

The Development of Peer Victimization in Adolescence

By

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Abstract

Guided by a developmental framework, this thesis investigated the prevalence, continuity, and consequences of different forms of victimization across adolescence. From Grade 5 through Grade 12, over 3,000 youth completed self-report measures of physical, social, bullying, and sexual harassment victimization, as well as of internalizing symptoms, externalizing symptoms, and friendship quality. Developmental trajectory analyses identified three distinct pathways for each form of victimization, with most youth experiencing consistently low levels of victimization. Physical victimization affected a small proportion of youth in Grade 5 and became decreasingly prevalent with development, while social victimization was relatively common and persistent. Bullying victimization was common in preadolescence but declined through to mid-adolescence. Sexual harassment emerged as a new form of victimization as early as Grade 6, with most youth beginning to experience a low level of sexual harassment later in adolescence. There was evidence for heterotypic continuity in victimization: youth who experienced one form of victimization were likely to experience other forms of victimization. Furthermore, the form and frequency of victimization predicted increased risk for negative psychosocial outcomes. Findings from the study highlight the importance of early prevention and intervention, to protect youth from following trajectories of persistent victimization and of negative psychosocial outcomes. Moreover, interventions should focus on different forms of victimization as they become developmentally relevant. The social, biological, and psychological transitions that occur during this developmental period provide a framework for understanding the changing nature of peer victimization.

Keywords: peer aggression; victimization; adolescence.

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Chapter 1: Introduction

Peer Victimization in Adolescence: Theoretical Context

Many Canadian children experience aggression by their peers. In a recent international survey, Canada ranked the 10th worst among 38 countries in terms of prevalence of peer victimization, with 17% of Canadian 11-year-olds reporting being victimized by bullying (Currie et al., 2010). Developmental studies demonstrate that youth experience diverse pathways of peer victimization, with a small proportion of youth experiencing persistent and frequent victimization (Barker, Boivin, et al., 2008; Sumter, Baumgartner, Valkenburg, & Peter, 2012). These youth are at risk for a wide range of long-lasting psychosocial problems, including increased levels of social isolation, anxiety, depression, self-harm behaviours, and aggression (Arseneault, Bowes, & Shakoor, 2010; Hong & Espelage, 2012). During adolescence, a time of rapid transitions in multiple domains (A. C. Petersen, 1988), there may be changes in the prevalence and forms of victimization – including physical, social, bullying, and sexual harassment victimization – that youth experience. They may also be at heightened risk for the negative outcomes associated with victimization. There are, however, limited longitudinal studies that capture the evolution of victimization in adolescence. The current study examined patterns of victimization and psychosocial functioning in a sample of 10- through 17-year-olds, guided by a developmental framework linking changes in the prevalence, forms, and consequences of victimization with the biological, psychological, and social transitions that occur during this age range.

Development of Different Forms of Peer Victimization

There is considerably more longitudinal research on peer aggression focusing on

the perpetration of these behaviours, rather than the experience of victimization. In the perpetration research, investigators have observed that, for most youth, physical aggression and bullying emerge early in development and decline across childhood (Barker, Arseneault, Brendgen, Fontaine, & Maughan, 2008; Brame, Nagin, & Tremblay, 2001; Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Pepler, Jiang, Craig, & Connolly, 2008), while social aggression emerges later and peaks in preadolescence (Archer & Coyne, 2005; Cleverley, Szatmari, Vaillancourt, Boyle, & Lipman, 2012; Xie, Swift, Cairns, & Cairns, 2002). Although some studies have examined the developmental trajectories of peer victimization (e.g., Goldbaum, Craig, Pepler, & Connolly, 2003; Sumter et al., 2012), few have spanned the full range of adolescence or investigated multiple forms of victimization within the same sample. The current study examined trajectories of physical, social, bullying, and sexual harassment victimization from pre- to late adolescence.

By the preadolescent years, youths' victimization experiences differ from their earlier childhood experiences. Early in development, peer victimization tends to be physical, such as pushing, biting, or punching, as young children have yet to develop the emotional regulation skills and cognitive abilities required to participate in or understand other forms of aggression (Brame et al., 2001). Youth begin to experience social victimization (e.g., being the subject of negative rumours) later in development, as peers develop the emotion regulation abilities and social intelligence required to perpetrate these more subtle forms of aggression (e.g., an ability to understand others' motives and feelings, to take advantage of others, and to engage others within the social network to participate in the attack, all without damaging one's own social status; Kaukiainen et al., 1999; Xie et al., 2002). For socially skilled youth, social aggression can

be a more effective form of aggression, compared to physical aggression, as it minimizes harm to the self (Björkqvist, Osterman, & Lagerspetz, 1994). Thus, by the start of adolescence, social victimization is a more common experience than physical victimization, especially for girls (boys experience more physical victimization than girls, but equal rates of social victimization; Carbone-Lopez et al., 2010; Crick & Nelson, 2002). It is unclear, however, how gender effects and prevalence rates change across adolescence.

By the start of adolescence, another form of victimization, bullying, is on the decline (Borg, 1999; Craig & McCuaig Edge, 2011; Smith, Madsen, & Moody, 1999). This trend may reflect the changing dynamics of peer victimization across development. Two elements differentiate bullying victimization from other victimization experiences: (1) a power differential among participants, and (2) repetition. In other words, bullying can be conceptualized as an ongoing, negative peer relationship, in which one child uses aggression to assert power over another (Olweus, 1993; Pepler et al., 2006). In their review, Smith, Madsen, and Moody (1999) concluded that the two most likely causes for a decline in bullying victimization were: (1) at younger ages, there are more opportunities to be bullied by older children, and (2) older children are better equipped to deal with being bullied in ways that reduce their risk for further victimization. The decline in the prevalence of victimization by bullying, however, does not necessarily imply the decline of other forms of victimization, which may occur outside of a bullying dynamic (e.g., among friends). There are contrasting findings with respect to the developmental trajectories of bullying victimization (Barker, Arseneault, et al., 2008; Sumter et al., 2012), as well as mixed findings for gender effects in bullying victimization across adolescence (Barker, Arseneault, et al., 2008; Sumter et al., 2012). The current

research aimed to clarify the differential pathways of bullying victimization during this developmental period.

A new form of victimization, sexual harassment, emerges in pre- to early adolescence as an increasingly common experience for youth (Hill & Kearl, 2011; Schnoll, Connolly, Josephson, Pepler, & Simkins-Strong, 2014). Researchers have found evidence of sexual harassment victimization as early as Grade 5, increasing in frequency until at least Grade 9 (Pellegrini, 2001; J. L. Petersen & Hyde, 2009). The biological and psychosocial changes that occur in adolescence help explain the emergence of sexual harassment victimization during this period. With the onset of puberty in early adolescence, youth experience rapid physical growth and develop secondary sex characteristics, among other physical changes (A. C. Petersen, 1988). Youths' emerging sexuality is associated with a number of psychosocial transitions, including changes in the composition of peer groups (e.g., from same-gender to increasingly mixed-gender groups) and types of social behaviours (e.g., dating) (Connolly, Craig, Goldberg, & Pepler, 1999, 2004). The saliency of the physical changes associated with pubertal development (especially early pubertal development relative to peers) may increase self-consciousness and elicit unwanted attention from peers in the form of sexual harassment (Craig, Pepler, Connolly, & Henderson, 2001; A. C. Petersen, 1988). Furthermore, increased mixed-gender interaction may increase the likelihood of sexual harassment, which, unlike other forms of victimization, often occurs in both mixed- and same-gender interactions (Craig et al., 2001; McMaster, Connolly, Pepler, & Craig, 2002).

Sexual harassment can also be understood in terms of the broader sociocultural context in which youth develop. In the adult literature, and increasingly in the adolescent literature (Conroy, 2013; Gruber & Fineran, 2008; Meyer, 2008), theorists

emphasize the role of gender and sexuality in the perpetration of sexual harassment, pointing to a culture that privileges inflexible gender roles and heterosexuality. From this perspective, youths' sexual harassment victimization experiences may be conceived of as part of their peers' desire to assert their conformity with the socially constructed gender roles expected of them, and to police the heterosexuality, masculinity, and femininity of their peers (Chambers, Tincknell, & Loon, 2004; Meyer, 2008; Terrance, Logan, & Peters, 2004; Tolman, 2006). Dominant gender norms perpetuate stereotypes, such as expectations for boys to assert their dominance over girls, for girls to be sexually passive, and for both boys and girls to be overtly heterosexual; in this cultural context, girls are at greater risk for sexual harassment victimization by boys, as are individuals who defy their peers' expectations of gender or sexuality (Conroy, 2013; Meyer, 2008). These attitudes are present among the adult population, and may develop in adolescence as youth become increasingly attuned to the gender roles expected of them and the social value placed on conformity to these roles (Alfieri, Ruble, & Higgins, 1996).

Longitudinal research on adolescent sexual harassment is rare. One study found that sexual harassment victimization increased from Grade 5 through to Grade 9 (J. L. Petersen & Hyde, 2009), suggesting that this behaviour becomes increasingly common as students progress through high school, while another found that early sexual harassment victimization predicted later sexual harassment victimization (Chiodo, Wolfe, Crooks, Hughes, & Jaffe, 2009), suggesting that there is continuity in this form of victimization. The current study aimed to demonstrate the diverse pathways of sexual harassment victimization across adolescence, as well as the consequences of ongoing victimization.

Most studies have found that girls report more sexual harassment victimization

(e.g., AAUW, 2001; Goldstein, Malanchuk, Davis-Kean, & Eccles, 2007; Hill & Kearl, 2011), while others have found no gender differences in frequency (Chiodo et al., 2009; Fineran & Bennett, 1999). An issue with most studies on gender and peer victimization is that they are cross-sectional in design, and thus any gender effects might only apply to one particular point in development. Therefore, an additional objective of the current study was to clarify the relationship between gender and different pathways of victimization in adolescence.

Heterotypic Continuity in Peer Victimization

An emerging area of research theorizes that different forms of peer victimization are interrelated (Espelage & Holt, 2007; Holt & Espelage, 2003), and will develop successively according to a developmental continuum of victimization, in an example of heterotypic continuity (Craig et al., 2001). The theory of heterotypic continuity proposes that a single latent variable manifests as different but related behaviours over time (Kagan, 1969). I propose that, for some youth, the experience of peer victimization (the latent variable) is persistent across development, manifesting in different forms across adolescence. For the current study, I hypothesized that there would be a positive relationship among the three forms of victimization already prevalent by preadolescence - physical, social, and bullying victimization - such that youth were likely to follow similar trajectories for each of these forms of victimization across adolescence. Furthermore, I expected that youth who experienced chronic levels of victimization by any of those three forms would also report greater levels of sexual harassment victimization compared to their peers.

There is a dearth of longitudinal research on this topic that could demonstrate whether there is heterotypic continuity in victimization across adolescence, but recent studies show some support for this theory. For example, studies have identified positive relationships between victimization by physical and social aggression (Card, Stucky, Sawalani, & Little, 2008), by bullying and sexual harassment (Ashbaugh & Cornell, 2008; Espelage & Holt, 2007), and by physical aggression and sexual harassment (Chiodo et al., 2009). Researchers have proposed a number of theories to explain why individuals who experience one form of victimization are at greater risk for subsequent victimization. The re-victimization or polyvictimization literature (typically used to describe the co-occurrence of multiple types of crime experiences) points to shared risk factors among different forms of victimization (Finkelhor & Asdigian, 1996; Holt, Finkelhor, Kaufman Kantor, & Kantor, 2007). In addition, victimization may lead to negative psychosocial outcomes, such as social withdrawal, which increase vulnerability for further victimization (Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges, Malone, & Perry, 1997).

It is important to study the multiple victimization experiences of youth for a number of reasons. First, those who are victimized in multiple ways experience greater psychosocial problems, compared to peers who experience a single form of victimization or who are not victimized (Holt & Espelage, 2003). By only studying the effects of any single form of victimization, researchers risk overestimating the effects of any single form of victimization on psychosocial functioning, as well as underestimating the full “burden of victimization” (Finkelhor, Ormrod, Turner, & Hamby, 2005, p. 5) that youth may experience. From a clinical perspective, findings on the heterotypic continuity of

victimization highlight the importance of early prevention and intervention, in order to protect children from following trajectories of chronic victimization.

Psychosocial Outcomes of Peer Victimization

Researchers have identified complex interactions among biological, social, and psychological changes that occur in adolescence, and their influence on functioning, with an increasing focus on diverse pathways of development (Powers, Hauser, & Kilner, 1989). The same intra- and interpersonal changes (e.g., pubertal development, diversification of the peer group) that lead to positive personal growth and development for most youth may also heighten others' risk for negative outcomes (A. C. Petersen, 1988). Youth who experience chronic victimization, especially those who experience multiple forms of victimization during development, might be those most at risk for negative outcomes, as the persistence and pervasiveness of their negative interactions with others affect their emotional well-being, sense of self, and quality of relationships (Arseneault et al., 2010; Pepler & Craig, 2000; Rudolph, Troop-Gordon, Hessel, & Schmidt, 2011).

Peer relationship quality is an important predictor of both internalizing (e.g., social withdrawal, anxiety, sadness) and externalizing (e.g., aggression, delinquency) problems in adolescence (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Craig, 1998). Youth who are chronically victimized might feel a sense of helplessness, lowered self-worth, shame, or isolation (Juvonen, Nishina, & Graham, 2000; Menesini & Camodeca, 2008), precipitating the development of internalizing symptoms, such as sadness, withdrawal, irritability, and anxiety in social situations. In addition, or instead, they might react with anger or a desire to re-establish their status in the peer group, and

respond with aggressive or delinquent behaviours (Rudolph et al., 2011; Sullivan, Farrell, & Kliewer, 2006; Troop-Gordon & Ladd, 2005), characteristics of externalizing problems.

Youth who experience high levels of victimization year after year may be those at greatest risk for these psychological problems, as they may fall into cycles of victimization that affect their functioning, and vice versa. For example, victimization predicts subsequent internalizing problems, and internalizing problems predict subsequent victimization, perhaps because children with these problems are more likely to be socially isolated (Goldbaum et al., 2003; Hawker & Boulton, 2000). Few studies have examined the development of these outcomes across adolescence, or their relationship with different forms of victimization. I expected that children who followed trajectories of relatively high victimization would experience greater internalizing and externalizing problems in preadolescence, and with continued victimization, these problems would increase at a faster rate than their non-victimized peers. Further, I expected each form of victimization to be positively associated with these outcomes.

In addition to intrapersonal issues, interpersonal factors are related to peer victimization. In adolescence, youth experience multiple transitions in their peer groups, including increases in the value placed on peer relationships (Blyth, Hill, & Thiel, 1982; Furman & Buhrmester, 1992). Peer relationships provide youth with intimacy, companionship, and support (Clark-Lempers, Lempers, & Ho, 1991; Furman & Buhrmester, 1985, 1992). Furthermore, positive friendships may buffer against physical, social, and bullying victimization (Bollmer, Milich, Harris, & Maras, 2005; Schmidt & Bagwell, 2007). This finding may be because youth with high-quality friendships have positive social skills that protect them from ongoing victimization, have friends to

intervene when they are at risk for victimization, and associate with peers who do not aggress against them frequently. I hypothesized that these factors would be particularly important during preadolescence and be related to the three forms of victimization present during that age, with high friendship quality in Grade 5 protecting youth from experiencing ongoing physical, social, and bullying victimization. Across adolescence, I expected friendship quality to increase for non-victimized youth. Given that social victimization often occurs in the context of friendships (Crick & Nelson, 2002), I expected ongoing social victimization to predict decreasing friendship quality across adolescence.

The current study investigated youths' victimization experiences in adolescence, by examining the relationship among multiple forms of victimization and their association with psychosocial outcomes. The theory of heterotypic continuity suggests that physical, social, bullying, and sexual harassment victimization are overlapping experiences, sharing risk factors and consequences, while also having unique characteristics.

Objectives and Hypotheses

The overall objective of the study was to examine the differential pathways of different forms of victimization in adolescence, their relationship among one another, and their longitudinal association with psychosocial outcomes. The first objective was to identify the developmental trajectories of four forms of peer victimization – physical aggression, social aggression, bullying, and sexual harassment– in adolescence. I hypothesized that for each form of victimization there would be at least three different developmental trajectories: a low-involvement group that was rarely victimized

(representing the majority of youth); one or more moderately victimized groups; and a chronically victimized group that experienced a relatively high level of victimization throughout adolescence (representing the smallest proportion of youth). For physical and bullying victimization, I expected these trajectories to be broadly characterized by declines across adolescence; for social victimization, I expected an early peak and subsequent decline; and for sexual harassment, I expected the trajectories to increase through to Grade 12. In addition, I hypothesized that boys would be more likely than girls to follow higher trajectories of physical and bullying victimization, while girls would be more likely to follow higher trajectories of social and sexual harassment victimization.

The second objective of this study was to examine the heterotypic continuity of victimization. I hypothesized that there would be a high degree of overlap among the different forms of victimization, such that youth would be likely to follow similar trajectories of physical, social, and bullying victimization. Furthermore, I expected that physical, social and bullying victimization would each uniquely predict sexual harassment victimization.

The third objective was to relate peer victimization trajectories to psychosocial outcomes. I hypothesized that individuals who followed moderate or high trajectories of victimization would be at greater risk than their non-victimized peers for a number of psychosocial outcomes. I expected that each form of victimization would be associated with internalizing and externalizing problems in Grade 5, and with continued victimization these problems would increase across adolescence. I expected physical, social, and bullying victimization to be associated with lower friendship quality in

Grade 5, and that continued social victimization would predict decreasing friendship quality across development.

Chapter 2: Research Method

Study Design

The current study examined archival data from a seven-year longitudinal study conducted in a large Canadian city. Data were collected once annually. At Time 1 (T1), participants were students from seven elementary schools. Students were in Grade 5 to Grade 8, forming four cohorts. Later, the four cohorts were followed into four local high schools (Grades 9 through 12). Data collection continued until participants reached Grade 12, or when the study ended at T7 (whichever came first). Table 1 shows the cohort sequential design of the study. Data were analyzed with grade level (not time point) as the independent variable as indicated in Table 2.

Table 1

The Cohort Sequential Design

Cohort	Grade Level						
	T1	T2	T3	T4	T5	T6	T7
A	5	6	7	8	9	10	11
B	6	7	8	9	10	11	12
C	7	8	9	10	11	12	
D	8	9	10	11	12		
<i>n</i>	1,854	1,530	762	901	1171	957	659

Table 2

Participation by Grade Level

Grade	<i>n</i>	<i>M_{age}</i> (<i>SD</i>)
5	407	10.1 (.3)
6	726	11.2 (.4)
7	1,180	12.3 (.5)
8	1,381	13.2 (.4)
9	787	14.3 (.5)
10	991	15.3 (.6)
11	1,222	16.3 (.6)
12	677	17.2 (.6)

Participants

Information forms were distributed to students in eligible grades at participating schools. Participants had parental consent and provided assent at the time of administration. Across the seven waves of data collection, participation rates were consistently over 80%. In total, 3,360 students (51% male) participated in at least one wave of data collection. Table 2 shows the mean age of participants in each grade level. The majority of participants identified their race as White (68.4%); participants also identified as East Asian (11.4%), Aboriginal (4.9%), Hispanic (4.6%), South-Asian (4.2%), Black (3.7%), and Middle-Eastern (1.2%). 1.7% identified as “Other”, and 7.3% did not self-identify as any of the above. 73% were born in Canada. At T1 (N = 1,820), 77% of participants were living in a two-parent household; at T7 (N = 496), that figure was 75.3%.

Measures

Physical victimization. A modified version of the Conflict Tactics Scale measured participants’ experiences of physical victimization (Straus, 1979). Two items¹ at the first time point (Spearman-Brown reliability² = .68) and five items at every other time point (Cronbach’s α range: .80 - .89) assessed different physical victimization experiences enacted by peers, including being “slapped or kicked”, and being “choked, punched or beaten during an argument”. Participants rated how often they had experienced each type of aggression (0 to more than 9 times) in the previous two months.

¹ Ideally, the measure would have included more than two items at every time point, to increase reliability and validity. This is a limitation of the study.

² For two-item measures, the Spearman-Brown coefficient is a better estimate of reliability than Cronbach’s alpha (Eisinga, Grotenhuis, & Pelzer, 2013).

Social victimization. A modified version of the Conflict Tactics Scale also measured participants' social victimization experiences (Straus, 1979). Two items¹ at the first time point (Spearman-Brown reliability = .67) and four items at every other time point (Cronbach's α range: .77 - .85) assessed different social victimization experiences enacted by peers, including "getting even... by keeping [me] from being in a group of friends," and "telling rumours or mean lies to make [me] unpopular" (Cronbach's α range: .80 - .89). Participants rated how often they had experienced each type of aggression (0 to more than 9 times) in the previous two months.

Bullying victimization. Bullying victimization was assessed using a modified version of the Safe School Questionnaire (Olweus, 1989; Pepler et al., 2006). After being provided with a definition of bullying, participants rated their experiences of being bullied both in the past two months and in the past five days on a five-point scale from 0 (*not at all*) to 4 (*five or more times*) (Cronbach's α range: .77 to .86).

Sexual harassment victimization. Beginning in Grade 6, sexual harassment was measured using a shortened version of the AAUW Sexual Harassment Survey (AAUW, 2001), which asked how often a peer had perpetrated unwanted behaviours in the previous two months, on a scale from 1 (*never*) to 5 (*daily*). Five items included "made sexual comments, jokes, movements or looks at you," and "wrote sexual notes, messages, or graffiti about you" (Cronbach's α range: .71 to .80).

Mental health: internalizing and externalizing problems. Participants completed shortened version of the Youth Self-Report (Achenbach, 1991). Using a three-point scale (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*), participants rated 12 internalizing (e.g., "I cry a lot") and 12 externalizing (e.g., "I destroy things belonging to others") items (Cronbach's α range: .77 to .86).

Peer relationships: alienation and trust in friendships. Friendship quality was assessed using two subscales from the People in My Life measure (Cook, Greenberg, & Kusche, 1995; Ridenour, Greenberg, & Cook, 2006). Feelings of alienation among friends were assessed using four items (e.g., “My friends don’t understand what I’m going through these days”), and trust was assessed using five items (e.g., “I trust my friends”). Participants rated these items on a scale from 1 (*almost never or never true*) to 5 (*almost always or always true*) (Cronbach’s α range: .71 to .86).

Procedure

Trained research assistants administered the questionnaires in students’ classrooms. Participants were assured of the confidentiality of their responses and of the voluntary nature of the study. Following completion, participants received a debriefing form. This study was approved by the Queen’s University’s Research Ethics Board and followed Canadian Psychological Association ethical guidelines (Canadian Psychological Association, 2000).

Chapter 3: Results

Cross-Sectional Means

Responses for all victimization measures were standardized to a scale of 0 to 4. Table 3 details the means for each gender and grade level. Consistently from Grade 5 through Grade 12, mean levels of each form of victimization were less than 1. Boys reported more physical victimization in the older grades, more sexual harassment in Grades 11 and 12, and more bullying victimization in Grades 6 through 11. Girls reported more social victimization in some grades.

Table 3

Mean Levels of Victimization by Grade Level

Grade	Form of Victimization							
	Physical		Social		Bullying		Sexual Harass.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
5	.21	.05	.62	.50	.53	.43	.07	.05
6	.09	.07	.29	.32	.43*	.35	.09	.07
7	.17	.10	.37	.42**	.50***	.31	.16	.15
8	.19***	.11	.35	.39**	.39**	.31	.24	.18
9	.34***	.23	.41	.46	.54***	.24	.32	.32
10	.30***	.13	.43	.46	.34*	.22	.32	.25
11	.24***	.09	.38	.41**	.32***	.16	.31***	.21
12	.21***	.04	.33	.32	.13	.09	.31***	.18

Note: Gender comparisons using Mann-Whitney U. *** $p < .001$, ** $p < .01$, * $p < .05$

Developmental Trajectories of Peer Victimization

I conducted developmental trajectory analyses for each form of victimization using the SAS PROC TRAJ macro (Jones, Nagin, & Roeder, 2001; Jones & Nagin, 2007). For these analyses, I estimated the trajectories using a censored normal distribution, which is appropriate for data which cluster at the minimum or maximum of a scale (Nagin, 2005). Three criteria informed the selection of the most suitable number of trajectories: (1) the Bayesian information criterion (BIC) and the log Bayes factor (which

compares BIC values); (2) posterior probabilities of group membership greater than 70% (Nagin, 2005); and (3) alignment with past research and theories on the development of victimization. I determined the most appropriate shape for each trajectory (constant, linear, quadratic, or cubic) by dropping those with non-significant parameters.

Physical victimization. I tested competing models to fit the physical victimization data, and found that the BIC value was highest for a four-trajectory model (BIC = 5223.91), compared to a three-trajectory (BIC = -5228.23, log Bayes factor \approx 8.64) or five-trajectory model (BIC = -5228.00, log Bayes factor \approx 8.18). However, the four-trajectory model contained two trajectories that had a constant, zero level of victimization from Grade 5 through Grade 12 (one trajectory extended below 0, and thus became equal to 0 after enforcing the scale minimum). Thus, a three-trajectory model was selected, which had a better fit than a two-trajectory model (BIC = -5304.01, log Bayes factor \approx 160.2). After testing different trajectory shapes, I found an optimal fit for three linear trajectories (High, Medium, and Low), shown in Figure 1. The average posterior probabilities for each group ranged from 78.9% to 94.9%, indicating good model fit.

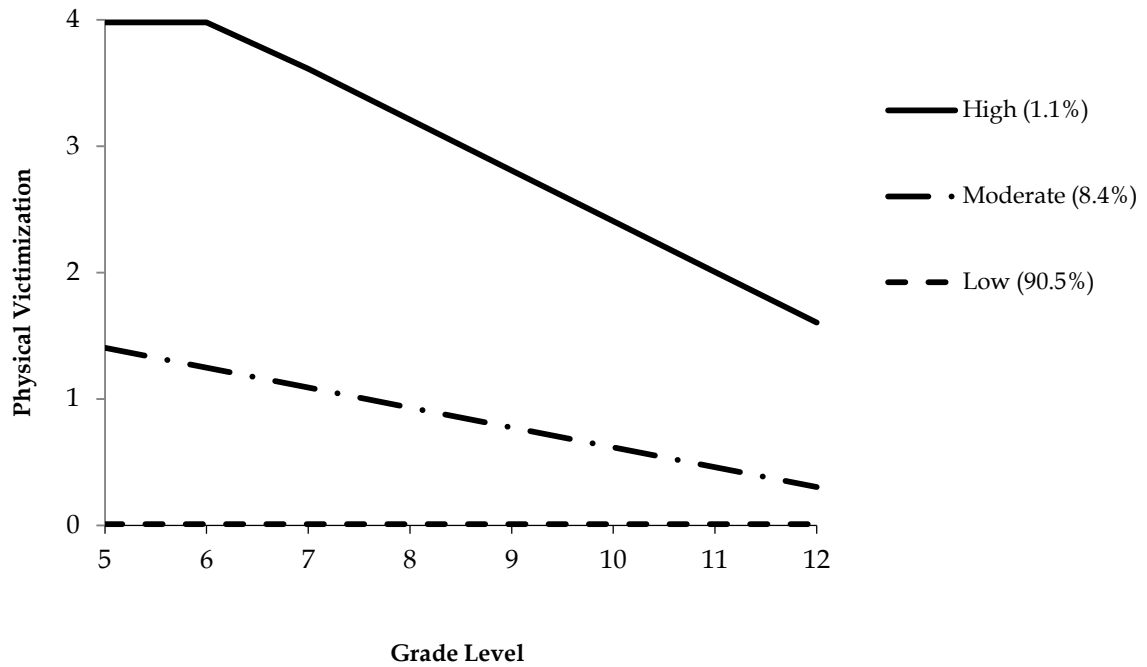


Figure 1. Predicted trajectories of physical peer victimization across adolescence.

The majority of participants (90.5%) followed a Low physical victimization trajectory. This group held a constant level of low victimization (the scale minimum) through adolescence ($\beta_0 = -.09, p = .07; \beta_1 = -.02, p < .001$). The Moderate trajectory group (8.4%) reported some physical victimization in Grade 5 (approximately 1.4 on the scale, or an average of 3.5 incidents in the previous two months). This group experienced a linear decrease through to Grade 12, ending close to the scale minimum ($\beta_0 = 2.19, p < .001; \beta_1 = -.16, p < .001$). The High trajectory group represented 1.1% of participants. This group was characterized by a high degree of physical victimization in Grade 5 and Grade 6 (the scale maximum, or an average of more than 9 incidents in the previous two months), with a linearly decreasing trajectory through to Grade 12 ($\beta_0 = 6.42, p < .001; \beta_1 = -.40, p < .001$).

Gender was added to the model as a covariate. The estimates reported here are the change in log odds (*lo*) ratios of being in the Moderate or High victimization trajectories versus the Low victimization trajectory, given gender. Gender was significant in distinguishing the Moderate trajectory from the Low trajectory ($lo = -3.74, p < .001$), as well as in distinguishing the High trajectory from the Low trajectory ($lo = -2.68, p = .047$); the boys' odds of experiencing physical victimization across adolescence were significantly higher than girls' odds.

Social victimization. The BIC value was highest for a four-trajectory model (BIC = -6248.24); this was substantially larger than the value for the two- (BIC = -6342.32, log Bayes factor ≈ 188.16) and three-trajectory models (BIC = -6284.24, log Bayes factor ≈ 72). The five-trajectory model did not provide better fit (BIC = -6250.02, log Bayes factor ≈ 3.84). However, the four-trajectory model had low posterior probabilities for group membership (one of the trajectories had a posterior probability of 64.7%, indicating a poor fit). Thus, a three-trajectory model was selected. It had posterior probabilities of group membership ranging from 68.7% to 84.7%. An optimal fit was found for two linear trajectories (High and Low) and one cubic trajectory (Moderate), shown in Figure 2.

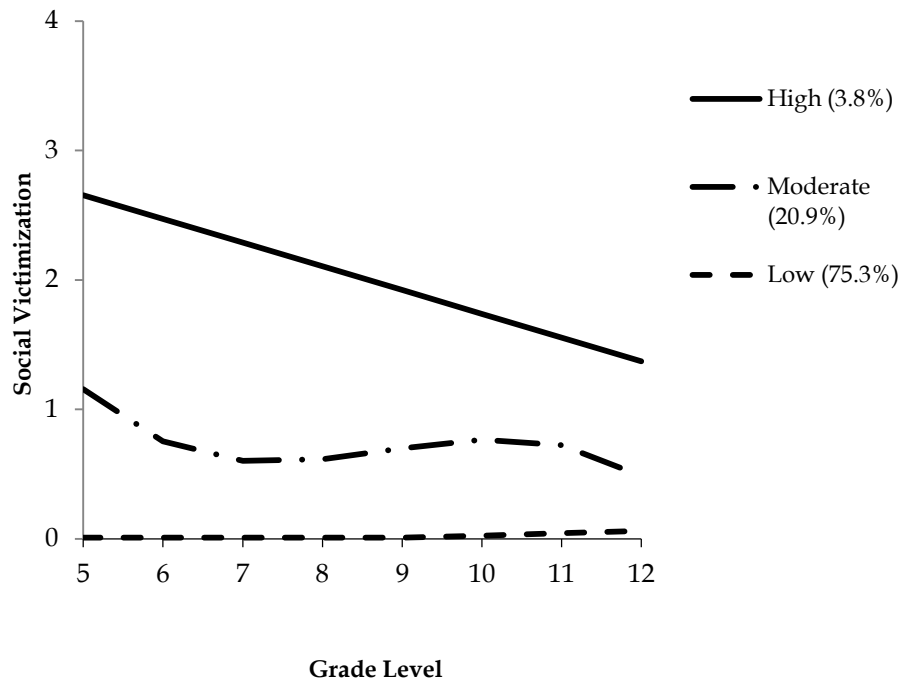


Figure 2. Predicted trajectories of social peer victimization across adolescence.

The majority of participants (75.3%) reported limited social victimization across adolescence. This Low victimization group's predicted victimization level in Grade 5 was the scale minimum; this trajectory was linear in shape, with a minimal increase through to Grade 12, ending just above the scale minimum ($\beta_0 = -.16, p = .005; \beta_1 = .019, p < .001$). About one-fifth of participants (20.9%) followed a Moderate victimization trajectory, represented by a cubic function ($\beta_0 = 10.11, p < .001; \beta_1 = -3.40, p < .001, \beta_2 = .40, p < .001, \beta_3 = -.02, p < .001$). This group's initial victimization levels in Grade 5 were approximately 1 on the scale, or an average of 2 to 3 incidents in the previous two months. Their victimization levels decreased through to the end of elementary school (Grade 8), increased slightly during the transition to secondary school (Grades 9 and 10) and decreased thereafter, ending at around .5 on the scale, or an average of 1 to 2 incidents in the previous two months. Finally, 3.8% participants were represented by a

High victimization trajectory. This group showed a high initial level of victimization in Grade 5 (just under 3, or an average of 6 to 7 incidents in the previous two months), with a linearly decreasing trajectory through to Grade 12 (ending around 1.4, or being victimized once or twice in the previous two months; $\beta_0 = 3.57, p < .001$; $\beta_1 = -.18, p < .001$).

As a covariate, gender was significant in distinguishing the Moderate trajectory from the Low trajectory ($lo = .44, p = .007$), such that girls were about 1.5 times more likely than boys to be in the Moderate victimization group. There was no significant difference between genders for likelihood of membership in the High victimization group versus the Low victimization group ($lo = -.30, p = .210$).

Bullying victimization. After testing competing models to fit the bullying victimization data, the BIC value was highest for a three-trajectory model (BIC = -5686.65); this value was substantially larger than the value for the two-trajectory model (BIC = -5696.85, log Bayes factor ≈ 20.40). The four-trajectory model did not provide better fit (BIC = -5691.01, log Bayes factor ≈ 8.72). Comparing different trajectory shapes, an optimal fit was found for three linear trajectories: High, Moderate and Low, shown in Figure 3. The average posterior probabilities for group membership ranged from 69.4% to 79.1%, indicating that this three-trajectory model sufficiently grouped together like trajectories, and effectively distinguished among trajectories.

The majority of participants (63.8%) reported limited victimization across adolescence. This Low victimization group's predicted victimization level, from Grade 5 through Grade 12, was the scale minimum (0, or no victimization in the past two past months; $\beta_0 = .391, p = .042$; $\beta_1 = -.227, p < .001$). About a third of participants (32.8%) were followed a Moderate trajectory, with a low initial level of victimization in Grade 5 (<1 on

the scale, which represents being victimized once or twice in the last two months) and a linearly decreasing trajectory through to Grade 12, ending at the scale minimum ($\beta_0 = 1.13, p < .001; \beta_1 = -.118, p < .001$). The High trajectory (3.4%) had a high initial level of victimization (approximately 3, or being victimized about once a week), with a linearly decreasing trajectory through to Grade 12 (ending around 1.4, or being victimized once or twice in the last two months; $\beta_0 = 4.62, p < .001; \beta_1 = -.269, p < .001$).

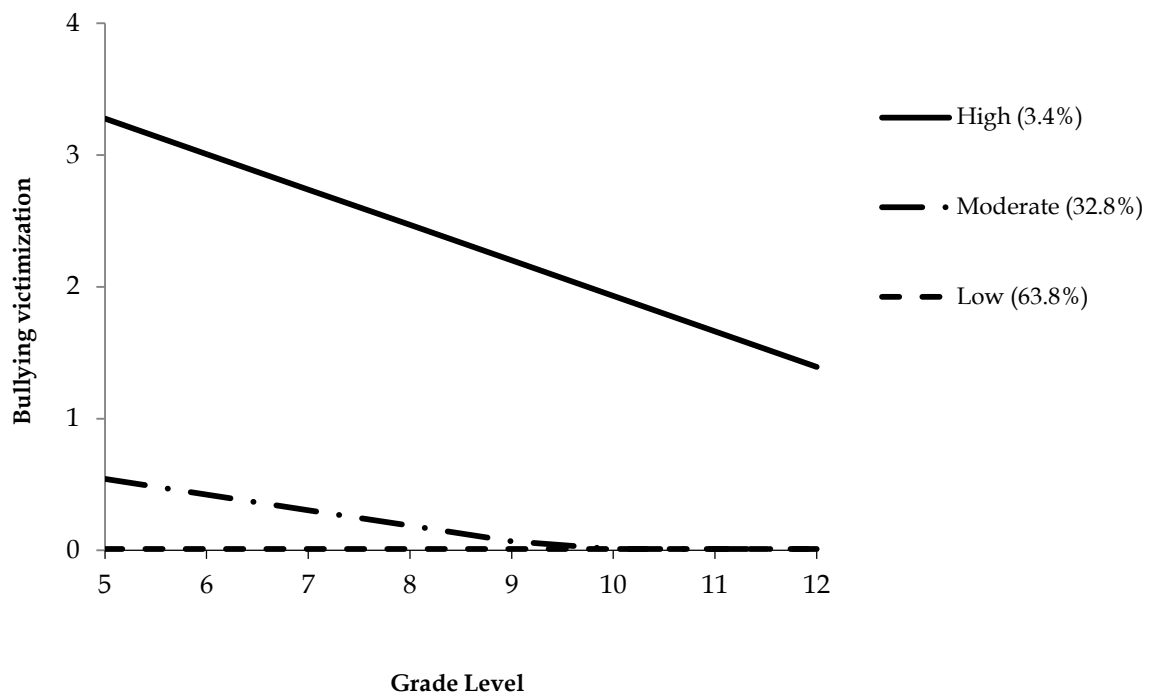


Figure 3. Predicted trajectories of bullying victimization across adolescence.

Gender was significant in distinguishing the Moderate bullying victimization trajectory from the Low trajectory ($lo = -.85, p < .001$), as well as in distinguishing the High trajectory from the Low trajectory ($lo = -1.03, p < .001$). Boys were significantly more likely than girls to follow one of the higher trajectories.

Sexual harassment victimization. I tested competing models to fit the sexual harassment victimization data, and found that the BIC value was highest for a four-

trajectory model (BIC = -3180.78), compared to a three-trajectory (BIC = -3188.59, log Bayes factor ≈ 15.62) or five-trajectory model (BIC = -5228.00, log Bayes factor ≈ 8.18). However, the four-trajectory model had two trajectories with posterior probabilities of group membership considerably lower than 70%. Thus, a three-trajectory model was selected. After testing different trajectory shapes, I found an optimal fit for three quadratic trajectories, shown in Figure 4. The average posterior probabilities for each group ranged from 73.6% to 87.6%, indicating good model fit.

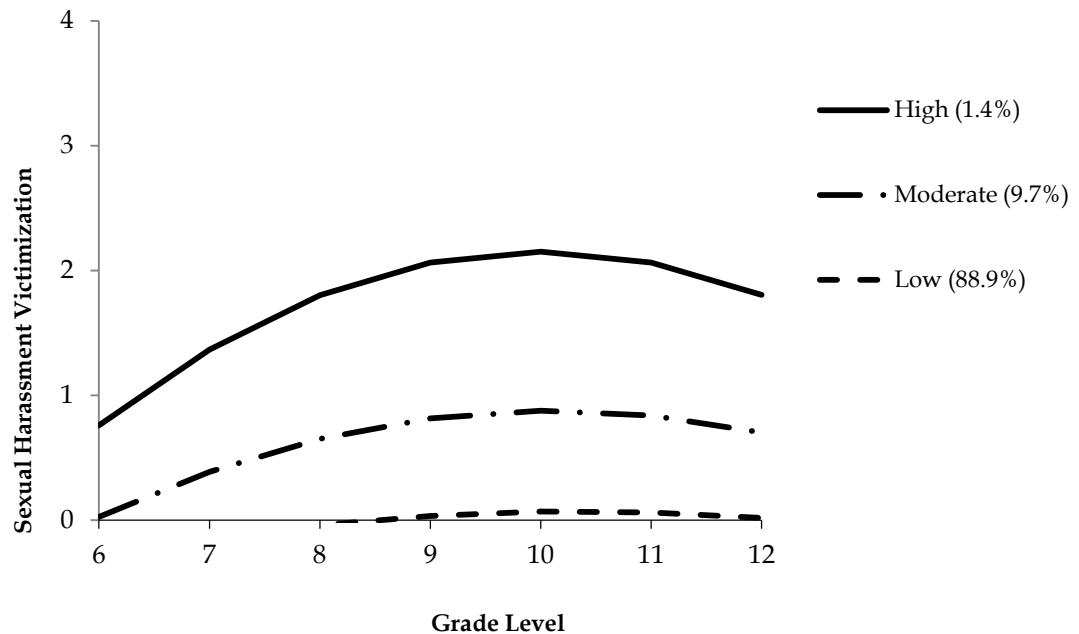


Figure 4. Predicted trajectories of sexual harassment victimization across adolescence.

The majority of participants (88.9%) followed a Low victimization trajectory. This group held a constant level of no victimization (the scale minimum) through early adolescence, then a very low level of victimization through the secondary school years, near the scale minimum ($\beta_0 = -2.06, p < .001$; $\beta_1 = .41, p < .001$; $\beta_2 = -.02, p < .001$). The Moderate victimization group (9.7%) reported no victimization in Grade 6, but began

reporting sexual harassment earlier in development compared to the Low victimization group ($\beta_0 = -4.26, p < .001$; $\beta_1 = 1.02, p < .001$; $\beta_3 = -.05, p < .001$). This group's trajectory followed a quadratic function, increasing through to Grade 10 and decreasing slightly afterwards. Of the three groups, the High victimization (1.4%) group was the only to report victimization in Grade 6 (1, or an average of 1 or 2 incidents of each item on the scale, in the last two months). This group's trajectory followed a quadratic function, increasing through to Grade 10 and decreasing slightly afterwards, ending at approximately 2, which represents an average of "a few times per month" for each item ($\beta_0 = -6.53, p < .001$; $\beta_1 = 1.74, p < .001$; $\beta_3 = -.09, p < .001$).

There were significant gender differences among sexual harassment trajectories. Gender was a significant covariate distinguishing the Moderate victimization trajectory from the Low victimization trajectory ($lo = -.57, p < .001$), as well as the High victimization trajectory from the Low victimization trajectory ($lo = -1.25, p < .001$), such that boys were more likely than girls to follow the Moderate and High trajectories of sexual harassment victimization.

Table 4 summarizes the gender differences found for each of the four forms of victimization, in terms of odds of appearing in the Moderate or High victimization groups compared to the Low victimization group. Boys were more likely than girls to experience higher levels of victimization for physical, bullying, and sexual harassment victimization. Girls were more likely to experience moderate levels of social victimization; there were no differences in the High victimization trajectory for social victimization.

Table 4

Summary of Gender Effects of Trajectory Group Membership

Form	Moderate Victimization (<i>lo</i>)	High Victimization (<i>lo</i>)
Physical	Boys > girls (-3.74)	Boys > girls (-2.68)
Social	Girls > boys (.44)	No differences
Bullying	Boys > girls (-.85)	Boys > girls (-1.03)
Sexual Harassment	Boys > girls (-.57)	Boys > girls (-1.25)

Note: This table indicates significant log odds ratios of membership in Moderate and High victimization trajectories, compared to the Low trajectories.

Heterotypic Continuity in Peer Victimization

Co-occurrence of physical and social victimization. I used PROC TRAJ to estimate a joint trajectory model of physical and social victimization (Nagin & Tremblay, 2001). Previously, I found three trajectories of physical victimization and three of social victimization. The joint trajectory analyses provided three main outputs: (1) the joint probabilities, or the proportion of youth estimated to belong to each cell of the 3 X 3 combination of physical and social victimization trajectories; and (2) the conditional probability of membership in each social victimization trajectory based on physical victimization trajectory; and (3) the conditional probability of membership in each physical victimization trajectory based on social victimization trajectory.

The first part of Table 5 indicates the joint probabilities of membership in each combination of social and physical victimization trajectories. The largest proportion, 70.0%, comprised children who followed the low trajectories of both physical and social victimization. The second largest proportion, 25.0%, comprised children who followed the moderate trajectories of both forms of victimization. The third (2.0%) and fourth (1.6%) largest groups were children who experienced high social victimization, along with moderate and high physical victimization, respectively. Very small proportions of

participants (<1%) followed all the other combinations of physical and social victimization trajectories.

Table 5

Joint Trajectories of Physical and Social Victimization

Social victimization trajectory	Physical victimization trajectory		
	Low	Moderate	High
Probabilities (%) of joint trajectory group membership (all-cell sum = 100.0)			
Low	70.0	<.001	.8
Moderate	<.001	25.0	.5
High	.2	2.0	1.6
Probability (%) of social victimization conditional on physical victimization (vertical sum = 100.0)			
Low	99.7	<.001	26.3
Moderate	<.001	92.6	18.0
High	.3	7.4	55.6
Probability (%) of physical victimization conditional on social victimization (horizontal sum = 100.0)			
Low	98.9	<.001	1.1
Moderate	<.001	97.9	2.1
High	5.0	52.5	42.5

The second and third parts of Table 5 indicate the conditional probabilities of following each social victimization trajectories given each of the physical victimization trajectories, and vice versa. Participants who followed a trajectory of low physical victimization were most likely to follow a trajectory of low social victimization, as well (99.7%). Following the same pattern, participants who followed a moderate physical victimization trajectory were most likely to follow a moderate social victimization trajectory (92.6%). There was more variation among participants who followed a trajectory of high physical victimization: they were most likely to follow a high social

victimization trajectory (55.6%), followed by low (26.4%) and moderate (18.0%) social victimization trajectories.

Looking at the inverse conditional probabilities, I found that participants who followed a trajectory of low social victimization tended to follow a trajectory of low physical victimization (98.9%), while participants who followed a trajectory of moderate social victimization tended to follow a trajectory of moderate physical victimization (97.9%). Participants who followed a trajectory of high social victimization were most likely to follow a trajectory of moderate (52.5%) or high physical victimization (42.5%).

Co-occurrence of physical and bullying victimization. The first part of Table 6 indicates the joint probabilities of membership in physical and bullying victimization trajectory groups. The modal group was made up of youth who followed Low trajectories of both physical and bullying victimization (62.2%). The second largest group was comprised of youth who followed two Moderate trajectories (24.7%). The third largest group followed a Moderate bullying victimization trajectory and a Low physical victimization trajectory (7.7%). It was rare to follow one High and one Low trajectory (<1%).

The second part of Table 6 indicates the probability of bullying victimization trajectory membership given one's physical victimization trajectory. Given their physical victimization trajectory, youth were most likely to follow a similar bullying victimization trajectory (i.e., two Low, two Moderate, or two High trajectories). There was a considerable amount of variability among those who followed a High physical victimization trajectory, however. About half followed a High bullying victimization trajectory, about a third followed trajectories of Low bullying victimization, and the remaining 17.4% followed a Moderate victimization trajectory.

The final part of the table indicates the probability of physical victimization trajectory membership given one's bullying victimization trajectory. Again, there was the most variability among youth who followed a High bullying victimization trajectory, who were most likely to follow a Moderate physical victimization trajectory (64.9%).

Table 6

Joint Trajectories of Physical and Bullying Victimization

Bullying victimization trajectory	Physical victimization trajectory		
	Low	Moderate	High
Probabilities (%) of joint trajectory group membership (all-cell sum = 100.0)			
Low	62.2	<.001	.9
Moderate	7.7	24.7	0.5
High	<.001	2.6	1.4
Probability (%) of bullying victimization conditional on physical victimization (within-column sum = 100.0)			
Low	89.9	<.001	33.3
Moderate	11.0	90.5	17.4
High	<.001	9.5	49.3
Probability (%) of physical victimization conditional on bullying victimization (within-row sum = 100.0)			
Low	98.5	<.001	1.5
Moderate	23.4	75.1	1.5
High	<.001	64.9	35.1

Co-occurrence of social and bullying victimization. The first part of Table 7 indicates the joint probabilities of membership in social and bullying victimization trajectory groups. Youth were most likely to follow two Low trajectories (65.5%). The second largest group was comprised of youth who followed two Moderate trajectories (26.5%). 3% of youth followed two High trajectories. An additional 3% followed a Moderate bullying victimization trajectory and a Low social victimization trajectory.

The second section of Table 7 indicates the probability of bullying victimization trajectory membership given one's social victimization trajectory, while the third section has the converse probabilities. Both sections indicate that youth were most likely to follow similar bullying and social victimization trajectories (e.g., two High trajectories). Youth who followed a Low social victimization trajectory were highly likely to follow a Low bullying victimization trajectory (95.7%) and vice versa (98.5%). The same was true of the Moderate (96.2% and 89.9%) and High trajectories (75.8% and 74.2%).

Table 7

Joint Trajectories of Social and Bullying Victimization

Bullying victimization trajectory	Social victimization trajectory		
	Low	Moderate	High
Probabilities (%) of joint trajectory group membership (all-cell sum = 100.0)			
Low	65.5	<.001	1.0
Moderate	3.0	26.5	<.001
High	<.001	1.1	3.0
Probability (%) of bullying victimization conditional on social victimization (within-column sum = 100.0)			
Low	95.7	<.001	24.2
Moderate	4.3	96.2	<.001
High	<.001	3.8	75.8
Probability (%) of social victimization conditional on bullying victimization (within-row sum = 100.0)			
Low	98.5	<.001	1.5
Moderate	10.1	89.9	<.001
High	<.001	25.8	74.2

Predicting sexual harassment victimization. I conducted hierarchical logistic regression to determine whether chronic physical, social, and bullying victimization would predict sexual harassment victimization, over and above gender effects.

Victimization was dichotomized into high (the High Victimization trajectory) and low

(either the Moderate or Low Victimization trajectories) for each form of victimization.

The overall model was significant, $\chi^2(4, N = 3466) = 65.18, p < .001$. There was good model fit, as evidenced by a non-significant result on the Hosmer-Lemeshow test, $\chi^2(n = 3466) = .32, df = 1, p = .580$.

Controlling for gender, each form of victimization was a significant predictor of sexual harassment victimization. High physical victimization was a significant predictor of high sexual harassment victimization, Wald = 12.50, $df = 1, p < .001$. The odds ratio for physical victimization suggests that membership in the high physical victimization group increased the odds of being in the high sexual harassment victimization group about eight-fold (odds ratio = 8.02). High social victimization was also a significant predictor of high sexual harassment victimization, Wald = 22.59, $df = 1, p < .001$. For those who experienced a high of social victimization, the odds of experiencing a high level of sexual harassment victimization was about nine times higher than for those who did not experience a high level of social victimization (odds ratio = 9.07). Finally, bullying victimization significantly predicted sexual harassment victimization, as well, Wald = 8.87, $df = 1, p = .003$. The odds ratio for bullying victimization was 4.84, indicating that membership in the high bullying victimization trajectory increased the odds of being in the high sexual harassment victimization group about five times.

Table 8 presents the results for the model including the regression coefficients, Wald statistics, odds ratios (Exp[B]), and 95% confidence intervals (CI) for the odds ratios.

Table 8

Logistic Regression Model Predicting Sexual Harassment Victimization

	<i>B</i>	<i>SE</i>	Wald	<i>p</i>	Exp(B)	95% CI for Exp(B)	
						Lower	Upper
Intercept	-4.956	.269	339.301				
Gender	-1.040	.448	5.395	.020	.354	.147	.850
Physical	2.082	.589	12.501	.000	8.022	2.529	25.444
Social	2.204	.464	22.590	.000	9.065	3.652	22.499
Bullying	1.576	.529	8.871	.003	4.838	1.714	13.650

Psychosocial Outcomes of Peer Victimization

Internalizing problems. The development of internalizing symptoms was analyzed using two multilevel models. Model 1 examined the rate of change in internalizing problems across development, without any additional predictors. Model 2 examined whether the initial level in internalizing problems, as well as the rate of change, varied according to victimization trajectory group.

Each multilevel model consisted of two submodels, or levels. In the analysis for Model 1, Level 1 represented within-person trajectories of internalizing symptoms during adolescence. In this individual growth model, changes in internalizing symptoms were modelled as a linear function of grade level (serving as a proxy for age). The Level 1 model could be expressed as:

$$\text{INTERNALIZING}_{ij} = \pi_{0i} + \pi_{1i} (\text{Grade}_{ij} - 5) + \varepsilon_{ij}$$

In this equation, the subscript *i* identifies individuals (1 through 3091, for 3091 participants), and the subscript *j* represents occasions of measurement (1 through 8, for 8 grade levels). INTERNALIZING is the level of internalizing problems reported by Participant_{*i*} in Grade_{*j*}. π_{0ij} is the intercept, indicating the internalizing score of

Participant_i in Grade 5, while π_{1ij} is the slope, indicating the linear rate of change in internalizing problems for Participant_i. ε_{ij} is a random error component associated with each participant's trajectory.

The Level 2 submodel was expressed as:

$$\pi_{0i} = \beta_{00} + e_{0i}$$

$$\pi_{1i} = \beta_{10} + e_{1i}$$

For this Model 1 analysis, Level 2 did not add any additional predictors. In the first equation for Level 2, Participant_i's Grade 5 internalizing score (π_{0i}) is a function of the grand mean intercept of the entire sample (β_{00}) and an error component (e_{0i}). In the second equation, Participant_i's change in internalizing symptoms, or slope (π_{1i}), is the grand mean slope for the entire sample (β_{10}), plus an error component (e_{1i}).

In Model 2, gender and victimization trajectory groups were added as predictors of internalizing symptoms. Again, there were two submodels or levels. The Level 1 model was the same as for Model 1. Level 2 tested predictors of the intercept (π_{0i}) and of the slope (π_{1i}). The Level 2 submodel could be expressed as:

$$\pi_{0i} = \beta_{00} + \beta_{01}(\text{gender}) + \beta_{02}(\text{physical}) + \beta_{03}(\text{social}) + \beta_{04}(\text{bullying}) + \beta_{05}(\text{sexual}) + e_{0i}$$

$$\pi_{1i} = \beta_{10} + \beta_{11}(\text{gender}) + \beta_{21}(\text{physical}) + \beta_{31}(\text{social}) + \beta_{41}(\text{bullying}) + \beta_{51}(\text{sexual}) + e_{1i}$$

The tested predictors were gender (0 = Male, 1 = Female) and increasing victimization trajectories (0 = Low, 1 = Moderate, 2 = High) for each of the four forms of victimization described previously³.

Table 9 shows the coefficients (β) for Models 1 and 2.

Table 9

Multilevel Analyses Predicting Internalizing Problems

Variable	Model 1	Model 2
	Coefficient (SE)	Coefficient (SE)
Internalizing problems in Grade 5	.35 (.008)**	.26 (.01)**
Gender		.05 (.02)**
Physical victimization		.14 (.04)**
Social victimization		.16 (.02)**
Bullying victimization		.09 (.02)**
Sexual harassment victimization		-.002 (.03)
Rate of change in internalizing problems	.01 (.002)**	.002 (.002)
Gender		.02 (.004)**
Physical victimization		-.01 (.009)
Social victimization		-.009 (.006)
Bullying victimization		.007 (.004)
Sexual harassment victimization		.01 (.007)*

* $p < .05$ ** $p < .01$

Model 1 indicated that, overall, there was an effect of time on internalizing problems, such that these problems increased across development ($p < .001$). In Model 2, gender (being female) was a significant predictor of greater internalizing problems in Grade 5 ($p = .001$). As well, greater physical ($p = .001$), social ($p < .001$) and bullying victimization ($p < .001$) significantly predicted greater internalizing problems in Grade 5; greater sexual harassment victimization did not ($p = .948$).

In this model, internalizing problems did not change (increase or decrease) across development for the sample as a whole, but being female was a significant

³ Ideally, I would have also tested interactions between gender and victimization, but there was low power due to low n in the higher trajectories.

predictor of experiencing increasing internalizing problems across development ($p < .001$). Level of physical ($p = .142$), social ($p = .097$), and bullying ($p = .412$) victimization did not predict the rate of change in internalizing problems; however, greater sexual harassment victimization increased the rate of change of internalizing problems ($p = .032$). Figure 5 and Figure 6 illustrate the development of internalizing problems by gender and by sexual harassment victimization trajectory, respectively.

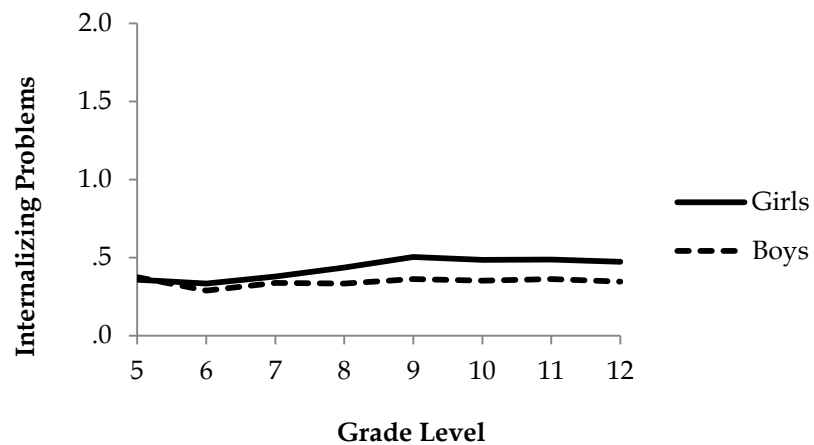


Figure 5. Development of internalizing problems by gender.

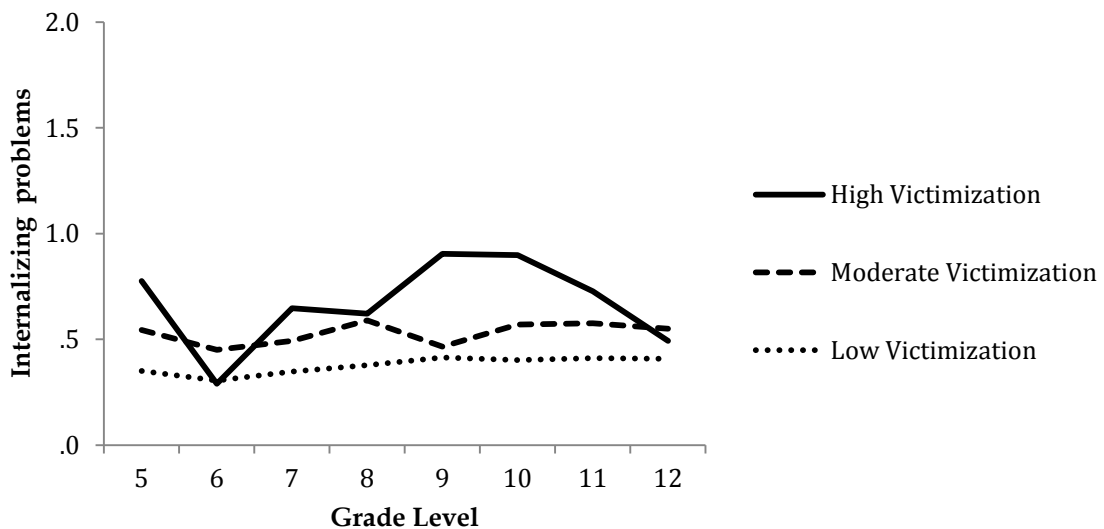


Figure 6. Development of internalizing problems by sexual harassment victimization trajectory.

Externalizing problems. The above analyses were repeated for each of the target risk factors: externalizing problems, self-esteem, and feelings of trust and alienation among friends. For externalizing problems, a quadratic growth curve demonstrated better fit than a linear curve, $\chi^2(3) = 158.830, p < .001$. Thus, Model 1 was adjusted to include an additional beta (β) coefficient .

Table 10 shows the coefficients for Models 1 and 2 for externalizing problems. In Model 1, the significant positive slope indicated that externalizing problems increased across development ($p < .001$), while the significant negative acceleration indicated that growth in externalizing problems slowed down towards late adolescence.

Model 2 indicated that boys had greater externalizing problems in Grade 5, over girls ($p = .025$). As well, greater social victimization significantly predicted greater externalizing problems in Grade 5 ($p < .001$). Externalizing problems increased over time, overall ($p < .001$), with girls' externalizing problems increasing faster than boys'. Sexual harassment victimization also predicted an increased rate of developing externalizing problems ($p < .001$).

The acceleration coefficients indicate that growth in externalizing slowed and decreased over time; for youth who experienced sexual harassment victimization, there was faster deceleration in later adolescence. Figure 7 illustrates the development of externalizing problems by sexual harassment victimization trajectory.

Table 10

Multilevel Analyses Predicting Externalizing Problems

Variable	Model 1	Model 2
	Coefficient (SE)	Coefficient (SE)
Externalizing problems in Grade 5	.25 (.007)**	.169 (.010)**
Gender		-.059 (.001)**
Physical victimization		.198 (.079)*
Social victimization		.113 (.027)**
Bullying victimization		.011 (.024)
Sexual harassment victimization		-.065 (.044)
Rate of change in externalizing problems	.04 (.002)**	.054 (.009)**
Gender		.027 (.011)*
Physical victimization		-.015 (.017)
Social victimization		0.006 (.017)
Bullying victimization		-.015 (.043)
Sexual harassment victimization		.140 (.028)**
Acceleration of externalizing problems	-.005 (.0007)**	-.003 (.001)*
Gender		-.003 (.001)
Physical victimization		-.0005 (.005)
Social victimization		.0008 (.002)
Bullying victimization		.0003 (.001)
Sexual harassment victimization		-.014 (.004)**

* $p < .05$ ** $p < .01$

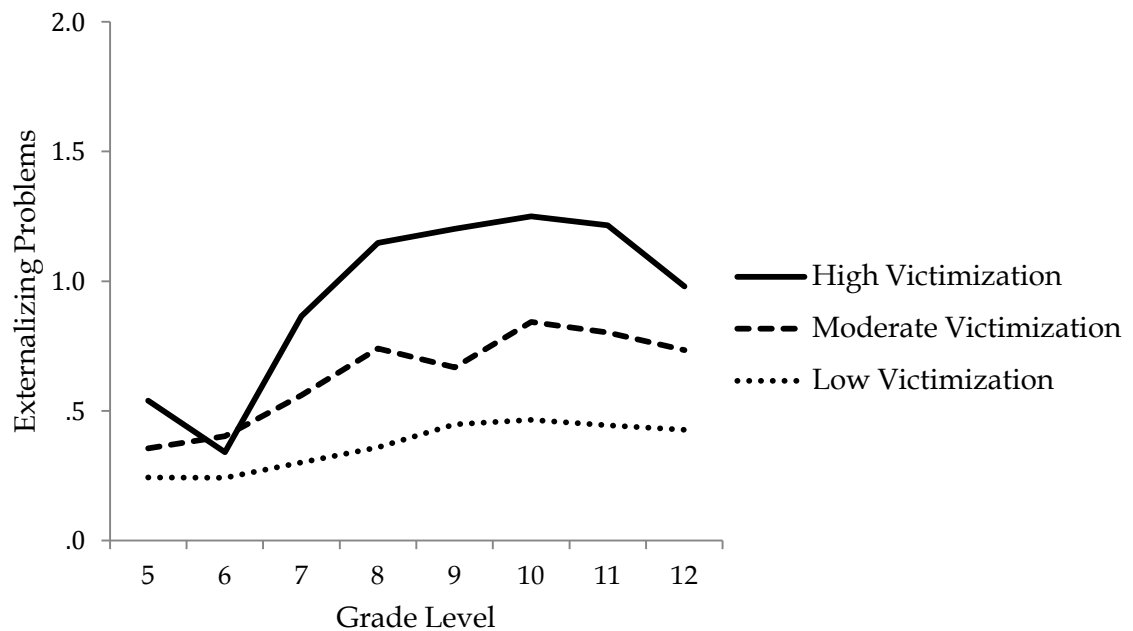


Figure 7. Development of externalizing problems by sexual harassment victimization trajectory.

Friend trust. Table 11 shows the results of the multilevel analyses predicting trust in friendships. Model 1 revealed that, on average, trust increased over time ($p < .001$). The results from Model 2 indicated that girls reported higher trust than boys in Grade 5 ($p < .001$). Further, greater social ($p = .007$) and bullying ($p = .004$) victimization predicted lower initial levels of trust. There was no significant relationship between physical ($p = .470$) or sexual harassment ($p = .398$) victimization and trust in Grade 5. Neither gender nor any of the peer victimization trajectories predicted increased rates of change in the development of trust in friendships (all $ps > .05$). Figure 8 illustrates the relationship between social victimization and the development of trust in friendships.

Table 11

Multilevel Analyses Predicting Trust in Friendships

Variable	Model 1	Model 2
	Coefficient (SE)	Coefficient (SE)
Trust in friendships in Grade 5	4.09 (.02)*	3.75 (.07)*
Gender		.29 (.41)*
Physical victimization		-.07 (.10)
Social victimization		-.16 (.06)*
Bullying victimization		-.16 (.05)*
Sexual harassment victimization		.07 (.09)
Rate of change in trust in friendships	.02 (.005)*	-.01 (.02)
Gender		.02 (.009)
Physical victimization		.005 (.02)
Social victimization		.01 (.01)
Bullying victimization		.02 (.01)
Sexual harassment victimization		-.02 (.02)

* $p < .05$

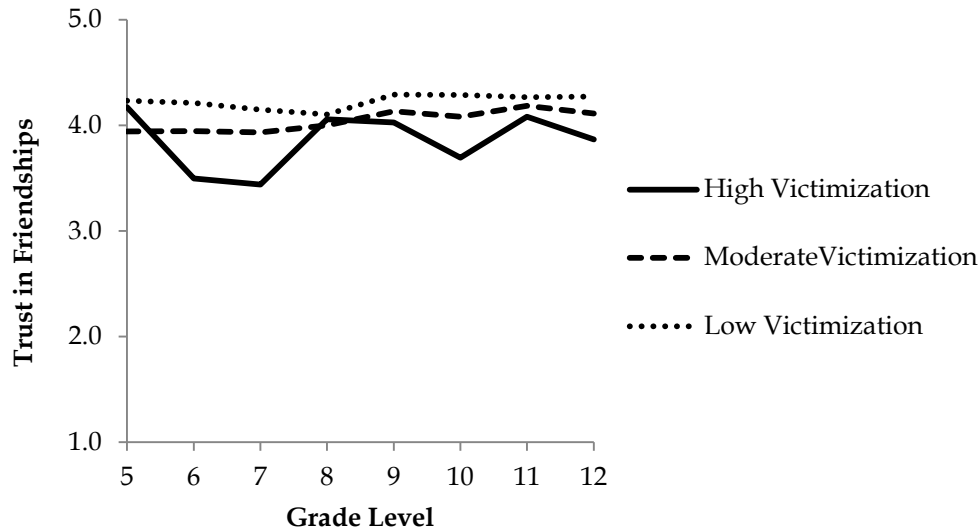


Figure 8. Development of trust in friendships by social victimization trajectory.

Friend alienation. Table 12 shows the results of the analyses for the other friendship quality variable, alienation. Model 1 revealed that, on average, alienation in friendships decreased over time ($p < .001$). The results from Model 2 indicated that girls reported lower feelings of alienation than boys in Grade 5 ($p = .028$). Further, greater social victimization ($p = .020$) predicted higher initial levels of alienation. There was no significant relationship between physical ($p = .265$), bullying ($p = .776$), or sexual harassment ($p = .318$) victimization and alienation in Grade 5. Neither gender nor any of the peer victimization trajectories predicted increased rates of change in the development of feelings of alienation in friendships (all $ps > .05$). Figure 9 illustrates the relationship between social victimization and the development of alienation in friendships.

Table 12

Multilevel Analyses Predicting Alienation in Friendships

Variable	Model 1	Model 2
	Coefficient (SE)	Coefficient (SE)
Alienation in friendships in Grade 5	2.28 (.02)*	2.4 (.08)*
Gender		-.11 (.05)*
Physical victimization		.11 (.10)
Social victimization		.14 (.06)*
Bullying victimization		.02 (.06)
Sexual harassment victimization		-.09 (.09)
Rate of change in alienation in friendships	-.06 (.005)*	-.06 (.02)*
Gender		.001 (.01)
Physical victimization		.01 (.02)
Social victimization		-.002 (.01)
Bullying victimization		.005 (.01)
Sexual harassment victimization		.02 (.02)

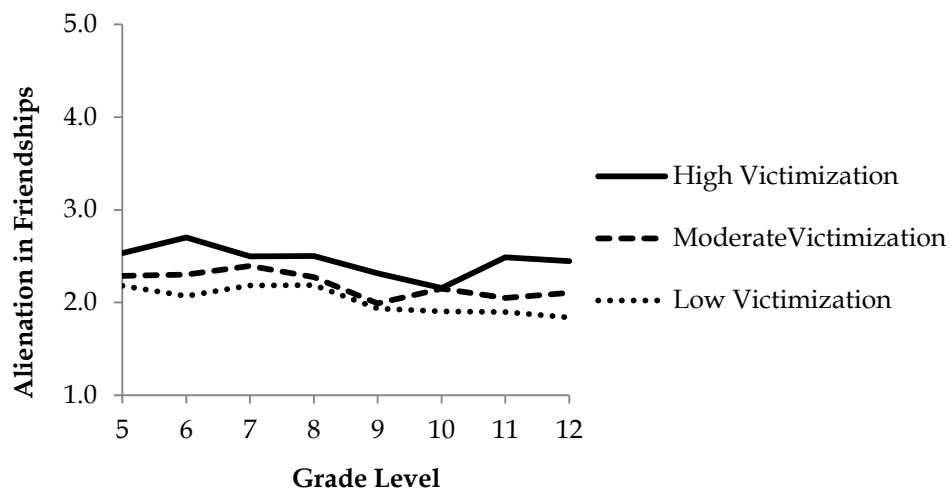


Figure 9. Development of alienation in friendships by social victimization trajectory.

The results from all the multilevel models are summarized in Table 13. The first part of the table indicates significant predictors of initial (Grade 5) levels of internalizing and externalizing problems, as well as trust and alienation in friendships. The second part indicates the effects of each predictor on the rate of change in the development of these psychosocial outcomes.

Table 13

Summary of Multilevel Analyses Predicting Psychosocial Outcomes

Significant predictors of outcomes in Grade 5 (intercept)				
Predictor	Internalizing	Externalizing	Friend trust	Friend alienation
Gender†	+	-	+	-
Physical	+	+		
Social	+	+	-	+
Bullying	+		-	
Sexual harassment				
Significant predictors of outcomes' rate of change (slope)				
Gender†		+		
Physical				
Social				
Bullying				
Sexual harassment	+	+		

†Boys = 0, Girls = 1

+ = significant positive predictor, $p < .05$ - = significant negative predictor, $p < .05$

Chapter 4: Discussion

This study provides new insight into the development of peer victimization in adolescence. The findings demonstrate heterotypic continuity in victimization: different forms of victimization emerged and declined in accordance with the social contexts relevant at different stages of development. Furthermore, youth were likely to experience similar levels of different forms of victimization across adolescence. For adolescents who consistently experienced high levels of victimization across development, there were significant psychosocial consequences. These differences in functioning were present from preadolescence and continued to intensify over time, according to the degree and form of victimization experienced. Findings are discussed within a developmental framework to facilitate understanding of the mechanisms involved in the evolution of peer victimization, highlighting the social, biological, and psychological changes that affect peer relationships as youth progress through adolescence.

Developmental Trajectories of Peer Victimization

For each form of victimization, the trajectory analyses revealed distinct patterns of victimization across adolescence. Social, biological, and psychological changes that occur during this developmental period help to explain the findings that: (1) physical victimization declined with age; (2) a greater proportion of youth experienced social victimization than physical victimization, and this form of victimization persisted across adolescence; (3) bullying victimization was relatively common in preadolescence and declined through to mid-adolescence; (4) most youth did not begin experience sexual harassment until at least mid-adolescence; (5) for each form of victimization, there were

gender differences in risk for trajectory group membership.

There were three trajectories of physical victimization. The High physical victimization trajectory represented a small proportion of youth (approximately 1%) who experienced extremely non-normative levels of victimization. These youths' physical victimization became decreasingly frequent with development, but continued to be frequent relative to their peers. About 8% of youth followed a Moderate physical victimization trajectory, characterized by a decline through to Grade 12 that ended near the scale minimum. The majority of youth, over 90%, followed a Low physical victimization trajectory, experiencing little to no victimization across adolescence. These developmental trajectories did not overlap, with youth in the High trajectory consistently experiencing more victimization than those in the Medium and Low trajectories. This finding suggests that there is stability in physical victimization experiences, with those who experience a high initial level of victimization likely to continue experiencing a high level of victimization.

Consistent with previous research, boys were overrepresented in the Moderate and High physical victimization trajectories (Carbone-Lopez et al., 2010; Crick & Nelson, 2002). It is well established in the literature that adolescent boys perpetrate more peer physical aggression than girls (Card et al., 2008; Cleverley et al., 2012; Underwood, Galen, & Paquette, 2001). Given that youth tend to primarily associate and aggress against same-gender peers for most of childhood and early adolescence (Craig et al., 2001; Pellegrini & Long, 2002), it is understandable that boys experience more frequent physical victimization than girls.

Youth also followed one of three social victimization trajectories. The High and Moderate social victimization trajectories represented greater proportions of youth than

the High and Moderate physical victimization trajectories, respectively. Unlike the High social victimization trajectory, which declined across adolescence, the Moderate social victimization trajectory remained relatively stable, with a brief increase through to the mid-adolescent years and a slight decline overall. Again, these developmental trajectories did not overlap, demonstrating stability in victimization experiences over time. Boys and girls were equally likely to follow a High trajectory of social victimization, but girls were more likely to follow a Moderate trajectory. These results demonstrate that by early adolescence, social victimization is a more common experience than physical victimization, consistent with previous findings (Carbone-Lopez et al., 2010; Crick & Nelson, 2002). Furthermore, social victimization continues to be a relatively common experience throughout the high school years, with one-fifth of youth following moderate trajectories of victimization.

A developmental framework aids in understanding the relative prevalence of social victimization compared to physical victimization. As youth develop different aggressive strategies, their peers' victimization experiences change. Björkqvist and colleagues (1994) posit that developmental and gender trends in the perpetration of aggression can be explained by a cost/benefit or effect/danger ratio. The effect/danger ratio suggests that individuals will use the technique that maximizes the effect of their aggression while minimizing danger to themselves. From this perspective, physical aggression may be dangerous to young aggressors, but they may be able to use this form of aggression more effectively than more covert forms. As physical aggression becomes less normative with development, there are social costs to continue perpetrating this behaviour, particularly for girls, for whom physical aggression is not gender normative (Björkqvist et al., 1994).

Youth who are more socially skilled can use social aggression, which can be highly effective and minimize the risk for the perpetrator, who may remain anonymous and minimize the risk for retaliation or punishment by authorities (Björkqvist et al., 1994; Björkqvist, 1994; Kaukiainen et al., 1999). Previous research has demonstrated the growth of social aggression perpetration across childhood (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007). Older youth are more likely to have developed the cognitive and emotion regulation abilities necessary to carry out social aggression effectively (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Card et al., 2008; Kaukiainen et al., 1999) . Thus, by early adolescence, social victimization should be a relatively common experience compared to physical victimization. This theory is consistent with my findings that more adolescents followed Moderate trajectories of social victimization than they did physical victimization, and that boys were overrepresented in the Moderate and High physical victimization trajectories.

Previous studies have found adolescent boys and girls were equally likely to experience social victimization (Carbone-Lopez et al., 2010; Crick & Nelson, 2002), but these studies have mainly focused on gender effects at different time points. The current study examined gender effects of longitudinal trajectories. While boys and girls were equally likely to follow a High trajectory of social victimization, girls were overrepresented in the Moderate trajectory group, which represented more youth. Research on the typical composition of early adolescent social groups, as well as gender differences in friend relationships, can help explain why girls might experience a persistent and moderate amount of social victimization as they develop. Social groups tend to be same-gender for most of childhood and early adolescence, and boys and girls tend to develop different cultures of friendship within these same-gender contexts

(Maccoby, 1988). For example, adolescent girls experience greater intimacy and support in their friendships, and view their friendships as more intense than boys view theirs (Kuttler, 1999). The value that girls place on close relationships with peers is highly prosocial, but may also place them at greater risk for social victimization; since adolescent girls are likely to find social exclusion more painful, it is a more effective form of aggression in girls' peer groups, compared to boys' (Archer & Coyne, 2005).

The results also demonstrated the decline of another form of victimization, bullying. Both the High and Moderate trajectories were characterized by linear declines across adolescence. A small proportion of youth experience consistently high levels of victimization across adolescence, relative to their peers. Notably, the Moderate trajectory represented a large proportion of youth (almost one-third) and declined rapidly. This finding suggests that while many youth experience a low level of bullying victimization in preadolescence, this form of victimization is rare by mid-adolescence. This decline in bullying victimization, which was defined as repeated victimization by a more powerful peer, was expected, given previous literature on the topic (Smith et al., 1999). The different shapes of bullying, social, and physical victimization imply that youth do not perceive all physical and social acts of aggression as bullying. It could be that the continued social victimization experienced by older adolescents occurs might occur within friendships, or as youth get older, they perceive less of a power differential among their peers. Further research is needed to determine the nature of older adolescents' peer victimization experiences.

The bullying trajectory findings are consistent with those of Sumter and colleagues (2012), who similarly found three declining trajectories from age 12 to 19 years. Their study found that girls were overrepresented in the High trajectory, whereas boys were

overrepresented in the Moderate and High trajectories of the current study. The difference might be due to the measures used: their study combined “bullying” and “harassment” victimization into one measure, whereas the current study specifically focused on bullying victimization. These mixed findings highlight the importance of operationalizing victimization, as youth may respond differently to different terms.

As bullying declined, sexual harassment emerged as a new and increasingly prevalent experience in early adolescence, peaking around Grade 10 and declining slightly thereafter. All three trajectories followed this pathway, with differences in prevalence observed from pre-adolescence through to late adolescence. Youth who followed the High trajectory reported victimization in Grade 6, suggesting that this behaviour emerges at or prior to that age, consistent with previous findings (Pellegrini & Long, 2002; J. L. Petersen & Hyde, 2009; Schnoll et al., 2014). Youth who experienced this early non-normative victimization experienced greater levels of sexual harassment victimization than their peers consistently across adolescence. This finding suggests that relatively early sexual harassment is a risk factor for increased levels of victimization later in development. Unlike the other forms of victimization, the Low victimization trajectory increased slightly above the scale minimum, suggesting that a low level of sexual harassment victimization is a common experience among older high school students. This finding is consistent with many cross-sectional studies (e.g., AAUW, 2001; Hill & Kears, 2011).

The rise of sexual harassment victimization in adolescence was expected. With youths’ pubertal development and emerging sexuality, there is an increase in mixed-gender interactions, sexualized behaviours, and pressure to conform to gender norms (McMaster et al., 2002; Meyer, 2008). In this sociocultural context, sexual harassment

victimization emerges as a developmentally relevant form of aggression. Contrary to expectations, however, boys were more likely than girls to follow Moderate and High trajectories of sexual harassment victimization, adding to the mixed results on gender effects and sexual harassment in the literature.

Most studies have found that girls report more victimization (e.g., AAUW, 2001; Goldstein, Malanchuk, Davis-Kean, & Eccles, 2007; Hill & Kearn, 2011), while some have found that boys report more victimization than girls (e.g., J. L. Petersen & Hyde, 2009). Furthermore, a number of studies have found equal rates of victimization among boys and girls, with differences lying in the *forms* of harassment experienced (Chiodo et al., 2009; Fineran & Bennett, 1999). For example, Chiodo et al. (2009) found that girls experienced more unwanted sexual comments, gestures and touch, while boys experienced more homophobic slurs and were unwillingly shown more sexual pictures or messages. Those findings are consistent from a sociocultural perspective that highlights the gendered nature of sexual harassment. It is possible that there would have been different gender effects in the current study by analyzing items individually or in different combinations. In future trajectory analyses, it would be useful to employ a multifactorial model of sexual harassment, rather than one broadband scale that takes into account the different subtypes of sexual harassment, including gender-based harassment and unwanted sexual attention, as these may affect boys and girls differentially.

Heterotypic Continuity in Peer Victimization

The individual developmental trajectory analyses described above suggest that the prevalence of different forms of victimization changed according to developmental

trends. Additional analyses demonstrated that these forms of victimization are interrelated. Youth tended to follow similar trajectories of physical, bullying, and social victimization across development (i.e., it was rare to follow one High and one Low trajectory). Furthermore, each form of victimization differentially predicted sexual harassment victimization, as hypothesized. The high degree of overlap suggests that many youth experience heterotypic continuity in victimization across adolescence, with the form of their victimization changing according to developmental relevant factors. In addition, the finding that each form of victimization did not perfectly overlap suggests that these forms of victimization have unique characteristics, with numerous intrapersonal, interpersonal and contextual factors likely interacting to influence the forms of victimization a child experienced (Holt & Espelage, 2003). These findings are a longitudinal extension of those found in a number of cross-sectional studies, which have shown that multiple forms of peer victimization tend to co-occur (e.g., Card et al., 2008; Felix & McMahon, 2006; Wigderson & Lynch, 2013).

The finding of heterotypic continuity highlights the importance of studying multiple forms of victimization in order to obtain a comprehensive perspective of peer victimization in adolescence. In the current study, for example, only examining bullying victimization trajectories might have led to the conclusion that peer victimization is quite rare by mid-adolescence, when the social and sexual harassment victimization trajectories demonstrate that is not the case. A failure to account for multiple forms of victimization might lead to an underestimation of the frequency and contexts of youths' peer victimization experiences. .

Furthermore, the heterotypic continuity of victimization suggests that for some youth, victimization can be conceptualized as a condition, rather than an event

(Finkelhor, Ormrod, & Turner, 2007; Finkelhor et al., 2005). As these youth develop, they continue to experience victimization in multiple forms, at greater rates than their non-victimized peers. One explanation for this finding is that different forms of victimization share common risk factors (Finkelhor & Asdigian, 1996; Holt et al., 2007). In the current study, for example, each form of victimization predicted greater internalizing problems, suggesting that it may be a common risk factor. Researchers also propose that continuity occurs because there is a cyclical effect of victimization leading to negative psychosocial outcomes, which, in turn, increase risk for victimization (Hodges et al., 1999, 1997). From a research perspective, it is important to assess the interrelationship among multiple forms of victimization because, as will be discussed in the following section, each form uniquely predicts psychosocial outcomes. By not accounting for multiple forms of victimization, researchers risk overestimating the effects of any single form of victimization (Finkelhor et al., 2005).

Psychosocial Outcomes of Peer Victimization

I investigated the relationship between victimization and four psychosocial outcomes: internalizing and externalizing problems, and trust and alienation in friendships. Chronic peer victimization, regardless of form, predicts higher risk for internalizing problems, and these problems were present by preadolescence. Each increasing trajectory level (Low, to Moderate, to High) of physical, social, and bullying victimization predicted significantly higher levels of internalizing problems in Grade 5, even after accounting for the effect of gender. In addition, greater sexual harassment victimization predicted an increased *rate* of developing internalizing problems. The current findings are consistent with research demonstrating the link between peer

victimization and internalizing difficulties in early adolescence (Craig, 1998; Nadeem, 2005). Furthermore, the current study demonstrates that multiple forms of victimization are involved in this association, and that the experience of persistent sexual harassment may lead to the faster development of internalizing problems. These findings suggest that each of these forms of victimization may have a negative impact on youths' wellbeing, highlighting the importance of addressing multiple forms of victimization in prevention and intervention efforts.

Similarly, almost every form of victimization significantly predicted the development of externalizing problems. Physical and social victimization predicted greater externalizing problems in Grade 5, while sexual harassment victimization predicted increased rates of developing externalizing problems across adolescence. As physical and social victimization both emerge in childhood (Björkqvist et al., 1992; J. L. Miller, Vaillancourt, & Boyle, 2009), it is understandable that differences in behaviours were already seen by Grade 5. Youth who followed Moderate and High sexual harassment victimization trajectories (about 11%, combined) experienced this type of victimization at an earlier age and with greater frequency than their peers. The continued experience of persistent sexual harassment may cause significant levels of distress that lead these youth to act out in an increasingly aggressive or delinquent manner as they develop (Chiodo et al., 2009; Goldstein et al., 2007).

It is notable that sexual harassment victimization was the only form of victimization to predict an increased rate of developing both internalizing and externalizing problems. One interpretation is that victimization with a sexual component is particularly distressing to adolescents (Gruber & Fineran, 2008). Sexuality is an important and sensitive topic for maturing youth, making sexuality a point of

vulnerability and sexual harassment victimization especially upsetting (Craig et al., 2001). Future research could further examine the mechanisms by which sexual harassment affects youths' wellbeing, and how chronic sexual harassment differentially affects subsets of youth. For example, gay, lesbian, questioning and trans youth may be more likely to follow trajectories of chronic sexual harassment victimization, and find sexual harassment more distressing (Gruber & Fineran, 2008; Meyer, 2008; Swearer, Turner, Givens, & Pollack, 2008).

Chronic peer victimization was also negatively associated with interpersonal functioning. Social victimization predicted decreased feelings of trust and increased feelings alienation in friendships in Grade 5. Bullying victimization also predicted decreased feelings of trust in Grade 5. As predicted, it was social victimization, mainly, that was associated with friendship quality. Further, as I found with internalizing and externalizing problems, this association was apparent from preadolescence. These findings were consistent with a number of studies that have linked peer victimization with lower friendship quality among children and preadolescents (e.g., Bollmer, Milich, Harris, & Maras, 2005; Hodges et al., 1999); my results extend this relationship into adolescence.

Because alienation and affiliation are common themes in youths' social victimization experiences (Caims et al., 1989), it is understandable that those who experience persistent social victimization feel greater alienation from and less intimacy with their peers. Youth with high-quality friendships - who are able to confide in their friends and feel like a part of a social group - may be at lower risk for chronic victimization because their close peers protect them from repeated victimization (Schmidt & Bagwell, 2007). Youth with such friendships might also have positive social

skills, including conflict resolution abilities, which protect them from victimization.

Furthermore, since social victimization often occurs in the context of friendships (Crick & Nelson, 2002), children with more positive friendships might have less risk of victimization.

Taken together, these findings suggest that the experience of persistently negative peer interactions can be highly distressing and may negatively affect one's functioning in multiple domains. Adolescents who consistently experienced higher levels of peer victimization than their peers – regardless of the form that victimization took – tended to experience greater psychosocial problems later in adolescence. Furthermore, some forms of victimization predicted greater psychosocial problems as of early adolescence, suggesting that these problems develop in the childhood years. Because each form of victimization contributed uniquely to functioning, those who experienced heterotypic continuity in victimization were most at risk for problems.

Limitations and Future Directions

While the current research contributes to the literature on adolescent peer victimization, a number of factors limit its generalizability and suggest future directions for research. First, the relatively small sizes of the High chronic victimization groups meant that, due to low power, I could not examine interactions among gender, victimization, and psychosocial outcomes. For example, I was unable to examine the differential effects of sexual harassment victimization on boys versus girls (e.g., Chiodo et al., 2009), or the protective effects of positive friendships on mental health outcomes (e.g., Hodges et al., 1999). Examining these interactions (using a larger sample or alternative methods) would provide a clearer understanding of how victimization

affects functioning across development.

Second, future longitudinal research should look beyond incident rates to fully capture the experience of chronic victimization. While it was clear from the current analyses that increased frequency of victimization was related to greater psychosocial problems, it is possible that a measure of severity, not included in the current study, is also necessary to understand victimization. For example, Ormerod, Collinsworth, and Perry (2008) found that both boys and girls experienced frequent sexual harassment, but girls experienced harassment as more distressing and experienced more negative outcomes as a result. By weighing incident rates by perceived severity, Ormerod et al. (2008) were able to capture the range of victimization experiences, from those that are more benign to those that are more stressful or frightening. A similar approach could be combined with trajectory analyses to better understand victimization over time.

Another measurement issue is the use of self-report measures. It is possible that responses did not reflect youths' true victimization experiences, and future research could include the use of multiple informants to reduce the possibility of self-report bias in responses. The current study, however, did use reliable and valid measures, and included a large sample size that reduced the impact of bias in the data. In addition, researchers have found that multiple informants (e.g., peers, parents, and teachers) become increasingly concordant with self-reports across childhood (Ladd & Kochenderfer-Ladd, 2002). I would expect the current adolescent sample's responses, then, to be concordant with other informants.

Future research should also examine other forms of peer victimization to fully understand heterotypic continuity in adolescence. This study did not include specific questions about online victimization, a topic that is receiving emerging attention with

regards to multiple victimization experiences (Sumter et al., 2012; Wigderson & Lynch, 2013). It would also be useful to more fully examine the developmental relationship between dating violence and other forms of peer victimization, as it is an example of a changing context of power and aggression in relationships (Fredland, 2008; Holt & Espelage, 2003; S. Miller et al., 2013).

Finally, the current findings suggest that all these forms of victimization could emerge prior to Grade 5. Future research should widen the age range of focus to include younger children, to capture the onset of victimization experiences and the factors that protect children from following high-risk trajectories. Further, an extension into adulthood could allow for the observation of new forms of victimization, such as workplace harassment. It is possible that by including earlier or later age groups, different developmental trajectories would emerge.

Implications for Policy and Practice

These results suggest that intervention efforts must focus on multiple forms of victimization in order to be effective at preventing future victimization and negative psychosocial outcomes. The developmental trajectory analyses demonstrate that different forms of victimization should be a focus of prevention efforts at different stages in development. In pre- to early adolescence, bullying, physical and social victimization should be focuses for prevention and intervention, while social and sexual harassment victimization are appropriate focuses for middle to late adolescence. Adults who work with youth, including educators, would benefit from training on how to identify and intervene appropriately for different forms of victimization.

The finding of heterotypic continuity in victimization suggests that even as one form of victimization declines, other forms may emerge. These findings strengthen the argument that schools and child-serving organizations should begin prevention efforts early on in development, to protect youth from following trajectories of persistent victimization. Furthermore, clinicians who work with youth should be mindful that those who report one form of victimization experience are likely to have other victimization experiences that affect their psychosocial functioning, as well.

Youth who experienced persistent victimization were at high risk for developing psychosocial problems. Further, given the trajectories of externalizing and internalizing problems, which either increased or persisted, it is likely that these negative outcomes persist into young adulthood. These findings highlight the importance of instituting early prevention and intervention efforts, and of providing accessible mental health care to youth who experience victimization. In intervention efforts, educators can harness the power of friends, who may play a protective role in preventing repeated victimization from occurring.

By promoting positive relationships and teaching adolescents to intervene on behalf of peers, adults may be able to help reduce victimization. Policy-makers, educators, parents, researchers, and other adults who care about the well-being of youth need to actively create safe climates and positive relationships for all young people, in order to promote their healthy development.

Conclusion

The current research contributes to the literature on peer victimization by taking a longitudinal approach that spans the full range of adolescence and by examining the

relationship among multiple forms of victimization. An additional unique contribution is the examination of the differential impact of each form of victimization on psychosocial functioning over time. As youth develop, the content and contexts of their interactions with their peers change, and this is manifested in the form, frequency, and consequences of their victimization experiences. For youth who experience victimization across development, the persistent experience of negative social interactions is highly distressing and may be associated with serious problems in psychosocial functioning. Peer relationships play an important role in the healthy development of youth.

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