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Patterns of Victimization Locations in Elementary School Children: Effects of Grade Level and Gender

Paula J. Fite · Anne Williford · John L. Cooley · Kathryn DePaolis · Sonia L. Rubens · Eric M. Vernberg

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Abstract
Background Little research has examined the locations in which youth are victimized, particularly outside the school context. Further, it is not clear if the locations in which youth are victimized vary as a function of grade level or gender.
Objective The goals of the current study were to: (1) Determine the locations inside and outside of the school context in which elementary school students are most likely to report being victimized, and (2) Examine whether the locations in which victimization takes place varies by grade level and gender.
Methods Associations were examined in a sample of 186 2nd thru 5th grade students (52 % male) who reported experiencing victimization.
Results The playground was the most common place in which victimization was reported, followed by home and the neighborhood. Boys were more likely than girls to report being victimized on the bus or during a sporting activity, while girls were more likely than boys to report being victimized at home. No grade level effects were found, suggesting that specific locations of victimization did not become more or less evident at older grade levels.
Conclusions Findings indicate that there are many locations inside and outside the school context that need to be further monitored for the prevention of victimization and that gender differences may need to be considered.

Keywords Victimization · Locations · Grade and gender differences

P. J. Fite (✉) · J. L. Cooley · S. L. Rubens · E. M. Vernberg
Clinical Child Psychology Program, University of Kansas, Lawrence, KS 66045, USA
e-mail: pfite@ku.edu

A. Williford · K. DePaolis
School of Social Welfare, University of Kansas, Lawrence, KS, USA

Introduction

Peer victimization, or being the object of other children's aggressive and ostracizing behavior, is associated with a host of negative outcomes starting in elementary school, including poor academic performance (Nakamato and Schwartz 2010), aggression and delinquency (e.g., Hodges et al. 1999; Khatri et al. 2000), depression, anxiety, loneliness, and low self-esteem (Hawker and Boulton 2000; Reijntjes et al. 2010). Early onset and duration of peer victimization has significant implications for the development of adjustment problems (Kochenderfer and Ladd 1996), and as such, elementary school age represents a critical time period for studying children's experiences of victimization. From a prevention and intervention perspective it is important to understand where early victimization is most likely to take place so that effective interventions, such as increased adult monitoring and supervision, can be implemented before more pervasive patterns of victimization are established. Unfortunately, however, our knowledge of where children are most often victimized has been limited, particularly in elementary school-age students, with no research to our knowledge examining where peer victimization takes place outside the school context. Additionally, grade level and gender differences in the locations in which victimization occurs are not yet clear. The current study significantly advances the field by being one of the first to assess locations in which elementary school-age children reported being victimized in and outside the school context and examining grade level and gender differences in these locations.

Peer Victimization

Peer victimization can take many forms, with research commonly distinguishing between overt, relational, and cybervictimization. Overt victimization refers to the experience of being physically attacked (e.g., hit or kicked) or verbally threatened by a peer (Crick et al. 1999; Olweus 2001). In contrast, relational victimization involves being harmed by others through the manipulation of peer relationships to diminish a child's reputation, self esteem, and social status using tactics such as spreading rumors and encouraging peers to exclude a specific child from desired activities (Crick and Grotpeter 1996), with most research conceptualizing relational victimization as occurring through in-person processes. More recently, cybervictimization has drawn attention as a distinct form of victimization that involves being threatened with harm, disparaged, or ostracized through the use of electronic forms of contact (e.g. sending derogatory or threatening text messages via cell phones or posting negative comments or photos on social media sites such as Facebook or Twitter; Hinduja and Patchin 2008; Smith et al. 2008). Although research has found associations between relational and overt victimization, accumulating evidence suggests cybervictimization is a unique construct. In a recent study, Dempsey et al. (2009), using confirmatory factor analysis, found the constructs of overt-, relational-, and cyber-victimization, while overlapping to some degree, formed 3 separate latent factors. Further, Smith (2012) identified seven characteristics that distinguish cybervictimization from traditional victimization, including cybervictimization not being bound by time (e.g. school hours), or place (e.g., community, neighborhood, or school; also see Slonje et al. 2013).

Peer victimization in multiple forms appears to be a frequent problem for a significant proportion of children, with all forms of victimization evident during the elementary school-age years (Turner et al. 2011). Evidence suggests that between 10 and 20 % of students are severely and repeatedly victimized by their peers (Biggs et al. 2010; Centers for Disease Control and Prevention 2012; Graham and Juvonen 1998; Kochenderfer-Ladd and Wardrop

2001; Nansel et al. 2001; Stadler et al. 2010), and approximately 60 % of elementary school children report having been exposed to some form of peer victimization (Kochenderfer-Ladd and Wardrop 2001). More systematic evaluation of the locations in which elementary school-age children are at risk for experiencing all forms of peer victimization may inform efforts to prevent the many negative outcomes that arise from persistent peer victimization. Potential grade and gender differences in locations must be also considered, as some differences in forms of victimization across grade and gender have been found.

Considerable debate among researchers has focused on grade and gender differences in rates of specific forms of peer victimization. Several studies have found that elementary school-age girls are more likely than boys to be victims of relational aggression (e.g., Biggs et al. 2010; Crick and Grotpeter 1995; Galen and Underwood 1997), although other studies did not find such differences (see Card et al. 2008). There is also evidence suggesting that relational victimization increases as children age and may become more prominent in girls' peer networks as they age (Galen and Underwood 1997). Similarly, there are inconsistencies in findings pertaining to cybervictimization, with some studies suggesting that girls more likely to be victims of cyberbullying than boys (Dehue et al. 2008; Kowalski and Limber 2007; Wade and Beran 2011; Ybarra and Mitchell 2008) and other studies finding no gender differences in rates of cybervictimization (Hinduja and Patchin 2008; Juvoven and Gross 2008; Li 2006; Patchin and Hinduja 2006; Tokunaga 2010; Williams and Guerra 2007). With regard to grade level, some studies have found no association between grade level and cybervictimization (Juvoven and Gross 2008; Patchin and Hinduja 2006; Smith et al. 2008), while others have found that cybervictimization is more prevalent among youth in older grades (Hinduja and Patchin 2008; Kowalski and Limber 2007; Slonje and Smith 2008). At this point in time, there appears to be a curvilinear relationship between grade level and cyberbullying involvement with victimization peaking in junior high (7th and 8th grades) and then declining in older adolescence (Ševciková and Šmahel 2009; Tokunaga 2010).

In contrast, gender differences in overt victimization are consistent, with studies most often finding greater overt victimization for boys than girls (Card et al. 2008) and that overt aggression appears to decrease in both girls' and boys' social networks as they age (Brame et al. 2001; Côté et al. 2006). Given these gender and grade level difference in victimization, an important extension of the peer victimization literature is to assess for potential gender and grade level differences in locations of victimization.

Locations of Victimization

To date, only a handful of studies have focused on the locations in which children are most likely to be victimized, and these studies are primarily limited to victimization within the school context (i.e., Baldry and Farrington 1999; Bradshaw et al. 2007; Collins et al. 2004; Craig and Pepler 1997; Craig et al. 2000; deLara 2008; Espelage and Asidao 2001; Fekkes et al. 2005; Raskauskas 2005; Vaillancourt et al. 2010; Wolke et al. 2001). These studies suggest that victimization occurs in many locations within the school, but is most likely to take place in large areas where fewer rules and constraints exist, the ratio of students to teachers is high, and adults are limited in their ability to monitor and provide supervision (e.g., Craig et al. 2000). Indeed, the playground is consistently viewed as the location where children are most likely to be victimized (Craig and Pepler 1997; Craig et al. 2000; Collins et al. 2004; Fekkes et al. 2005; Wolke et al. 2001). The lunchroom, the hallway, the bathroom, and the classroom (particularly when the teacher is absent) are other school locations where high levels of victimization are reported (e.g., Bradshaw et al. 2007;

Collins et al. 2004; Espelage and Asidao 2001; Vaillancourt et al. 2010). Studies have also found that victimization is also likely to occur on the school bus (Allen et al. 2003; deLara 2008; Raskauskas 2005).

Assessing victimization outside of the school context generally captures victimization that occurs "on the way to school," "from school," and "at the bus stop" (Collins et al. 2004; Vaillancourt et al. 2010). However, it is unlikely that victimization only occurs within the school context, particularly in light of cyberbullying—a form of victimization that may also take place at home via cell phone or computer. In fact, a recent study found that 66 % of fourth through ninth graders have computers in their home and can access them from the privacy of their bedrooms (Tokunaga 2010). Thus, further research is needed to understand victimization that occurs outside the school context in order to further inform prevention and intervention efforts. Importantly, limiting prevention and intervention efforts to the school context alone may not address all instances of victimization. Improving our understanding of where victimization occurs outside the school context will help to identify who, other than school personnel, may need to be aware of and know how to effectively intervene with victimization.

Moreover, although preliminary evidence has identified grade level differences regarding where victimization is most likely to take place, some inconsistencies exist. Bradshaw et al. (2007) found that victimization among middle school youth occurred more often in the hallways as compared to elementary and high school students. Vaillancourt et al. (2010) found that older students felt less safe in the lunchroom, bathroom, and hallways, whereas elementary school students reported feeling less safe during outside recess time on the playground. Collins et al. (2004) found that the most common places for primary school students (year 6 of their education) to report being victimized were in the lunchroom and to and from school, while post primary school students (year 9 of their education) reported that victimization was most likely to take place on the playground/athletic field and in the hallways. Both groups reported victimization in the classroom when the teacher was absent. Although grade level differences are somewhat mixed across studies, particularly with regard to the lunchroom, it appears that elementary school students may be more likely to report being victimized on the playground yet less likely to report being victimized in the hallway as compared to middle and high school students. Of note, however, students at all grade levels may be at risk for victimization in the classroom when the teacher is absent.

Further, gender differences in locations of victimization have only been empirically evaluated in two known studies. Raskauskas (2005) found that there were no gender differences in rates of victimization on the bus when examining videotaped observations on 30 elementary school bus rides. However, Collins et al. (2004) found that of children in primary school reported that girls were more likely than boys to be victimized in the classroom. In contrast, youth in post-primary school reported that girls were more likely than boys to be victimized in the bathroom and at the school bus stop, whereas boys were more likely to be victimized at other locations (however, "other" locations were not specified). Further examination of both grade and gender differences is key for improving our prevention and intervention efforts. Understanding at what grade and for whom particular locations are more vulnerable for experiencing victimization will inform the development of additional protection strategies for youth victimized by their peers (i.e., extra monitoring and contingency plans).

Current Study

In sum, the current study examined locations in which elementary school students reported being victimized and evaluated whether grade level and gender differences exist in the

locations in which victimization occurs. The current study advances the field by examining victimization locations at school (i.e., lunchroom, hallway, bathroom, classroom, playground), on the bus, and outside the school context (i.e., program or club, sporting activity, babysitter, at home, in neighborhood). This study further contributes to the literature by examining grade level and gender differences in victimization locations. Consistent with prior elementary school research, victimization rates were expected to be the highest on the playground (Craig and Pepler 1997; Craig et al. 2000; Collins et al. 2004; Fekkes et al. 2005; Wolke et al. 2001), where adult monitoring is difficult and fewer rules and constraints exist. Victimization rates among elementary school-age students were also expected to be high in other locations in which monitoring is more difficult, such as the hallway, the bathroom, the bus, and in the neighborhood. No specific hypotheses regarding grade level or gender differences in locations were posited, however, given the unclear findings from the limited research available.

Method

Participants

Participants for this study included 186 students in 2nd thru 5th grade from an elementary school in a small Midwestern town. Second through fifth grade students at this school were recruited in two ways: (1) during school enrollment days just prior to school starting, and (2) through letters and consent forms sent home at the beginning of the school year that could mailed back in a pre-addressed, stamped envelope to the research lab. Of the 490 students enrolled in the school, 360 (73.4 %) parental consent forms were received. Of those received, 318 (88 %) consented for their children to participate and a total of 294 students actually completed the study measures. The remaining 24 students with written consent did not participate in data collection due to moving prior to data collection (n = 2), absent or unavailable during the data collection period (n = 18), or declining to participate (n = 4).

The final sample for the current study is comprised of the 186 (63 %) participants who reported experiencing at least one instance of peer victimization within the first 2 months of school. The sample included 96 males and 90 females ranging from 7 to 11 years of age (M = 8.65, SD = 1.19). School records indicate that the majority of the students are Caucasian, with less than 20 % of the student body identifying with an ethnic/racial minority group. The demographic make-up of the sample is representative of the entire school, with similar gender and grade level distributions. City data indicate that per capita income is approximately $25,369, and the school reported that approximately 35 % of the entire student body receives free or reduced fee lunch.

Measures

Peer Victimization

Children's self-reports of victimization were assessed using 9 items of the Victimization of Self (VS) scale from the Peer Experiences Questionnaire used in prior research with elementary school-age children (e.g., Biggs et al. 2010; Dill et al. 2004; Vernberg et al. 2011) and three new items intended to reflect children's experiences of cybervictimization (Vernberg, personal communication). Overt victimization items reflected physically aggressive behavior (e.g., *a kid hit, kicked or pushed me in a mean way*; *a kid grabbed, held,*

or touched me in a way I didn't like). Relational victimization items reflected behaviors that were hurtful to the child by the manipulation of peer relationships (e.g., *a kid told lies about me so other kids wouldn't like me*; *some kids left me out of thing just to be mean to me*). Cybervictimization items reflected the use of electronic forms of contact to disparage or ostracize the child (e.g., *a kid used email, instant messaging, or a chat room to turn other kids against me; a kid used a webspace such as MySpace or Facebook to say mean things about me*). Participants were asked to rate the frequency of such occurrences since the beginning of the current school year (i.e., over a 10-week period) on a 5-point scale ranging from 1 (*Never*) to 5 (*Several Times a Week*). A dichotomous variable of whether or not a student endorsed any of the above items was created and used for location analyses. Internal consistency of the overall sample was good ($\alpha = .87$).

For descriptive purposes, items for each form of victimization were summed to create an overall score for each subscale, with higher scores indicating more severe experiences of victimization. Each subscale demonstrated adequate internal consistency ($\alpha = .72$ for overt victimization, $\alpha = .80$ for relational victimization, and $\alpha = .79$ for cybervictimization) in the current sample. Mean scores of relational victimization were 8.63 (SD = 4.05), means scores of overt victimization were 5.74 (SD = 2.73), and mean scores of cybervictimization were 3.46 (SD = 1.61). Correlations between these subscales ranged from .70 (relational-overt) to .57 (overt-cyber), suggesting related but distinct forms of victimization.

Location of Peer Victimization

Upon completion of the VS scale, participants were then asked to report globally where these acts of victimization occurred. Participants were given a list of five locations associated with the school context (i.e., lunchroom, hallway, bathroom, classroom, playground), on the bus, and five locations outside of the typical school context (i.e., program or club, sporting activity, babysitter, at home, in my neighborhood) and asked to indicate whether or not (yes/no) they had experienced victimization in each of the locations.

Procedure

All study procedures were approved by the researchers' institutional review board as well as the school district's administrators and board prior to data collection. Participants completed the survey in their classroom during the school day approximately 2 months into the Fall semester. The research team came to the school on two separate days to administer the survey, with 4th and 5th graders completing the survey on 1 day and 2nd and 3rd graders completing the survey on a second day. There were 2–3 trained research team members in each classroom; one researcher in each room read all survey items aloud while the others walked around the room to help answer questions. Most students completed the survey in 30 min. No school personnel were present in the room while surveys were administered in order to maintain student confidentiality. Participants provided verbal assent prior to starting the survey, and each classroom received a $75 gift card for school supplies as a thank you for participating.

Results

Among this sample of children (n = 186) who reported at least one recent incident of peer victimization, most (91.9 %) reported one or more instance of relational victimization,

57 % reported experiencing at least one instance of overt victimization, and 11.8 % reported experiencing at least one instance of cybervictimization.

Rates of victimization in the various locations are reported in Table 1. McNemar's Chi square test was used to evaluate whether the endorsement rate of particular locations was significantly different from other locations. Note that a Chi square value is not provided in SPSS, only a p value is reported. Victimization most often occurred on the playground ($p = .00$). Also within the school setting, the lunchroom and hallway were common locations in which victimization occurred, and they occurred at similar rates ($p = .13$). Interestingly, less than 11 % of children reported being victimized in the classroom, which is significantly less than reported in the lunchroom ($p = .02$) but similar to rates reported in the hallway ($p = .46$). The bathroom was the location least likely for children to report being victimized in the school setting ($p = .04$). The school bus was another common location for victimization to occur, with rates similar to the lunchroom ($p = .20$).

Outside the school context, children were equally as likely to experience victimization at home and in their neighborhood ($p = .44$). Additionally, children reported that victimization occurs at programs and clubs. However, rates of victimization at a babysitter or sporting activity were of similarly low rates ($p > .50$), with less than 10 % of youth reporting being victimized in these settings.

Associations between grade level and victimization locations were evaluated using correlation analyses. As seen in Table 2, grade level was not correlated with any victimization location. That is, no location becomes more or less evident for victimization at higher grade levels.

Pearson Chi square tests were then estimated in order to evaluate gender differences in victimization locations (See Table 3); only 3 gender differences emerged. Specifically, boys were more likely to report victimization on the bus than girls. Additionally, there was a marginally statistically significant trend ($p = .056$) for boys to be more likely to report victimization during sporting events than girls. In contrast, girls were more likely to report victimization at home than boys.

Discussion

The current study examined locations in which elementary school students reported being victimized by peers and evaluated whether locations varied as a function of gender and

Table 1 Rates of endorsement for particular locations of victimization

Location	% Reported
Playground	58.4
At home	31.4
In neighborhood	27
On the bus	24.9
Lunchroom	18.9
Program or club	15.7
Hallway	13.5
Classroom	10.8
Sporting activity	7
Babysitter	5.9
Bathroom	4.9

Table 2 Correlations among locations and grade level

	1	2	3	4	5	6	7	8	9	10	11	12
1. Lunchroom	–											
2. Hallway	.29**	–										
3. Bathroom	.15*	.21**	–									
4. Classroom	.28**	.27**	.16*	–								
5. Playground	−.04	.05	.04	.05	–							
6. On the Bus	.04	−.08	.04	.00	−.17*	–						
7. P/C	.13	.00	−.03	.14	.00	.17*	–					
8. Sport	.03	.02	.04	.04	.10	.18*	.00	–				
9. Sitter	−.06	.17*	.05	−.01	.07	.07	−.11	−.07	–			
10. At Home	.03	.14	−.04	.03	.03	−.01	−.07	.04	.03	–		
11. Neighbor	.05	.15*	.09	−.02	.05	.13	.04	−.02	−.05	−.07	–	
12. Grade	.10	.06	−.08	.05	.01	−.09	−.11	.02	−.09	−.07	.04	–

$N = 186$; * $p < .05$, ** $p < .01$; *P/C* program or club, *Neighbor* neighborhood

Table 3 Evaluation of gender differences in locations of victimization

	Boys (n)	Girls (n)	χ^2
Lunchroom	14	21	2.23
Hallway	14	11	.25
Bathroom	4	5	.18
Classroom	9	11	.36
Playground	51	57	1.77
On the bus	32	14	8.13*
Program or club	11	18	2.48
Sporting activity	10	3	3.66†
Babysitter	7	4	.71
At home	22	36	6.09*
In neighborhood	30	20	2.05

* $p < .05$; † $p < .06$

grade. The present study extends previous research by examining locations outside the school context and by further evaluating grade and gender differences in victimization locations. The playground was by far the location in which victimization was most likely to occur, followed by home, the neighborhood, and on the bus. Although three gender differences in locations of victimization were evident, grade level differences in these locations were not found. Specific findings and their implications are described in turn.

As anticipated, the playground was the most common location for victimization to occur. Additionally, the lunchroom was a common location in which youth were victimized within the school context. Findings are consistent with previous research, which has found that victimization at school most often occurs on the playground and in other locations in which monitoring is limited and rules and expectations are not as well defined (Bradshaw et al. 2007; Collins et al. 2004; Craig and Pepler 1997; Craig et al. 2000; Espelage and Asidao 2001; Vaillancourt et al. 2010). Strategies to improve adult monitoring (e.g., additional adult monitors strategically placed on the playground) and provide

added structure (e.g., organized games and activities for the students to choose from) appear to be warranted.

Students also reported being victimized in the hallway and the classroom, but less so than other locations, and rates reported in the current sample were lower than rates reported in other studies examining these victimization locations in elementary school (e.g., Fekkes et al. 2005; Vaillancourt et al. 2010). It may be that teachers in this school are more likely to be present in these locations, and thus be aware of victimization that takes place among students. We are aware of existing anti-bullying training for staff and enhanced monitoring practices within this school (e.g., adult hall monitors before/after school). We note, however, that although victimization appears to be less likely to occur in the hallway and classroom, the rates of victimization as a whole are not lower, suggesting that the issue of victimization persists. Thus, further research and interventions focusing on preventing victimization in other locations are necessary to curtail victimization.

Interestingly, very few children reported being victimized in the bathroom (<5 %), which is a common location endorsed in prior studies (e.g., Espelage and Asidao 2001). At the school in which data were collected children are required to be escorted by an adult to the bathroom. The additional monitoring of bathrooms in this school context may account for the low rates of victimization reported by students. This finding suggests that appropriate monitoring can prevent this location from being a "hotspot" for victimization. However, it is possible the bathroom may be a more common location for victimization in middle and high schools, when students visit the restroom in between classes and the flow of traffic in and out is more difficult to monitor.

The school bus was an important "hotspot" for victimization in the present study. Findings are consistent with previous research (Allen et al. 2003; deLara 2008; Raskauskas 2005) and further suggest the need to intervene while children are being transported. Although prior research has not found gender differences in victimization on the bus when using videotaped observations (Raskauskas 2005), results of the present study suggest that victimization on the bus is particularly prevalent for boys. In light of findings that boys report higher rates of overt victimization than girls (Card et al. 2008), it is possible that the school bus represents a context where verbal taunts and physical forms of victimization may be more likely, thus placing boys at a greater risk for experiencing victimization within this context. However, further replication of these gender differences as well as investigations to determine factors that contribute to these differences in locations are needed to develop prevention and intervention strategies specific to girls and boys.

Previous research has documented that school bus drivers often observe victimization, yet reports of these incidents to school personnel are often ignored (deLara 2008). Thus, school-based anti-bullying efforts, including policies and practices, must extend to the school bus context. Prior intervention recommendations by bus drivers themselves have included: using behavioral strategies to prevent victimization (i.e., assigned seating), building a positive relationship with all students, and holding parents and students accountable for behavior on the bus (deLara 2008). However, empirical investigation of these potential strategies is needed in order to identify which strategies are most effective.

When examining locations outside the school context, victimization was most likely to be reported at home and the neighborhood. The neighborhood is certainly a large location, where monitoring is more difficult and there are fewer rules and behavioral demands (Craig et al. 2000), which may account for the increased rate of victimization reported in this study.

However, the finding for increased rates of victimization at home is not as clear. Further, girls (relative to boys) appear to be at an increased risk for victimization at home.

Although the form of victimization could not be assessed in these locations, it is possible that the increased rates of victimization among girls reported at home may capture experiences through electronic means. While evidence on gender differences in cyber-victimization is largely inconclusive, some studies have found that girls experience more cybervictimization than boys (e.g., Dehue et al. 2008; Smith et al. 2008).

In the present study, we were unable to determine if the victimization occurring at home takes place while parents are present and to what degree monitoring is taking place when victimization occurs. This is an important direction for future research, particularly in light of the growing body of evidence on cybervictimization. Research suggests that when parents' directly monitor their child's online activities the risk for victimization can be reduced (Hinduja and Patchin 2008). Yet parents often know little about their child's activities online (David-Feron and Feldman 2007). Consequently, an important direction for future research is to identify appropriate strategies for parents to protect their child from electronic forms of victimization.

There was a significant portion of students (>15 %) who reported being victimized at a program or club. Adult monitoring/supervision and child to adult ratios will vary across after school clubs and programs. As previously reported (Craig et al. 2000), victimization is most likely to occur in less structured environments, especially when the child to adult ratio is high. In contrast, relatively low rates (<8 %) of youth reported being victimized at the babysitters or sporting activity, and there was a trend ($p < .06$) for boys to be more often victimized at a sporting activity than girls. These lower rates may be due to these locations being better monitored and a smaller child to adult ratio. On the other hand, it may be that fewer children receive after school care by a babysitter or attend sporting activities, particularly among elementary school students, resulting in fewer youth endorsing these locations. Nonetheless, it appears that these locations may not be considered "hotspots" for victimization among elementary school age youth.

No grade level differences in victimization locations were found in the present study. Prior research has found mixed results regarding differences among elementary school and older students (e.g., Bradshaw et al. 2007; Collins et al. 2004; Vaillancourt et al. 2010). Yet the current study focused only on elementary school-age youth; thus, grade level differences may not be evident when focusing solely on elementary school students. It will be particularly important for future research to evaluate grade and gender differences in locations for middle and high school students.

Several limitations need to be considered when interpreting the results of the current study. First, although it is important to examine associations in the current age sample, findings should be interpreted as age specific. That is, current findings may not generalize to middle and high school age students, as previous research has suggested that elementary school-age children may not be victimized in the same locations as middle and high school students (Bradshaw et al. 2007; Collins et al. 2004; Vaillancourt et al. 2010). Additionally, our list of locations was not all-inclusive. Other locations, such as friends' homes, birthday parties and other social gatherings, need to be evaluated. The current data are also limited in that we were not able to evaluate whether the forms of victimization occur at different rates in various locations given that a global assessment of victimization locations was utilized. Further, it is not clear from our data who the aggressor is or the characteristics of the aggressor in these locations. Future research evaluating the various forms of victimization, who is aggressing (e.g., siblings, older children, same age peers), and characteristics of the aggressor (e.g., impulsivity level, gender) in various locations would be helpful to better educate adults on how to identify and intervene with victimization in hopes of preventing subsequent victimization and its associated negative

outcomes. Finally, we did not ask whether students had access to the various locations that we assessed in the current study. For example, some children may not attend a program or club, providing less opportunity for victimization to occur in this location. It will be important for future studies that examine the locations where peer victimization occurs to consider student access to specific locations and how frequently they are victimized in the location.

Despite these limitations, the current study has several important implications for the prevention of peer victimization. First and foremost, our findings suggest that better coordination of prevention and intervention efforts between adults both within and outside of the school and at home must occur. Schools would greatly benefit by extending anti-bullying training to bus drivers, after school program coordinators, and sports club leaders, to name a few, such that consistent monitoring and intervention with students are possible. Moreover, schools' anti-bullying policies would be strengthened by including clear reporting and investigation procedures so that adults on the periphery of the school know how to report such incidents and how these incidents will be investigated by school personnel. Of note, however, the role of schools in addressing victimization that occurs off school grounds or outside of school-sponsored activities is presently unclear. In fact, the U.S. Department of Education issued guidance to public schools suggesting that victimization that creates a significant disruption of the school environment, even when occurring outside of the school context, is the school's responsibility to address (Stuart-Cassel et al. 2011). It might be necessary, however, to have school districts' legal counsel review any anti-bullying policy language to clarify the degree to which outside activities are the responsibility of the school.

Moreover, enhanced communication and coordination between school personnel and parents is critical for preventing and intervening with students victimized by their peers within as well as outside the school context. The results of the present study suggest that, particularly for girls, parents may play a key role in preventing and intervening with victimization at home. Prevention and intervention efforts would likely benefit from outlining steps parents can take to monitor their child's online activities and their cell phone usage. Finally, the locations in which victimization occurs appear to be consistent across all grade levels in this elementary school sample, suggesting that strategies and locations for monitoring may be the same for all elementary school-age students.

Conflict of interest The authors declare that they have no conflict of interest.

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