

Peer Aggression and Victimization: Patterns of Change across Middle School

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Introduction

- Bullying, including both verbal and physical behaviors, may be the most prevalent form of low-level aggression among school-aged youth (Batsche, 1997; Goldstein, 2001; Haynie, Nansel, Eitel, Crump, Saylor, & Yu, 2001; Limber & Small, 2000; Nansel et al., 2001), which tends to peak in middle school (Hoover, Oliver, & Hazler, 1992; Pellegrini & Bartini, 2000).
- Aggression (see Coie & Dodge, 1998, for a review) and victimization (Nansel, Haynie, & Simons-Morton, 2003; Paul & Cillessen, 2003; Peets & Kikas, 2006; Storch, Masia-Warner, Crisp & Klein, 2005) have demonstrated relatively high levels of longitudinal stability across this middle age range.
- The stability of bullying behaviors has not received as much research attention; however, the contention that bullying is a stable behavior has received some support (Schafer, Korn, Brodbeck, Wolke, & Schulz, 2005).
- Ratings of aggression drawn from different sources (e.g. teachers, peers, and self) typically demonstrate moderate levels of agreement (Peets & Kikas, 2006) though estimates of this concordance may vary according to the type of aggression (i.e. overt vs. relational).
- Multi-informant ratings of victimization have found lower levels of concordance between peer and self-ratings (Graham, Bellmore, & Juvonen, 2003) and multi-informant ratings of bullying and victimization found poor concordance between self-report and peer and teacher reports (Cornell & Brockenbrough, 2004).
- Given the lack of empirical investigations examining bullying and victimization phenomena longitudinally across the middle school years with data gathered from multiple raters, data from this longitudinal study addressed basic questions of whether or not peer, teacher, and self ratings describe similar phenomena and similar trends over time.

Method and Participants

- Data for this current investigation were collected from five cohorts of students in three middle schools in a mid-sized Midwestern city who participated in the larger longitudinal study from 1999 until 2003. Self, peer, and teacher data were collected each spring across five years in the three middle schools.
- Active parental consent and youth assent were obtained for each participant in the study.
- In 2002, all middle schools in this community altered the grade ranges of their school (6th-8th). Table 1 (handout) shows the total school enrollment for each year as well as the total number of students in each participating grade.
- A total of 641 students across the three middle schools participated in the study. Participants ranged in age from 11 to 14 years old ($M = 12.13$; $SD = .72$; $n = 536$) in the first year of middle school (T1: sixth or seventh grades, depending on school); 12 to 15 years old ($M = 13.21$; $SD = .71$; $n = 447$) in the second year of middle school (T2: seventh or eighth grades); and 13 to 16 years old ($M = 14.09$; $SD = .72$; $n = 292$) in their third year (T3: eighth or ninth grades).
- The racial distribution for the sample was: 78% European American, 6% African-American, 5% Asian/Asian-American, 5% Biracial, 3% Latino(a), 1% Native American, 1% Eastern European, and 1% Middle Eastern.
- Based on self-nominations from the *Bully Survey* (Swearer, 2001), 70% of participants endorsed roles of bully, victim, or bully victim at T1, 69% at T2, and 58% at T3.

Instrumentation

- The Bully Survey** (Swearer, 2001). The Bully Survey is a four part, 31-question survey that queries students regarding their experiences with bullying, perceptions and attitudes toward bullying during the school year in which the survey is administered.

Instrumentation (cont')

- Part A queried whether or not participants had been bullied that school year. If they responded "no," they were given a zero for their self-reported victimization. If they responded "yes," they indicated the frequency by which they were bullied in a five-point Likert format (1 = never, 2 = rarely, 3 = sometimes, 4 = often, or 5 = always happened) by indicating how often peers "called me names," "made fun of me," "said they will do bad things to me," "attacked me," "said mean things behind my back," and "pushed or shoved me" (Olweus, 1993). Part C asked participants if they had bullied anyone this school year and how often they engaged in the same set of behaviors directed towards a peer. The same framework as used in Part A was applied in Part C to derive a measure of self-reported bullying behavior in subsequent analyses. Finally, a measure of self-reported bully-victim behavior was calculated as the sum of the self-reported victim and bully behavior scores, only if the student had a non-zero score for both victimization and bullying. ANOVA was conducted as an integrity check between the self-nominated bully/victim groups reported in Table 2 (handout) and office referrals and was significant, $F(4,614) = 4.66$, $p = .001$. As expected, bullies had the highest number of office referrals ($M = 3.38$; $SD = 6.11$), followed by bully-victims ($M = 1.69$; $SD = 4.38$), students not involved in bullying ($M = 1.16$; $SD = 4.10$), bystanders ($M = 1.01$; $SD = 2.78$), and victims ($M = .82$; $SD = 2.43$).

- Peer Nomination Inventory** (modified from Perry, Williard, & Perry, 1990) for use with elementary school students was modified to reflect the fact that the students in these middle schools changed classes during the day and did not have a "homeroom" or a "class" that structured their peer group during the school setting. Students were prompted to write the names of students in their school who fit the behavioral descriptors on the inventory as defined by Olweus (1993). The bivariate correlations between peer nominations for bullying behaviors and office referral data were statistically significant ($p < .05$) at T1, $r = .36$ at T1, $r = .26$ at T2, and $r = .18$ at T3, and the correlations between peer nominations for victimization behaviors and office referral data were not statistically significant ($p > .05$) at $r = .06$ at T1, $r = .04$ at T2, and $r = .06$ at T3, indicating external validity for the peer nomination procedure (i.e., bullies get sent to the office more than victims).

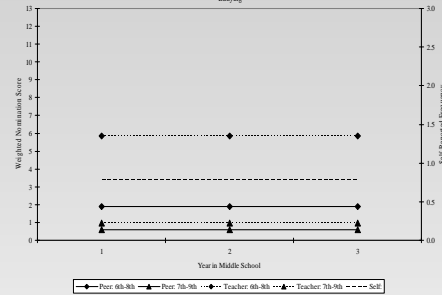
- Teacher Nomination Inventory** (modified from Perry, Williard, & Perry, 1990). The teacher nomination inventory is a parallel measure to the peer nomination inventory except that the language is changed for teacher use of the nomination measure on the students. The range of teacher nominations at T1 for victim status was 0 to 25, T2 was 0 to 25, and T3 was 0 to 16 (See Table 1 for the number of teacher nominations). The correlations between teacher nomination for bullying behaviors and office referral data were statistically significant ($p < .05$) at $r = .47$ at T1, $r = .37$ at T2, and $r = .19$ at T3. The correlations between teacher nomination for victimization behaviors and office referral data were $r = .07$ ($p = .05$) at T1, $r = .08$ ($p = .04$) at T2, and $r = .13$ ($p = .01$) at T3, indicating external validity for the teacher nomination procedure for bullies (i.e., bullies get sent to the office), but not for victims at T2 and T3.
- Teacher bully-victim nomination scores were created by summing the teacher victim and bully nomination scores.

Results

- Longitudinal multilevel modeling (Little, Bovaird, & Slegers, 2006; Singer & Willett, 2003) was used to compare trajectories for self-reported bullying, victimization, and bully-victim behavior with teacher and peer-nominations across three waves of data. All growth curves, both univariate and multivariate associative, were analyzed with SAS PROC MIXED.

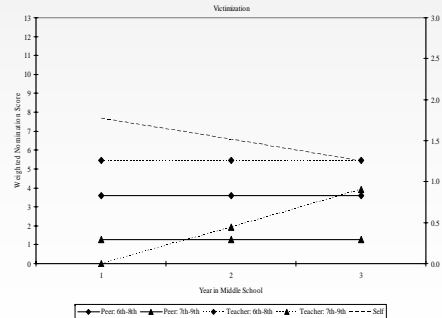
Victimization.

Figure 1. Change in victimization during middle school by measurement modality. Mean weighted peer and teacher nomination scores are reported on the left y-axis, and the average self-reported behavior frequency is reported in the right y-axis. Solid lines represent peer nominations, dotted lines represent teacher nominations, and dashed lines represent self-reported behavior. Diamonds represent trends among 6th-8th grade students, and triangles represent 7th-9th grade students.



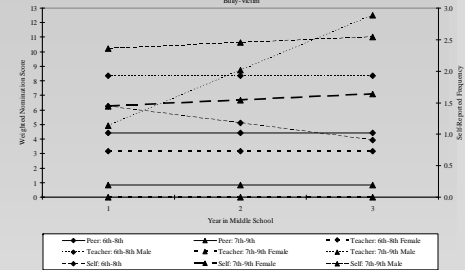
Bullying.

Figure 2. Change in bullying during middle school by measurement modality. Mean weighted peer and teacher nomination scores are reported on the left y-axis, and the average self-reported behavior frequency is reported in the right y-axis. Solid lines represent peer nominations, dotted lines represent teacher nominations, and dashed lines represent self-reported behavior. Diamonds represent trends among 6th-8th grade students, and triangles represent 7th-9th grade students.



Bullying/Victimization

Figure 3. Change in bully-victim behavior during middle school by measurement modality. Mean weighted peer and teacher nomination scores are reported on the left y-axis, and the average self-reported behavior frequency is reported in the right y-axis. Solid lines represent peer nominations, dotted lines represent teacher nominations, and dashed lines represent self-reported behavior. Diamonds represent trends among 6th-8th grade students, and triangles represent 7th-9th grade students. Bold-face (darker) lines represent trends for female students, and normal-face lines represent trends for male students.



Discussion and Limitations

- Peers and teachers reported an increase in bullying behaviors over time while the students themselves reported no change in bullying behaviors. Since data were collected each spring, it might be that students in their final year of middle school are anticipating their transition to high school and may display more aggressive and bullying behaviors in response to this upcoming transition.
- Peers and teachers reported an increase in victimization behaviors over time while the students themselves reported a decrease. As students get older, there might be a hesitancy to admit involvement in bullying and victimization. Thus, the self-report could be reflective of a sense of denial or the need to present oneself in a positive light.
- Peers and teachers reported an increase in bully/victim behaviors over the middle school years, with male students receiving more nominations than females and the students themselves reported a decrease over time. Students whom peers indicated as salient bully-victims showed the least amount of change over the middle school years while those students with the weakest salience as bully-victims were reported by teachers as showing the most change.
- Peer, teachers, and self-report of victimization were consistent in identifying students who were victimized.
- There was a lack of concordance between raters for both bullies and bully-victims. For students who self-reported bullying others, there was a striking disconnect between teachers and those students, while there was initial agreement between teachers and peers on nominating students who were aggressive.
- In order to not limit the number and the grade in which students could be nominated, we used an open-ended nomination procedure. However, there were many instances of zero nominations.
- Our sample was predominately European American from the Midwest and as such, generalization to other populations and locale is limited.
- Results from this study support the use of multiple informants in the assessment of aggression, bullying, and victimization. It is clear that different informants provide different perspectives on the aforementioned phenomena.
- Given that engagement in bullying and victimization was not stable over time, an important practice implication is that instead of asking "who are the bullies" or "who are the victims," we must ask the question, "Which conditions allow bullying behaviors to occur?"