently 
but not infrequently was associated with de-
pression and SSI. This type of victimization 
at any frequency was not associated with sui-
cide attempts among males. Interactions be-
tween victimization and gender were not sig-
ificant with regard to depression, SSI, and 

Belittled About Looks or Speech. Among 
females, being belittled about looks or speech 
at any frequency was significantly associated 
with depression, SSI, and attempts. Among 
males frequent, but not infrequent, victimiza-
tion was associated with depression, SSI, and 

Significant interactions between
<table>
<thead>
<tr>
<th>Made fun of you because of your religion or race</th>
<th>Male (N = 1,274)</th>
<th>Female (N = 907)</th>
<th>Total (N = 2,181)</th>
<th>χ² Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>83.3 (1,061)</td>
<td>92.2 (836)</td>
<td>87.0 (1,897)</td>
<td>41.15, p = .000</td>
</tr>
<tr>
<td>Less than weekly</td>
<td>9.7 (123)</td>
<td>5.7 (52)</td>
<td>8.0 (175)</td>
<td></td>
</tr>
<tr>
<td>Frequently</td>
<td>7.1 (90)</td>
<td>2.1 (19)</td>
<td>5.0 (109)</td>
<td></td>
</tr>
<tr>
<td>Hit, slapped, or punched</td>
<td>69.4 (881)</td>
<td>72.3 (655)</td>
<td>70.6 (1,536)</td>
<td>4.77, p = .092</td>
</tr>
<tr>
<td>Made sexual jokes, comments, or gestures to you</td>
<td>78.6 (997)</td>
<td>89.6 (813)</td>
<td>83.2 (1,810)</td>
<td>47.53, p = .000</td>
</tr>
<tr>
<td>Spread rumors or mean lies about you</td>
<td>14.3 (181)</td>
<td>7.6 (69)</td>
<td>11.5 (250)</td>
<td></td>
</tr>
<tr>
<td>Used e-mail or Internet to be mean to you</td>
<td>7.2 (91)</td>
<td>2.8 (25)</td>
<td>5.3 (116)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>84.6 (1,075)</td>
<td>76.0 (689)</td>
<td>81.0 (1,764)</td>
<td>26.10, p = .000</td>
</tr>
<tr>
<td></td>
<td>11.1 (141)</td>
<td>18.1 (164)</td>
<td>14.0 (305)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3 (55)</td>
<td>6.0 (54)</td>
<td>5.0 (109)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85.8 (1,091)</td>
<td>76.9 (697)</td>
<td>82.1 (1,788)</td>
<td>28.31, p = .000</td>
</tr>
<tr>
<td></td>
<td>8.9 (113)</td>
<td>13.9 (126)</td>
<td>11.0 (239)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.3 (68)</td>
<td>9.2 (83)</td>
<td>6.9 (151)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5 (44)</td>
<td>7.2 (65)</td>
<td>2.3 (50)</td>
<td>18.99, p = .000</td>
</tr>
<tr>
<td></td>
<td>1.8 (23)</td>
<td>3.0 (27)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 'N's vary slightly because of missing data.
TABLE 2
Correlation Matrix of the Specific Types of Peer Victimization

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Victimized about religion/ race</th>
<th>Victimized about looks/talks</th>
<th>Victimized by hit, slapped or punched</th>
<th>Victimized by spreading rumors</th>
<th>Victimized by sexual jokes</th>
<th>Victimized by e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victimized about religion/ race</td>
<td>1.00**</td>
<td>.290**</td>
<td>.159**</td>
<td>.174**</td>
<td>.149**</td>
<td>.110**</td>
</tr>
<tr>
<td>Victimized about looks/talks</td>
<td>.322**</td>
<td>1.00**</td>
<td>.358**</td>
<td>.353**</td>
<td>.248**</td>
<td></td>
</tr>
<tr>
<td>Victimized by hit, slapped, punched</td>
<td>.302**</td>
<td>.302**</td>
<td>1.00**</td>
<td>.391**</td>
<td>.383**</td>
<td></td>
</tr>
<tr>
<td>Victimized by spreading rumors</td>
<td></td>
<td></td>
<td></td>
<td>1.00**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victimized by sexual jokes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00**</td>
<td></td>
</tr>
<tr>
<td>Victimized by e-mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.249**</td>
</tr>
</tbody>
</table>

Note. ** < .01

Gender and victimization by looks or speech indicated that females who were belittled about looks or speech were at significantly higher risk for depression compared to males (ORinfrequently = 3.71, 95% CI = 2.41–5.72, p < .001; ORfrequently = 10.81, 95% CI = 6.20–18.85, p < .001). Interactions between victimization and gender were not significant with regard to SSI and attempts.

**Physical Victimization (Being Hit, Slapped, or Punched).** Among females, being physically bullied at any frequency was significantly associated with depression, SSI, and attempts. Among males frequent, but not infrequent, physical victimization was associated with depression, SSI, and attempts. Significant interactions between gender and infrequent physical victimization indicated that females who were physically victimized infrequently were at significantly higher risk for depression than comparable males (OR = .311, 95% CI = .13–.73, p < .001). Interactions between physical victimization and gender were not significant with regard to SSI and attempts.

**Subject of Rumors or Mean Lies.** Among females, victimization by the spread of rumors or lies at any frequency was associated with depression, SSI, and attempts. Among males, victimization at any frequency was associated with depression and SSI but only frequent victimization was associated with attempts. Interactions between this type of victimization and gender were not significant with regard to depression, SSI, and attempts.

**Subject of Sexual Jokes, Comments, or Gestures.** Among females, being bullied infrequently or frequently was significantly associated with depression and attempts. Only frequent victimization was associated with SSI. Among males only frequent victimization was associated with depression and both levels of victimization were associated with SSI and attempts. Interactions between this type of victimization and gender were not statistically significant with regard to depression, SSI, and attempts.

**Cyber Victimization.** Among females, being bullied via Internet or e-mail infrequently or frequently was significantly associated with depression and SSI. Only frequent victimization was associated with attempts. Among males, frequent but not infrequent victimization was associated with depression and both levels of victimization were associated with SSI. The small number of males who were victimized via Internet or e-mail
and made an attempt \( (n_{infrequent} = 2; n_{frequent} = 1) \) precluded a meaningful examination of the risk of attempts. Interactions between this type of victimization and gender were not significant with regard to depression, SSI, and attempts.

**Impact of Co-Occurrence of Several Types of Victimizations**

Among males who were victimized, 44.9% experienced one type of victimization, 26.6% experienced two types, 15.2% experienced three types, 7.5% experienced four types, and 5.8% experienced five or six types of victimization. Among females who were victimized, 40.9% experienced one type of victimization, 28.4% experienced two types, 18.1% experienced three types, 8.1% experienced four types, and 4.5% experienced five or six types of victimization.

Overall, the more types of victimization the higher the risk for depression, SSI, and suicide attempts among both genders (Table 4). A test for linear trends within the victimization groups indicated that as the types of victimization increased, the rates of depression and suicidality increased in a non-linear fashion (male depression: \( \chi^2 = 22.94, df = 3, p < .001 \); female depression: \( \chi^2 = 25.16, df = 3, p < .001 \); male ideation: \( \chi^2 = 30.46, df = 3, p < .001 \); female ideation: \( \chi^2 = 27.97, df = 3, p < .001 \); male attempts: \( \chi^2 = 11.65, df = 3, p < .05 \); female attempts: \( \chi^2 = 27.93, df = 3, p < .001 \)). When an individual is exposed to five or six types of peer victimization the risk of depression and suicidality increases dramatically. Males who were victimized in five or six ways were 12 times more likely to be depressed, nearly 20 times more likely to have reported serious suicidal ideation, and approximately 18 times more likely to have attempted suicide compared to males who were never victimized. Similarly, females who were victimized in five or six ways were approximately 33 times more likely to be depressed, 27 times more likely to have experienced suicidal ideation, and 19 times more likely to attempt suicide. Approximately 40% of the males and 70% of the females who were victimized in five or six ways had any of these three outcomes (depression, serious suicidal ideation, suicide attempts).

**DISCUSSION**

The most common experience of being bullied involved having one’s looks or speech belittled, similar to Nansel’s findings (Nansel et al., 2001). This result is not surprising in light of teens’ interest and investment in their appearance. Being bullied via e-mail or the Internet occurred with the lowest frequency. Cyber victimization may have occurred infrequently in the present sample because the data was collected between 2002–2004. Cyber victimization may have become more frequent since then (Patchin & Hinduja, 2006; Ybarra, 2004; Ybarra & Mitchell, 2004).

Males were more likely than females to be physically bullied and to be belittled because of religion or race. Females were more likely than males to be the subject of rumors, sexual gestures, and meanness by use of the Internet. The gender differences we found are consistent with previous findings that physical victimization is more prevalent among males (Baldry & Farrington, 1999; Prinstein et al., 2001). Adolescent males may be more involved in physical victimization due to their generally higher levels of aggression (Achenbach & Edelbrock, 1981). Our results are also consistent with Nansel’s findings that for males, both physical and verbal victimization was common while for females verbal victimization and rumors were common (Nansel et al., 2001). The high levels of verbal victimization among both genders may be explained by the increase in verbal aggression with age (Conner, 2004).

All types of victimization were associated with depression and suicidality. Our findings support previous reports that both direct and indirect victimization have negative consequences for internalizing problems (Crick & Grotpeter, 1996; van der Wal et al., 2003). The pattern of associations we found was consistent across the different types of peer victimization. On average, the more fre-
<table>
<thead>
<tr>
<th>TABLE 3: Prevalence of Depression, Suicidal Ideation, and Suicide Attempts among Teens Experiencing Specific Types of Victimization by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>% (n)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Made fun of you because of your religion or race</strong></td>
</tr>
<tr>
<td><strong>Depression</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Suicide ideation</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Suicide attempts</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Made fun of you because of your looks or speech</strong></td>
</tr>
<tr>
<td><strong>Depression</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Suicide ideation</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Suicide Attempts</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Hit, slapped, or punched</strong></td>
</tr>
<tr>
<td><strong>Depression</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Suicide ideation</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
</tbody>
</table>
Suicide Attempts

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N)</td>
<td>(95% CI)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.8 (18)</td>
<td>3.9 (7)</td>
</tr>
<tr>
<td>Suicide ideation</td>
<td>1.8 (19)</td>
<td>5.8 (8)</td>
</tr>
<tr>
<td>Suicide attempts</td>
<td>2.0 (21)</td>
<td>4.3 (6)</td>
</tr>
</tbody>
</table>

Spread rumors or mean lies about you

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>4.6 (49)</td>
<td>9.4 (13)</td>
</tr>
<tr>
<td>Suicide ideation</td>
<td>1.8 (19)</td>
<td>5.8 (8)</td>
</tr>
<tr>
<td>Suicide attempts</td>
<td>2.0 (21)</td>
<td>4.3 (6)</td>
</tr>
</tbody>
</table>

Made sexual jokes, comments, or gestures to you

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>5.1 (56)</td>
<td>8.9 (10)</td>
</tr>
<tr>
<td>Suicide ideation</td>
<td>2.2 (24)</td>
<td>5.3 (6)</td>
</tr>
<tr>
<td>Suicide attempts</td>
<td>1.8 (19)</td>
<td>7.2 (9)</td>
</tr>
</tbody>
</table>

Used e-mail or Internet to be mean to you

<table>
<thead>
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<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>5.1 (61)</td>
<td>9.1 (4)</td>
</tr>
<tr>
<td>Suicide ideation</td>
<td>2.2 (26)</td>
<td>9.3 (4)</td>
</tr>
<tr>
<td>Suicide attempts</td>
<td>2.4 (29)</td>
<td>4.5 (2)</td>
</tr>
</tbody>
</table>

Note. Adjusted for schools attended and grade; N's vary slightly because of missing data.

* N = 1,270; ** N = 902

OR = Odds ratio; CI = Confidence interval

*p < .05; **p < .01; ***p < .001
TABLE 4
Prevalence of Depression, Ideation, and Attempts by Number of Types of Victimization

<table>
<thead>
<tr>
<th>Victimization at any frequency</th>
<th>Never</th>
<th>One type</th>
<th>Two types</th>
<th>Three types</th>
<th>Four types</th>
<th>Five or six types</th>
</tr>
</thead>
</table>
| Males
| % (n) | 3.2(20) | 7.3(21) | 5.8(10) | 8.2(8) | 12.5(6) | 29.7(11) |
| OR b | 2.32*** | 1.85 | 2.57* | 4.23** | 12.15*** |
| (95% CI) | (1.23–4.37) | (.85–4.03) | (1.09–6.04) | (1.60–11.19) | (5.20–28.42) |
| Ideation
| % (n) | 1.4 (9) | 2.4(7) | 2.9(5) | 4.1(4) | 6.3(3) | 22.2(8) |
| OR b | 1.72 | 2.01 | 3.10 | 4.78* | 19.65*** |
| (95% CI) | (.63–4.69) | (.66–6.10) | (.92–10.40) | (1.23–18.53) | (6.85–56.34) |
| Attempts
| % (n) | 1.0(6) | 3.5(10) | 2.4(4) | 6.1(6) | 2.1(1) | 13.9(5) |
| OR b | 3.67* | 2.57 | 6.37** | 1.98 | 18.23*** |
| Females
| Depression
| % (n) | 5.5(25) | 14.2(26) | 25.2(32) | 33.3(27) | 41.7(15) | 65.0(13) |
| OR b | 2.88*** | 5.83*** | 8.49*** | 11.73*** | 33.51*** |
| (95% CI) | (1.61–5.14) | (3.29–10.34) | (4.59–15.73) | (5.38–25.59) | (12.13–92.58) |
| Ideation
| % (n) | 2.4(11) | 4.9(9) | 6.3(8) | 11.1(9) | 13.9(5) | 40.0(8) |
| OR b | 2.10 | 2.65* | 5.03* | 6.20** | 27.38*** |
| (95% CI) | (.85–5.16) | (1.03–6.78) | (2.00–12.65) | (2.00–19.24) | (8.98–83.53) |
| Attempts
| % (n) | 2.9(13) | 3.2(6) | 12.7(16) | 14.8(12) | 16.7(6) | 40.0(8) |
| OR b | 1.10 | 4.53*** | 6.41*** | 7.36*** | 19.40*** |
| (95% CI) | (.41–2.96) | (2.09–9.80) | (2.76–14.88) | (2.54–21.34) | (6.52–57.79) |

N’s vary slightly because of missing data; a Adjusted for schools and grade.
OR = Odds ratio; CI = Confidence interval
*p < .05; **p < .01; ***p < .001

quent the victimization, the higher the risk for depression and suicidality. Among males it was primarily frequent peer victimization that was more consistently associated with depression and suicidality. Among females, any level of peer victimization was associated with depression and suicidality. This pattern was similar to the one we found in our earlier study in which we assessed general peer victimization (Brunstein Klomek et al., 2007). Our findings contradict reports that only female victims are at greater risk for depression and ideation (Kim et al., 2005; van der Wal et al., 2003); male victims are also at increased risk.

Generally, the more types of peer victimization the teen has been exposed to the higher the risk for depression and suicidality. This finding is consistent with reports that adolescent victims of multiple forms of aggression are at greater risk for psychological adjustment difficulties than victims of one form
Specific types of victimizations can cross constructs. For example, verbal victimization such as belittling because of looks or speech can be categorized as direct victimization but also as indirect victimization if it is used to harm the victim through a third party (Hawker & Boulton, 2000). It can also be considered relational victimization if it is used to exclude the victim. Similarly, the use of e-mail or Internet can be considered a direct (e.g., cursing the victim directly) or an indirect (e.g., spreading rumors on a public chat) form of victimization. Another difficulty in differentiating between the different types of peer victimization is that relational victimization may include both direct and indirect forms. Lastly, in light of the cross-sectional design, causality cannot be determined from the associations between peer victimization and depression/suicidality.

Clinical Implications

Our findings suggest that specific types of peer victimization are a prevalent and serious problem among high school students. All types of victimization are associated with high risk of depression, serious suicidal ideation, and suicide attempts. Moreover, the more types of victimization the teen experiences the higher the risk. Our results emphasize that peer victimization may be a marker of suicidal behavior and that school-based suicide prevention programs should include the reduction of peer victimization because of its association with suicidality. Any intervention should target the specific forms of peer victimization.

One possible theory that might at least in part explain the relation of peer victimization to depression and suicidality is the self-concept perspective. From this perspective, the central, most damaging impact of peer victimization is on self-concept. Studies have shown that victimized children and adolescents have a more negative self-concept than children who are not victimized by their peers (Mizell, 2003; O’Moore & Kirkham, 2001). Similarly, suicidal adolescents have been shown to have a negative self-concept.
Adolescence, those who are not suicidal (Brunstein Klomek, Orbach, Meged, & Zalsman, 2005). As such, interventions and prevention strategies that focus on enhancing self-concept may reduce peer victimization as well as depression and suicidality among adolescents. Assessments of suicidal tendencies among high school students should consider peer victimization as a potential risk factor. Conversely, when evaluating victims, especially those victimized in multiple forms, it is important to assess depression, serious suicidal ideation, and suicide attempts.

REFERENCES


Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years’ research on peer victimization and


Manuscript Received: November 20, 2006
Revision Accepted: June 28, 2007