

A Cross-Sequential Investigation of the Relationship Between Bully/Victim Status and Social Anxiety

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Introduction

- Bullying is a prevalent problem (Bradshaw, Sawyer, & O'Brennan, 2007) that places all students involved at risk for negative effects, including anxious and depressive symptoms, (Swearer et al., 2001) low self-esteem, (Gruber & Fineran, 2008) and anger (Bosworth, Espelage, & Simon, 1999)
- The experience of peer victimization is positively associated with social anxiety (Craig, 1998; Storch, Brassard, & Masia-Warner, 2003)
- One study found that bullying behaviors were positively associated with social anxiety (Craig, 1998) whereas another study did not find any such relationship (Slee, 1994)
- Although evidence suggests that males engage in more bullying behaviors than females, (Pellegrini & Long, 2002) females tend to endorse higher anxiety levels (Grills & Ollendick, 2002)
- One study found a significant relationship between bully/victim status and social anxiety for girls only (Marini, Dane, Bosacki, & YLC-CURA, 2006)
- Thus, more information on the relationship between bully/victim status and social anxiety is needed, particularly for males

Research Objective

- To examine the relationship between social anxiety and bully/victim status in an all-male longitudinal database

Method

Participants

- Four cohorts of students (N=374) participated in this study
- Participants ranged from 14 to 18 years of age, were predominantly Caucasian, and were enrolled in an all-male parochial school in a city in the Midwest at the time of this study
- When the study commenced in 2003, participants included students in the ninth grade who comprised Cohort 1. In the following year (i.e., 2004), participants included students in Cohort 1, who had entered the tenth grade, and students in ninth grade, Cohort 2. In the final year of the study (i.e., 2006), students in grades 9-12 made up Cohorts 1 through 4

Measures

- The Bully Survey-Student Version* (BYS; Swearer, 2001)
- The Multidimensional Anxiety Scale for Children* (MASC; March, 1997)

Data Analysis

- Since there were no significant differences between cohorts with regard to social anxiety scores, cohorts were combined according to grade (i.e., 9th through 12th grade)
 - Data were analyzed by grade because bully/victim status was not stable and, in fact, frequently changed as students transitioned from one grade to the next (see Figures 1-4).
- One-way ANOVA was used to examine whether there were significant differences in social anxiety scores based on bully/victim status by grade level
 - Because we could not assume equal variances, the Welch's t test and Games-Howell post-hoc test were used
- Effect sizes (i.e., Cohen's d) are reported to provide more information on the strength of the relationship between bully/victim status and social anxiety scores

Figure 1: Confidence Intervals (95%) for Social Anxiety Scores Across the Bully/Victim Continuum, Grade 9

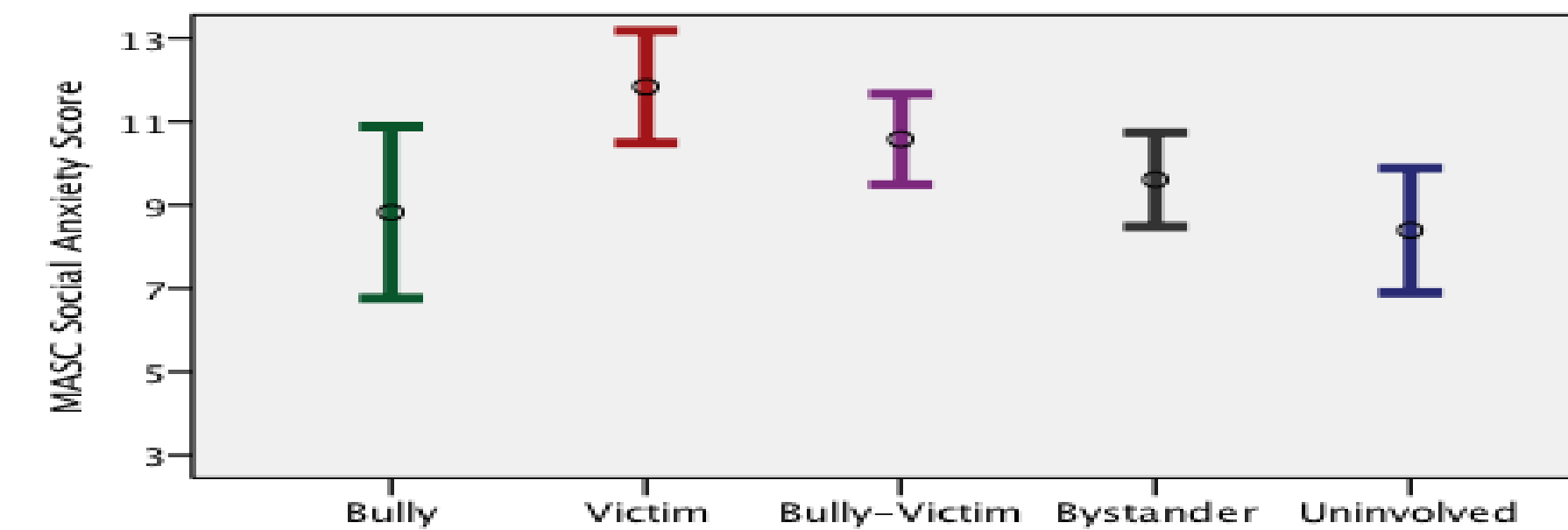


Figure 2: Confidence Intervals (95%) for Social Anxiety Scores Across the Bully/Victim Continuum, Grade 10

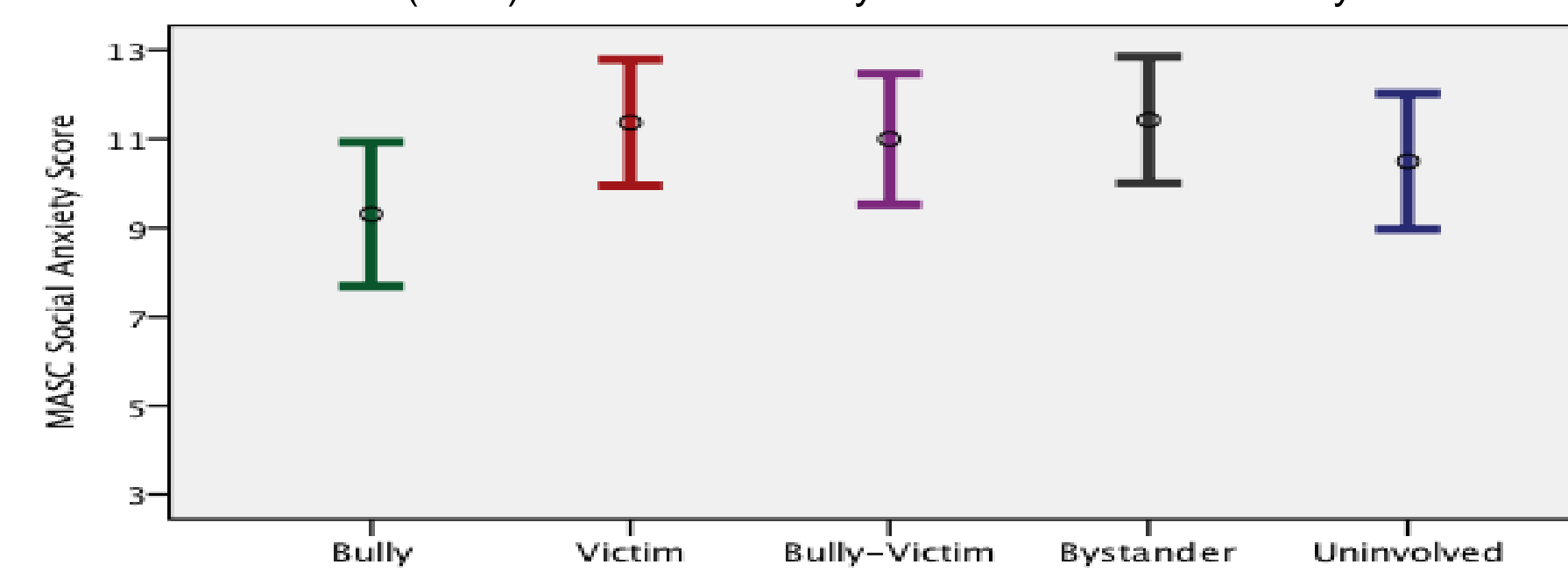


Figure 3: Confidence Intervals (95%) for Social Anxiety Scores Across the Bully/Victim Continuum, Grade 11

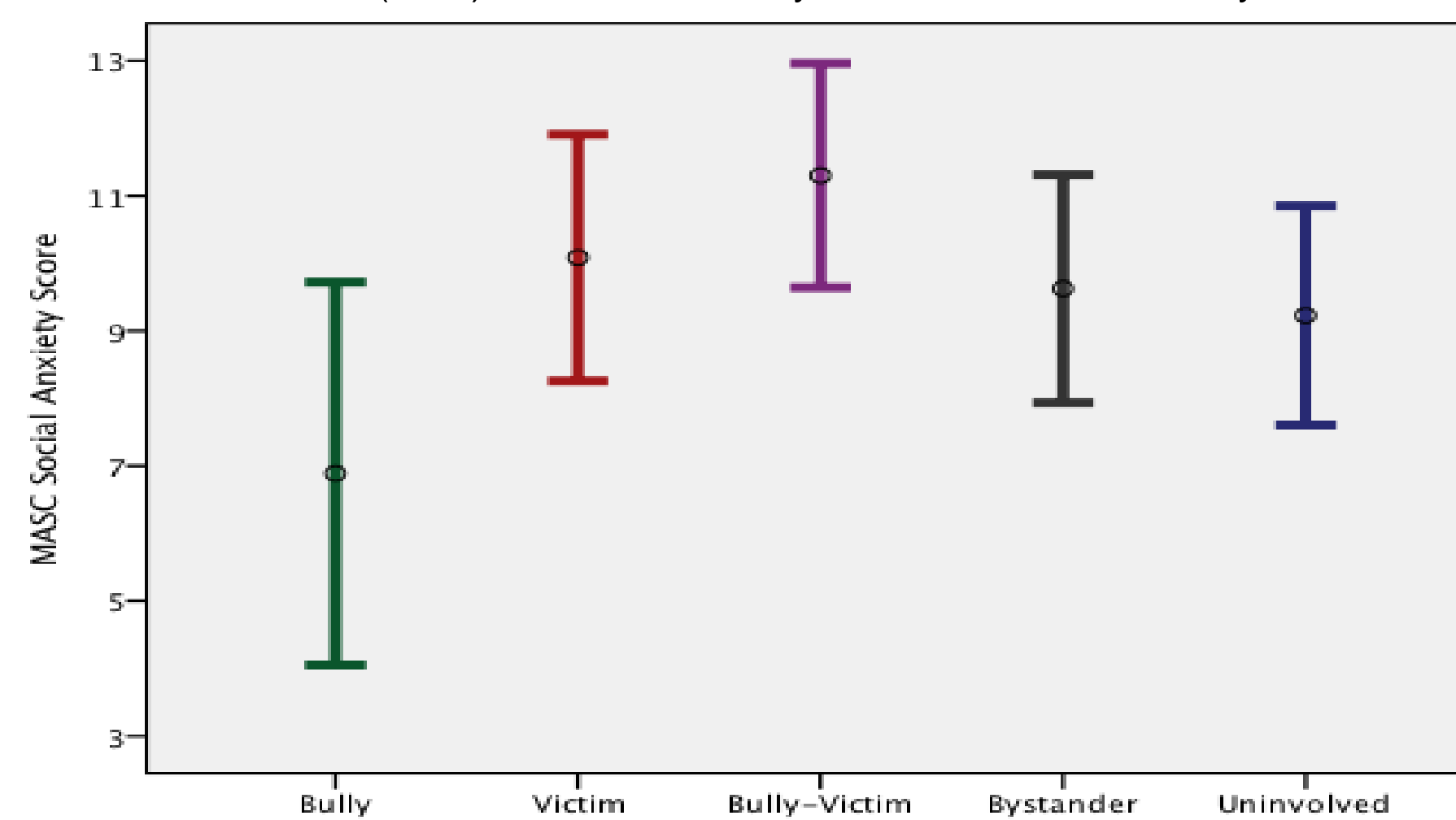
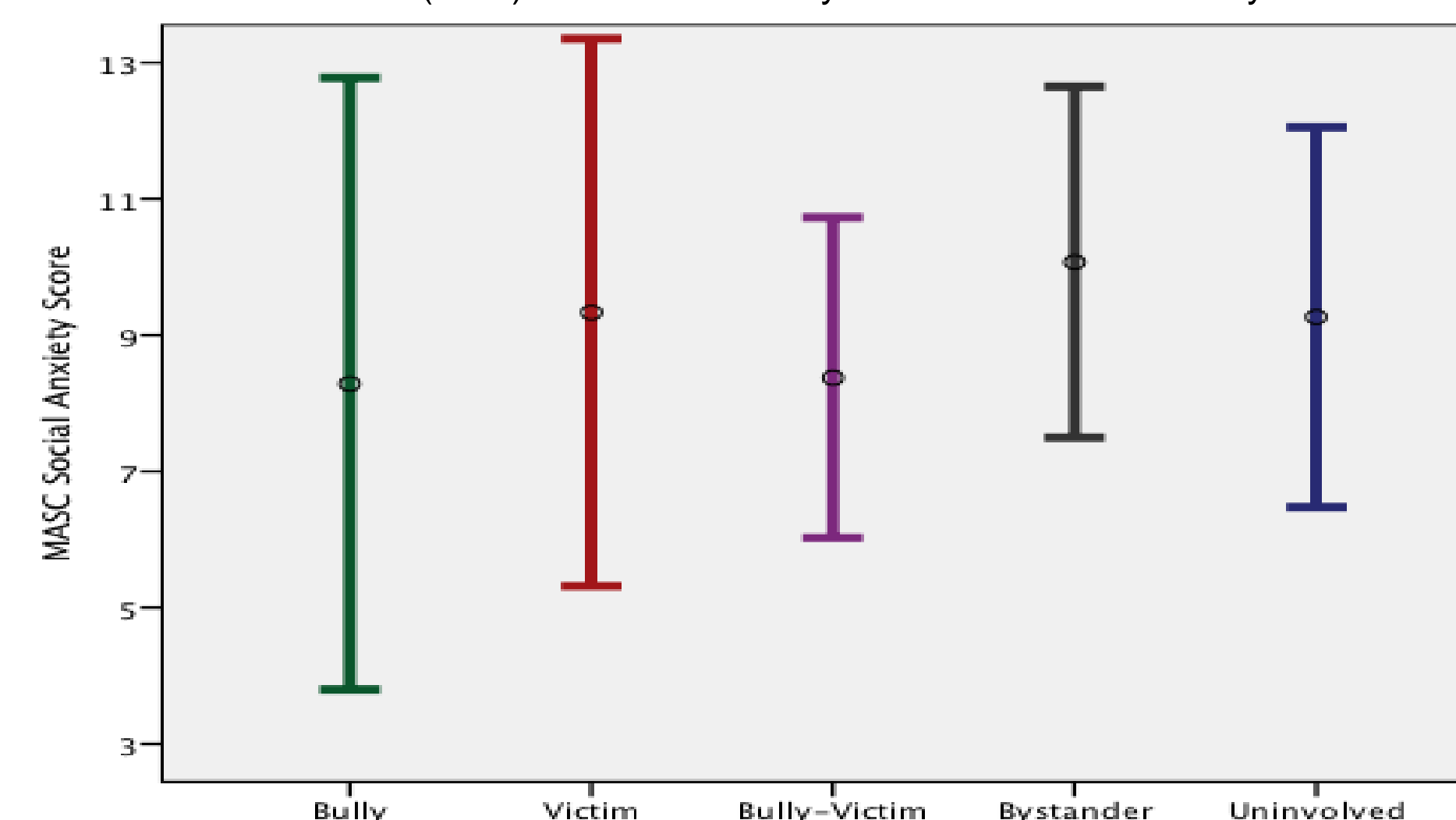


Figure 4: Confidence Intervals (95%) for Social Anxiety Scores Across the Bully/Victim Continuum, Grade 12



Results

Grade 9

- One-way ANOVA revealed a significant difference among the five bully/victim status groups on social anxiety scores
- Follow-up Games-Howell post-hoc test revealed a significant difference between two of the groups. Compared to students who were uninvolved in bullying (M=8.39, SD=5.20), victims (M=11.83, SD=5.67) endorsed significantly higher levels of social anxiety, $t(95)=3.07, p=.007$
- There was a medium effect size for the difference between victims and the students uninvolved in bullying, $d=0.60$, as well as between bullies (M=8.82, SD=5.81) and bully-victims (M=10.57, SD=5.76), $d=0.54$

Grade 10

- One-way ANOVA did not reveal any significant differences among the bully/victim status groups on social anxiety scores
- Small to medium effect sizes were found between bullies (M=9.31, SD=4.27) and victims (M=11.37, SD=5.20), $d=0.40$, and bullies and bystanders (M=11.43, SD=5.41), $d=0.41$

Grade 11

- One-way ANOVA did not reveal any significant differences among the bully/victim status groups on social anxiety scores
- A large effect size was found between bullies (M=6.89, SD=3.69) and bully-victims (M=11.30, SD=5.20), $d=0.87$
- Medium effect sizes were found between bullies and victims (M=10.08, SD=4.32), $d=0.63$, bullies and bystanders (M=9.63, SD=5.29), $d=0.54$, bullies and uninvolved students (M=9.23, SD=5.34), $d=0.46$, and bully-victims and uninvolved students, $d=0.41$

Grade 12

- One-way ANOVA did not reveal any significant differences among the bully/victim status groups on social anxiety scores
- Small to medium effect sizes were found between bullies (M=8.29, SD=4.86) and bystanders (M=10.07, SD=4.46), $d=0.39$, and bully-victims (M=8.38, SD=4.41) and bystanders, $d=0.37$

Discussion

- A significant difference among bully/victim status groups on social anxiety scores was only found for students in ninth grade
 - Specifically, victims reported having significantly higher levels of social anxiety than students uninvolved in bullying
 - This finding is consistent with studies whose results show that students often bully others to establish dominance (Olthof et al., 2011), especially following school transitions (Pellegrini, 2002)
- Bullies reported the lowest mean social anxiety scores across all grade levels, but also tended to have more variability in their scores than other bully/victim status groups
- Effect sizes revealed that many of the differences had practical significance

Limitations

- We only have complete (i.e., grade 9-12) data for Cohort 1
 - The N decreased with every subsequent grade level, which may explain why no significant results were found for grades 10-12
- These results may not generalize to other samples (e.g., public high school students and females)