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Victimization in the Middle School Context:
Features of the Classroom Environment that Influence Social Status among Peers

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Education

by

Leslie Echols

2013

ABSTRACT OF THE DISSERTATION

Victimization in the Middle School Context:
Features of the Classroom Environment that Influence Social Status among Peers

by

Leslie Echols

Doctor of Philosophy in Education

University of California, Los Angeles, 2013

Professor Sandra Graham, Chair

This dissertation comprises two empirical studies that investigated the role of classroom context in peer victimization during middle school. In both studies, a novel methodology for measuring classroom context at the *individual* level was employed, in which students received their own score on the classroom context variable of interest based on the unique set of courses in their class schedule. The purpose of the first study was to examine the influence of academic teaming (i.e., sharing different classes with the same classmates) on the relationship between social preference and victimization, accounting for differences in the effect of teaming based on classroom academic performance. Based on both peer- and self-reported victimization measures, children with low social preference in highly teamed classes were more victimized than low preference children who experienced less teaming throughout the school day. For victim reputation among peers, this effect was exaggerated in higher performing classrooms. The

results of this study have important implications for intervention approaches to reduce victimization that could be implemented at the school level through the use (or *non-use*) of structural practices such as academic teaming and ability grouping.

The purpose of the second study was to examine the effect of friendship choices on the stability of children's reputation as a victim during the first year of middle school and to investigate how friendship choices along with children's ethnic group representation in the classroom influence the likelihood of change in victim status among peers. Similar to prior research, reciprocal friends' victimization was associated with greater stability in children's own victim reputation. However, the findings demonstrated that *desired* friends may play a unique role in protecting children from future victimization if those friends are *not* victimized. The results of the second study also suggest that in ethnically diverse schools, choosing friends from the numerical ethnic majority group—who may enjoy higher social status regardless of their friends' reputations—may be another strategy for securing higher status oneself. Taken together, the two studies highlight methodological and conceptual advantages of studying classroom context at the individual level and underscore the social impact of the classroom environment.

The dissertation of Leslie Echols is approved.

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University of California, Los Angeles

2013

DEDICATED TO

The students of P.S. 7

You inspired me to begin this journey
and continually remind me that
it always has been and always will be
for the children.

AND

Aedan Connor Levi Seay

This is for you, buddy. I love you.

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Victimization in the Middle School Context:

Features of the Classroom Environment that Influence Social Status among Peers

Peer victimization is a persistent problem for many schoolchildren today. Approximately 10 to 15 percent of all children are the victims of some type of aggression (e.g., verbal, physical) on a regular basis (Card & Hodges, 2007; Rodkin & Hodges, 2003). Children who are victimized are more likely than other children to have fewer friends or no friends at all (Hodges, Malone, & Perry, 1997; Hodges, Boivin, Vitaro, & Bukowski, 1999); experience academic difficulties and decreased school liking (Erath, Flanagan, & Bierman, 2008; Juvonen, Wang, & Espinoza, 2010; Nakamoto & Schwartz, 2010; Schwartz, Gorman, Dodge, Pettit, & Bates, 2008); and suffer from a wide range of internalizing (depression, loneliness, low self-esteem) and externalizing (aggression, delinquency, poor self-regulation) symptoms (Hanish & Guerra, 2002; Hodges et al., 1997; Schwartz et al., 2008). The social, emotional, and academic risks associated with being victimized along with the stability of victimization over time (Hodges et al., 1999) make peer victimization one of the most insidious problems children experience in school.

As children approach adolescence—a developmental period marked by an increased need to fit in and belong—the risks associated with peer victimization are especially daunting. With their heightened awareness of social group membership, victimized children in middle school may be at particular risk for poor adjustment (Graham & Bellmore, 2007). In addition, victimization in middle school is strongly correlated with peer rejection and further decreases in the number of friendships, which together increase the probability of being trapped in a cycle of victimization and negative outcomes (Hodges & Perry, 1999). Chronic victims may also be at risk for problem relationships and adjustment difficulties in the future since peer relations in early adolescence often predict success in relationships in late adolescence and adulthood

(Collins & Laursen, 2004). Recent compelling evidence also indicates that adolescents who feel like they fit in with their peer group are more likely to persist in the types of academic courses (e.g., algebra) that improve their chances for college admission. On the contrary, the more adolescents feel like they are socially marginalized (e.g., victimized), the less likely they are to go to college, even after controlling for academic preparation (Crosnoe, 2011).

The literature demonstrates that not only does being victimized by peers have both short- and long-term implications for social, emotional, and even academic outcomes—particularly for children who are repeatedly victimized across time—but that the risks associated with peer victimization may be more or less severe in certain school contexts. For example, factors such as student behavioral norms and teacher responsiveness at the classroom level as well as the ethnic representation of students at both the classroom and school levels have been shown to moderate the relationship between peer victimization and overall adjustment (Atlas & Pepler, 1998; Bellmore, Witkow, Graham, & Juvonen, 2004; Graham, 2006; Hanish & Guerra, 2000; Kärnä, Voeten, Poskiparta, & Salmivalli, 2010; Verkuyten & Thijs, 2002). This research indicates that schools—and especially classrooms—are important social contexts in which maltreatment from peers may occur. Since classrooms are more proximal to students than the schools they attend (see Bronfenbrenner, 1992), it is not surprising that classroom effects on peer victimization have been given more attention in the literature than the overall influence of the school.

When children are in elementary school and remain with the same teacher and set of classmates throughout the school day, measuring social context at the classroom level is an appropriate way to capture the influence of the school environment on peer victimization. When children enter middle school, however, the academic structure changes, and they begin rotating classrooms for each course in which they are enrolled. Although in some cases middle school

students travel with the same group of classmates from course to course, often students change classrooms *and* classmates each period. These changing classroom settings present a major methodological challenge when trying to understand the role of school context in peer victimization since students could potentially be exposed to a different social environment within each class they attend *and* students with different course schedules could experience very different social environments throughout the course of a school day. In my dissertation, I addressed this challenge by using students' course schedules to create measures of classroom context unique to *each* student. Relying on self-reported data from my study participants as well as school records data provided by their school, I aggregated the individual characteristics of students and their classmates within and then across classrooms for each student based on his/her course schedule.

In the two studies that follow, I used this novel methodology to examine features of the classroom context that influence victimization in middle school. In the first study, I investigated whether the relationship between social preference (i.e., peer acceptance) and victimization in the spring of 6th grade was influenced by the extent of academic teaming (i.e., sharing classes with the same classmates) students experienced as well as the overall academic performance of their classrooms. In the second study, I investigated whether friendship choices (i.e., reciprocated vs. unreciprocated friendship nominations) were associated with greater or less stability in students' victim reputations from the fall to spring of 6th grade depending on the ethnic composition of students' classes throughout the day. In both studies I measured classroom context at the *individual* level in order to understand how the middle school environment is experienced by—and therefore influences the unique victimization experiences of—each student.

**Study 1: The Social Correlates of Academic Teaming in Middle School:
Do the Benefits Outweigh the Costs?**

The early middle school years are rife with social and academic challenges as children make the move from elementary to secondary education. Many children experience decreases in school liking and engagement as they navigate the new middle school environment (Burchinal, Roberts, Zeisel, & Rowley, 2008)—an environment in which status among peers is top priority (Fournier, 2009). In an effort to provide students with the most opportunities for learning and positive adjustment during this developmentally and educationally critical transition, the middle school movement has led to instructional and structural changes in middle school education (see Thompson & Homestead, 2004). For instance, the practice of interdisciplinary teaming—in which groups of students share the same teachers throughout the school day—has become a popular trend in middle school education and is estimated to be in use in nearly 80% of all U. S. middle schools (McEwin, Dickinson, & Jenkins, 2003).

Past research on interdisciplinary teaming has shown the benefits of this structural practice in middle school, such as greater feelings of school belonging, higher rates of academic engagement, and better scores on standardized achievement tests (Boyer & Bishop, 2004; Flowers & Mertens, 2003; Flowers, Mertens, & Mulhall, 1999; Lee & Smith, 1993; Wallace, 2007). To date, however, no research has considered the potential *costs* of teaming. In particular, little is known about the role of teaming in children’s social relationships with and status among their peers. Since the practice of interdisciplinary teaming may restrict children’s exposure to the general student body at their school, social status may be determined largely by the reputations formed within their team. For example, in the case of *academic* teaming, the same group of students moves together from class to class for all of their academic courses. Popular or well-liked students may enjoy taking classes with the same classmates with whom

they have positive social relationships, but peer-rejected or disliked students may suffer the consequences of being repeatedly subjected to the same classmates with whom they have negative social relationships. In other words, this type of teaming may be socially beneficial for high status children, but detrimental for low status children, who must endure a poor reputation throughout the majority of the school day.

The purpose of this study was to explore the influence of academic teaming on a well-known risk associated with low social status in middle school: peer victimization. Using social preference (which captures the relative balance of acceptance and rejection among peers) as the measure of social status, I sought to understand whether academic teaming would moderate the relationship between social preference and victimization. Specifically, I wanted to know whether academic teaming would serve as a protective factor for high status children but as a risk factor for low status children. Because academic teaming is often practiced in conjunction with ability grouping, I also wanted to determine whether the influence of academic teaming might be dependent on overall academic performance in the classroom.

Social Preference and the Likelihood of Victimization: Are They the Same?

Social preference has been defined in the peer relations literature as the number of “like most” nominations minus the number of “like least” nominations (Coie, Dodge, & Coppotelli, 1982), with positive scores indicating peer acceptance (being liked more than disliked) and negative scores indicating peer rejection (being disliked more than liked). Peer victimization refers to being the recipient of peer maltreatment, such as physical, verbal, or relational aggression. Although social preference is often correlated with peer victimization, social preference and victimization actually represent distinct types of relationships with peers (see

Ladd, Kochenderfer, & Coleman, 1997). This may be due, in part, to the heterogeneity in individual characteristics that exists among low status children (Sandstrom & Cillessen, 2003).

While many studies of peer victimization have focused on these individual risk factors (e.g., internalizing problems, low impulse control) that predict maltreatment from peers, a smaller body of research has established that in middle childhood and early adolescence, *social* risk (e.g., low social preference, peer rejection) compounds individual risk when it comes to being a victim of peer aggression (e.g., Hodges, Malone, & Perry, 1997). According to Sandstrom & Cillessen (2003) low social preference may not always be associated with maltreatment (e.g., victimization) from peers, but having low social preference among peers *and* being the victim of peer aggression consistently lead to the most negative adjustment outcomes. It is important, therefore, to understand the conditions under which low social preference among peers contributes to peer victimization, especially in middle school, when rates of aggression are so high (Eslea et al., 2003; Seals & Young, 2003) and being victimized makes children more susceptible to being trapped in negative cycle of rejection and aggression from peers (Hodges & Perry, 1999).

Risk and Protective Factors

Prior research has considered individual and school characteristics that could explain why some children, even under circumstances of individual or social risk, are more resilient than others to peer victimization (Kochenderfer-Ladd & Skinner, 2002). For example, the causes that children attribute to maltreatment from their peers may moderate the association between peer victimization and adjustment (Graham & Juvonen, 1998). In addition, the ethnic context of the classroom or school may influence children's *perceptions* of vulnerability to victimization (Juvonen, Nishina, & Graham, 2006). However, little research has examined other structural

features of the school environment, such as being in the same class(es) with aggressors or taking multiple classes with the same classmates, that may be associated with greater victimization among low status children. This is surprising given the recognition among scholars that placement in schools and classrooms with victims' aggressors may lead to repeated exposure of aggressors to their targets and, for the most vulnerable children in particular, may contribute to the stability of victimization across the school years (see Kochenderfer-Ladd & Skinner, 2002).

In middle school, the extent to which children share their classes with the same classmates, and therefore the likelihood of repeated contact with aggressors, is often influenced by the amount of interdisciplinary teaming practiced in their school. Interdisciplinary teaming consists of a core set of teachers responsible for teaching the same group of students—typically a subset of same-grade students in the school population—with the intended benefits of greater collaboration among teachers and greater community among teachers and students (Thompson & Homestead, 2004). If interdisciplinary teams are comprised of students with similar academic profiles (ability grouping is a common application of interdisciplinary teaming), students may share all their classes with classmates performing at a similar academic level. In addition, in schools where there is a large number of teams relative to the number of courses offered each period (e.g., each team comprises only one classroom of students), interdisciplinary teaming could result in the same set of classmates traveling together from course to course for all of their academic classes—a special case of interdisciplinary teaming which I refer to as *academic teaming*.

There are a number of social and academic benefits of teaming documented in the literature. For example, past research demonstrates that students in interdisciplinary teams have higher scores on standardized achievement tests and are more academically engaged (Flowers,

Mertens, & Mulhall, 1999; Lee & Smith, 1993). Some studies have also shown that in middle schools where interdisciplinary teaming is practiced, students feel a greater sense of belonging and “social bonding” (e.g., Boyer & Bishop, 2004; Wallace, 2007). Unfortunately, because the teaming literature does not differentiate between interdisciplinary teaming in general and the more specific case of academic teaming, it is unclear whether these benefits apply to all types of teaming practiced by schools. Another major limitation of previous research is that interdisciplinary teaming has been measured as a school-level dichotomous indicator (practiced/not practiced), making it difficult to investigate individual outcomes associated with the type and *extent* of teaming that occurs. Perhaps the biggest shortcoming of the teaming literature, however, is that no research to date has considered whether there may be social *costs* involved in teaming, particularly in the case of academic teaming, in which classmates remain the same across all academic courses.

Teaming and Victimization

Empirical research on social reputations indicates that peer status is less stable across changing peer settings than in settings in which peers remain the same (Bukowski & Newcomb, 1984; Coie & Kupersmidt, 1983). According to important qualitative research on victimization, reputations in middle school are often based on social status labels, and sometimes students cannot identify reasons for the mistreatment of low status children in their peer group (Merten, 1996). When considering the role of academic teaming in peer victimization, this research suggests that because social preference reflects status/reputation among peers, the relationship between low social preference and victimization might be strongest when academic teaming is practiced and weakest when it is not. To illustrate, for low status children in middle school, changing classes each period of the school day may help reduce their visibility among peers and

their likelihood of being victimized if each class is comprised of a different set of classmates and social norms. In other words, children with low social preference who share the *fewest* number of classes with the same peers may have the *most* opportunities to avoid victimization. On the contrary, if the middle school structure is such that children take classes primarily with the same set of classmates, even when they change classrooms, social status hierarchies may be more salient to the peer group, increasing the probability that children with low social preference will also be victims of peer aggression.

In many schools, interdisciplinary teams are comprised of students with similar academic profiles, and students share all their classes with classmates performing at the same academic level (Ansalone, 2001, 2006; Dauber, Alexander, & Entwisle, 1996; Eccles, Midgley, & Wigfield, 1993; Oakes, 1981). Thus, in practice, teaming may be synonymous with ability grouping or academic tracking. In order to isolate the true effect of teaming, independent of ability grouping, it is necessary to also consider the role of classroom academic performance (e.g., achievement level among classmates) in the relationship between social preference and victimization. Research on this topic is limited, but there is evidence to suggest that in middle school, both aggressiveness and academic achievement are related to social dominance (i.e., status/preference) *and* that achievement and dominance are more highly correlated in more academically oriented classrooms (see Jonkmann, Trautwein, & Lüdtke, 2009). This is contrary to elementary school, when aggressiveness is related to lower social preference in higher performing classrooms (Garandau, Ahn, & Rodkin, 2011), but not surprising given that aggression is more normative and even socially rewarded as children approach adolescence (e.g., Prinstein & Cillessen, 2003). If aggression is, in fact, more common among high status children in high performing classrooms, low status children may be at greater risk for victimization when

taking classes with high vs. low achieving classmates. This risk may be compounded when low status children are exposed to the *same* high status, high achieving classmates throughout their academic schedule.

Summary and Research Objectives

While the academic benefits of interdisciplinary teaming in middle school are well understood, the social consequences associated with this common educational practice have been relatively unexplored. Certain types of interdisciplinary teaming, such as academic teaming, might increase the visibility of children in their peer group. For high status children, this visibility could result in social benefits, but for low status children, academic teaming could make them more vulnerable to peer maltreatment, such as being victimized. The first objective of this study was to investigate the influence of academic teaming on the relationship between social preference and the likelihood of victimization among peers. Because academic teaming is often practiced in conjunction with ability grouping, the next objective was to examine whether classroom academic performance, independently and conjointly with academic teaming, also moderates the association between social preference and peer victimization. In order to achieve these objectives, I also addressed some other limitations of the interdisciplinary teaming literature. Until now, teaming has been measured as a dichotomous variable (practiced/not practiced) at the school level, making it difficult to understand *individual* outcomes associated with teaming and making it virtually impossible to know the type and *amount* of teaming students experience. The final objective of this study, therefore, was to use an individualized and continuous measure of teaming which I created that accounts for the extent to which students share their classes with the same classmates across the academic subjects in their course schedule. I conducted this study with a large, multiethnic sample of 6th grade students in order to

capture the social effects of academic teaming during the transition year into middle school, when reputations and social hierarchies are being formed. To allow adequate time for these social processes to develop, I examined the influence of academic teaming on the relationship between social preference and peer victimization in the spring of 6th grade (controlling for victimization in the fall).

Method

Participants

Participants were drawn from a larger sample of approximately 6,000 sixth graders across 3 cohorts of students participating in the UCLA Middle School Diversity Project, a longitudinal study of middle school adjustment in ethnically diverse schools from Northern and Southern California. Students were enrolled in one of 26 schools carefully selected to represent a variety of ethnic compositions. For example, some schools were ethnically diverse such that no single ethnic group represented a numerical majority in the population, and members of each of 4 major pan-ethnic groups (i.e., African American, Asian, Latino, and White) were present in the student population; some schools had 2 large and relatively equal ethnic groups with very few members of other ethnic groups; and other schools had a clear ethnic majority group with a smaller number of members from each of the other ethnic groups. To reduce confounds of ethnic diversity with socioeconomic status (SES), schools at the extremes of the SES continuum were avoided; only schools within a 20-80% range of free and/or reduced price meal (FRPM) eligibility were recruited for the study. Recruitment rates ranged from 63 to 95% ($M = 82\%$) across 3 cohorts of students beginning in the 2009-2010 school year and continuing into the 2010-2011 and 2011-2012 school years. Participation rates ranged from 74 to 94% ($M = 83\%$).

At the time of this study, school records were available for 19 out of the original 26 schools (Cohorts 1 and 2). Using students' class schedules and the index of academic teaming described in detail below, participants were selected if they attended a school with significant within-school variability in academic teaming. As shown in Table 1.1, 5 of the 19 schools for which class schedules were available had variance in individual teaming scores¹, and the proportion of classmates that remained the same across all academic subjects ranged, on average, from .21 to .65. These 5 schools ranged in size, ethnic composition, FRPM eligibility, and overall Academic Performance Index (API) scores as reported by the California Department of Education. None of these schools housed special programs or magnet (e.g., gifted/highly gifted, science) centers.

The ethnic composition of the MSDP sample is based on student self-report. Students were asked to select their ethnicity from several options: American Indian, Black/African-American, Black/other country of origin, East Asian, Latino, Mexican/Mexican-American, Middle Eastern, Pacific Islander (including Filipino), South Asian, Southeast Asian, White/Caucasian, Multiethnic/Biracial, and Other. For this study some groups were combined (Black/African-American and Black/other country of origin, East Asian and Southeast Asian, and Latino and Mexican/Mexican-American). The small number of students from the selected schools that did not fall into one of the 4 major pan-ethnic groups was excluded, resulting in a final sample of 818 participants (50.2% female, 49.8% male), consisting of 16.6% African-American, 16.8% White, 27.1% East/Southeast Asian, and 39.5% Latino/Mexican students.

Procedure

¹ The high ($\geq .92$) teaming scores for the majority of schools in our larger sample demonstrate the prevalence of this middle school practice. In addition, for 2 of the 5 schools which had substantial within-school variance in teaming scores, there was a significant correlation between individual and classroom academic performance, suggesting that some schools may use teaming as a mechanism for ability grouping or academic tracking (e.g., grouping together remedial or honors students).

Beginning in the fall of 2009, students with signed parental consent completed a questionnaire during a single period in one of their 6th grade classes. Students recorded their answers independently as they followed instructions being read aloud by a graduate research assistant who reminded them of the confidentiality of their responses. A second researcher circulated around the classroom to help students as needed. This procedure was repeated in the spring semester of 6th grade. At both waves of data collection, students were given an honorarium of \$5 for completing the questionnaire.

Measures

Social preference. Social preference among peers was determined by peer nomination. In both the fall and spring of 6th grade, students were presented with a roster containing the names of all students in their grade level at their school, arranged by name (alphabetically by first name) and gender. Using the roster, students were instructed to record the names of their classmates in response to the questions, “Which 6th grade students from your list would you like to hang out with at school?” and “Which 6th grade students from your list do you not like to hang out with at school?” Students were allowed to record as many names as they desired but were instructed not to nominate themselves.

Following the procedure outlined by Coie et al. (1982) to calculate social preference scores, nominations were tallied for each student and standardized by gender within each school. Next, standardized “not like” nominations received by each student were subtracted from standardized “like” nominations received, resulting in a difference score which was again standardized by gender within each school. Social preference scores of 0 represented students who were liked and/or disliked the same as their average same-gender peers attending the same school. Positive social preference scores (scores greater than 0) represented students who were

liked more than they were disliked relative to their same-gender peers, and negative social preference scores (scores less than 0) represented students who were disliked more than they were liked relative to their same-gender peers.

Victimization. Because social preference is a reputational measure of status among peers, peer reports of victimization may be more highly correlated with social preference than self-reports of peer victimization. For this reason, I used both peer nominations and self-reports of victimization in this study.

Victim reputation. On the same peer nomination measure as described above, students were instructed to record the names of their classmates in response to the question, “Which 6th grade students from your list get picked on by other kids (get hit or pushed around, called bad names, talked about behind their backs)?” The total number of “picked on” nominations that each student received was then tallied to create a score of victim reputation among peers.

Frequency of victimization. At each wave of data collection, students answered 7 items about how often someone in their school had engaged in some type of aggression toward them (e.g., “hit, kicked, or pushed you,” “called you bad names”) since the beginning of the school year. Responses ranged from 1 (“never”) to 5 (“almost every day”). This new measure, created for the larger MSDP study, has been shown to relate to other indicators of social and emotional adjustment (see Lanza, Echols, & Graham, in press). Based on high internal consistency in both the fall and spring of 6th grade ($\alpha=.86$ and $.87$, respectively), a mean of these items was computed and used as a single score of frequency of victimization.

Academic teaming. Students’ class schedules were used to measure the proportion of participants’ classmates who remained the same across all academic subjects during each wave

of the study (corresponding to fall and spring academic semesters). This proportion was calculated using an index of academic teaming which I created specifically for my dissertation.

$$T = \frac{\sum \frac{C_x \cap C_y - 1}{C_x - 1}}{{}_n P_2}, \text{ where } x = 1 \dots n, y = 1 \dots n, \text{ and } x \neq y$$

Using the above formula, the proportion of classmates in each academic class (C_x) who were also in another academic class (C_y) was calculated for all possible academic course combinations in each student's class schedule. The sum of these proportions was then divided by the total number of possible academic course combinations (${}_n P_2$) to create an average proportion of students in each participant's class schedule that remained the same throughout the academic subjects (i.e., math, science, English, social studies) in a given academic semester. The top half of the academic teaming equation represents the overlap in classmates between two given academic courses (e.g., math and social studies) totaled across all possible course combinations (i.e., math and social studies, math and science, social studies and science, etc.). The bottom half of the equation represents the number of possible academic course combinations when each course is paired with every other course. Possible scores on this Teaming index range between 0 and 1, with scores closer to 1 representing a higher proportion of students in one academic course who were also in every other academic course (i.e., complete academic teaming). For example, a score of .25 would indicate that 25% of a student's classmates remained the same across all four academic courses in his/her class schedule (low teaming), while a score of .75 would indicate that 75% of a student's classmates remained the same across all four academic courses (high teaming).

Classroom academic performance. Classroom academic performance was measured by average academic GPA among classmates according to the following procedure. First, based

on students' semester grades provided in school records, grade point average (GPA) was calculated for all participants for each academic course in their class schedule. Next, average GPA across classmates in each academic course was calculated. Finally, average classmate GPA in each course was averaged across the four academic courses in each participant's class schedule. Each participant received an average classmate GPA score, ranging from 0 to 4, using the available school records data for participants.

Results

The purpose of this study was to examine the influence of academic teaming on the relationship between social preference and victimization (measured by both peer and self-report), accounting for differences in the effect of teaming based on classroom academic performance. Table 1.2 shows the correlations among all study variables. I studied these relationships in the spring of 6th grade, controlling for victimization in the fall as well as the gender of participants. Given the multiethnic sample and the prevalence of racialized tracking or ability grouping in middle school (Ansalone, 2006; Buttaro, Catsambis, Mulkey, & Steelman, 2010), I also controlled for race/ethnicity in my analyses. However, no gender or racial/ethnic differences in victimization were observed.

Due to the clustered nature of the data (students nested within schools), multilevel modeling was employed using the PROC MIXED procedure in SAS 9.3 (SAS Institute Inc., 2011) and a set of stepwise hierarchical linear models was estimated. Model fit was evaluated using two comparative fit indices available in SAS: Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). Each index is used to calculate a chi-square difference test between models while accounting for factors such as sample size and the number of parameters in the model. For both indices, smaller numbers reflect better fit.

To compare the influence of social preference on victimization, the first step in each set of models estimated both victim reputation and frequency of victimization in the spring of 6th grade based on social preference in the spring of 6th grade, controlling for gender, race/ethnicity, and victimization in the fall of 6th grade. As shown in Tables 1.3 and 1.4, social preference had a significant, negative relationship with victim reputation and frequency of victimization. For both victim reputation and frequency of victimization, as social preference increased, victimization decreased. Likewise, as social preference decreased, victimization increased. Predictably because of informant overlap, this effect appeared to be stronger for victim reputation than self-reported frequency of victimization.

In the next step, academic teaming and classmate GPA were added to each model. There was no main effect of classmate GPA on victim reputation, but there was a main effect of classmate GPA on frequency of victimization. Students taking classes with higher performing classmates reported more frequent victimization (see Table 1.3). There was no main effect of teaming on either type of victimization.

In the following step, the interaction between social preference and academic teaming was entered into the model. This interaction was significant for both types of victimization (see Tables 1.3 and 1.4). As shown in Figure 1.1, for victim reputation (upper panel) and frequency of victimization (lower panel), victimization was lowest when both social preference and teaming were high. In other words, students who were well liked by others and who shared most of their core classes with the same classmates were least likely to be victimized. In contrast, victimization was highest when teaming was high but social preference was low. When teaming was low (i.e., students shared classes with few of the same classmates), social preference had the *least* impact on victimization.

In the final step, classmate GPA was included in 2-way interaction terms with social preference and academic teaming, and then as a 3-way interaction term with social preference and academic teaming. For frequency of victimization, none of these additional interaction terms was significant and including them resulted in poorer model fit, indicating that low status children were more frequently victimized when they experienced high levels of teaming, regardless of the performance level of their classrooms (although classroom academic performance still had a significant main effect). For victim reputation, however, all 2-way and 3-way interaction terms were significant and resulted in the best model fit (see Table 1.3). The 3-way interaction is depicted in Figure 1.2. Each plotted slope shows the relationship between social preference and victim reputation at different combinations of teaming (high or low) and average classroom academic performance (high or low). Higher teaming resulted in a much stronger association between social preference and victim reputation after accounting for classroom academic performance. In addition, the relationship between social preference and victim reputation was strongest for children with low social preference who were teamed with higher performing classmates. Following procedures outlined by Aiken and West (1991) and Dawson and Richter (2006) for probing interaction effects, a test of the difference between slopes revealed a significantly stronger relationship between social preference and victim reputation among students in highly teamed, higher performing classes compared to highly teamed, lower performing classes ($t=-4.782$, $p<.001$). Similar to the models estimated in the previous step, social preference also had significantly less impact on victim reputation when teaming was low (regardless of the level of classroom academic performance). Thus as hypothesized, academic teaming was a risk factor for peer victimization among low status 6th

graders, and this was particularly true when these children were teamed with high achieving classmates.

Discussion

In early adolescence, perhaps more so than any other time in development, status among peers contributes largely to children's social and emotional well-being and their overall adjustment in school. With many of these children using aggression to *gain* status, having *low* status makes some children particularly vulnerable to peer victimization. Certain educational practices determine the amount and types of exposure children have to the peer group in school, which may affect their visibility as either high or low status members, further influencing their likelihood of being victimized. In particular, academic teaming influences the extent to which classmates remain the same from class to class throughout the school day, which could make social status more or less salient to their peers. In addition, ability grouping influences the concentration of high- or low-performing—and therefore more or less socially dominant—students in the classroom, which may have an impact on the rates of peer aggression overall. In this study, I used social preference as the measure of status among peers and examined whether these features of the classroom context moderated the association between social preference and victimization for children in the 6th grade.

Consistent with past research, the results indicated a significant, negative relationship between social preference and peer victimization. Lower social preference scores were associated with more frequent victimization as well as a stronger victim reputation among peers. There was no main effect of academic teaming on peer victimization for either measure of victimization used in this study. Controlling for social preference among peers, the likelihood of being victimized was no different when students shared their classes with many of the same or

many different classmates. However, when considering the interaction between social preference and academic teaming, some consistent patterns emerged. Regardless of the victimization measure that was used, low status children in highly teamed classes were more victimized. Conversely, high status children in highly teamed classes were less victimized. These results support the hypothesis that academic teaming increases the social visibility of children to their peers, which may be a protective factor for children who enjoy high status in the peer group but a risk factor for low status children who rarely get the chance during the school day to escape their reputation.

Since academic teaming is often practiced in conjunction with ability grouping, it was necessary to also consider the role of classroom academic performance in the relations studied here. Interestingly, this feature of the classroom context had a significant main effect on self-reported frequency of victimization but not on victim reputation among peers. For frequency of victimization, being in higher performing classes was associated with greater victimization. As suggested in previous research, high academic achievement is often related to high social status in the peer group, and ability grouping may increase the concentration of socially dominant children who, especially in middle school, may be more likely to engage in aggressive acts toward their peers (Jonkman et al., 2009). This may explain why children in higher achieving classrooms reported more frequent victimization. However, this finding was not corroborated by peer reports, suggesting that children taking classes with higher performing classmates may only *perceive* greater victimization, even if they are no more likely to be identified as a victim in the peer group.

For victim reputation only, accounting for classroom academic performance resulted in the most dramatic differences in victimization across the varying levels of academic teaming that

children experienced. Children with high social preference were least likely to have a reputation as a victim regardless of their classroom context. Children with low social preference were more likely to have a reputation as a victim, and this was especially true when they were in higher teamed, higher performing classes. Compared to the self-reported measure of peer victimization used in this study, social preference was more strongly correlated with victim reputation. This finding is not surprising given that social preference, like victim reputation, is a peer measure of social status. If higher performing classrooms are more likely to comprise high status children, and these children remain together for the majority of the school day, reputations may be more salient in these classrooms than in any other type of classroom in middle school, resulting in the strongest relationship between social preference and victimization based on peer report. Since higher achieving classrooms are suggestive of ability grouping, these results may also indicate that the social risks associated with academic teaming are exaggerated when teaming is practiced in conjunction with ability grouping.

In general, the main effect of classroom academic performance on self-reported frequency of victimization and the interaction effect of classroom academic performance and academic teaming on peer-reported victim reputation suggest that ability grouping may create certain classroom contexts in which peer victimization is more likely to occur. First, if higher achieving classrooms do, in fact, comprise more socially dominant children who are more likely to be aggressive, the classmates with whom they share their classes may be the most likely recipients of their aggression—due simply to greater access to these classmates than other peers at school. Higher achieving classrooms may also contain *subgroups* of children, some of whom may be more or less likely to be victimized by their peers. That is, in addition to socially dominant children, higher achieving classrooms may contain children who are more

academically than socially oriented (e.g., “nerds”), making them prime targets of peer aggression. Thus, there may be a greater range of social statuses among children in high-performing compared to average- or low-performing classrooms that makes bully-victim interactions more likely to occur. In other words, ability grouping may contribute to unique classroom social dynamics that differ at varying levels of classroom performance.

Similar to research on interdisciplinary teaming which has, until now, only focused on the academic benefits of this practice, past research on ability grouping has neglected to consider many of the potential *social* consequences of creating academically homogeneous classrooms. Some scholars have expressed concern that the benefits of ability grouping (a.k.a. academic tracking) may only apply to students in higher performing tracks (see Ansalone, 2006; Fuligni, Eccles, & Barber, 1995), which are rarely representative of students from all ethnic groups (Buttaro, Catsambis, Mulkey, & Steelman, 2010; Hallinan, 1994). The findings reported here raise further doubts about the equitability of learning environments to which children are exposed if—due to ability grouping—some classrooms are more likely than others to become breeding grounds for peer victimization. With some type of ability or curriculum grouping currently in place in over 85% of American public schools (Ansalone, 2006), future research should continue to explore the unintended social consequences of these widely used academic practices.

Strengths and Limitations

This study makes several important contributions to the literature on both peer victimization and interdisciplinary teaming. First, by comparing the influence of social preference across both peer- and self-reported measures of victimization, I demonstrated that the relationship between peer status and peer victimization is evident regardless of the type of

victimization being studied. However, because I did not measure the overlap in victimization by measure (i.e., whether children with the strongest victim reputations were more likely to report greater frequency of victimization), it may be that participants with high victimization scores on one measure are not necessarily the same participants with high victimization scores on another measure. If there are indeed different subgroups of victims in middle school, as suggested by Sandstrom & Cillessen (2003), it is possible that the same feature of the classroom context might affect members of these subgroups in *different* ways. For example, children who perceive victimization but are not identified as victims by their peers may suffer from a victim mentality that is neither explained nor influenced by their classroom context, whereas children who are identified as victims by their peers and themselves report being victimized may be particularly vulnerable when their classmates stay the same from course to course throughout the school day. Although I did not account for this “comorbidity” effect in the present study, the results suggest that using these multiple informants may have implications for assessing the risks associated with self- vs. peer-perceived victimization in certain classroom contexts.

Next, this study adds to an emerging body of research that considers the role of classroom academic performance and ability grouping practices on peer aggression and victimization. Due to the small number of schools included in this study, the generalizability of the results may be limited, but the findings lend support to the hypothesis that higher achieving classrooms may be comprised of more high status children who are more likely to behave in socially aggressive ways. Future research should consider the specific level of academic courses in addition to student performance in order to more fully understand the role of ability grouping in peer victimization. In addition, more research is needed which explores differences in the individual

characteristics of children taking higher level academic courses in order to examine the unique social trajectories of high performing students at opposite ends of the social status hierarchy.

Most notably, this is the first study in which interdisciplinary teaming (i.e., students sharing teachers with members of the same *cluster*) has been distinguished from academic teaming (i.e., students sharing academic classes with the same *classmates*). Furthermore, measuring academic teaming at the *individual* level and as a *continuous* variable allowed me to examine the social costs associated with this common educational practice. Given the risks of peer victimization for children with low social status, in particular, the prevalence of this school practice is alarming. Future research should examine other social outcomes that may result from the practice of teaming in all its various forms.

Implications for Intervention

This study demonstrates that the relationship between social status and peer victimization in middle school depends on features of the classroom context that determine the extent of exposure children have to the same classmates throughout the day and—indirectly through the performance level of those classmates—the social status of their peers. The results confirm previous reports in the literature that social preference and peer victimization are not always related (Sandstrom & Cillessen, 2003); more importantly, these findings have implications for intervention approaches that could be implemented at the school level through the use (or *non-use*) of certain structural practices.

Although interdisciplinary teaming may lead to some positive outcomes such as greater feelings of belonging in school, *academic* teaming may come with certain social *costs* that outweigh these benefits. During a time when status among peers is paramount and the risk of being victimized is so high, researchers and practitioners would do well to consider the extent to

which this practice should be used, particularly for vulnerable children in the peer group. For example, a less restrictive teaming structure (e.g., large enough teams that students are not required to share all their academic courses with the same classmates) might provide the social benefits of this practice while avoiding the social costs.

Likewise, the results suggest that for academically oriented students who are not well integrated in the peer group, the risk of peer victimization inherent in sharing classes with socially dominant peers may overshadow the academic benefits of high-track ability grouping, especially when used in combination with academic teaming. For low status, high performing students, being in more academically heterogeneous classrooms may give them the opportunity to associate with less aggressive classmates, which may reduce their likelihood of being victimized. Thus, taking classes with a variety of students *and* students who differ in social status and academic performance may be one way for children who are not well-liked by their peers to avoid victimization in middle school.

Table 1.1
Descriptive Academic Teaming Statistics for MSDP Schools

School	Min.	Max.	Mean	Std. Dev.	<i>r</i>
1	0.05	0.95	0.21	0.12	0.12*
2	0.08	0.69	0.31	0.08	0.01
3	0.08	0.73	0.39	0.15	0.67***
4	0.08	0.63	0.43	0.14	-0.09
5	0.14	0.99	0.65	0.27	-0.40**
6	0.15	0.99	0.92	0.15	0.18**
7	0.26	0.99	0.93	0.14	0.38**
8	0.31	1.00	0.93	0.14	0.17*
9	0.32	1.00	0.94	0.13	-0.12**
10	0.33	1.00	0.94	0.13	0.28**
11	0.00	1.00	0.95	0.14	0.23*
12	0.33	1.00	0.95	0.10	-0.14**
13	0.30	1.00	0.95	0.13	0.29**
14	0.33	1.00	0.96	0.09	0.07
15	0.48	1.00	0.96	0.09	0.20**
16	0.60	1.00	0.97	0.07	0.09
17	0.43	1.00	0.99	0.04	0.18**
18	0.50	1.00	0.99	0.04	0.28
19	1.00	1.00	1.00	0.00	-- [†]

Note. *r* = correlation with classmate GPA based on Pearson's correlation coefficient. **p*<.05, ***p*<.01, ****p*<.001. [†]Insufficient variance in academic teaming necessary to compute correlation. Only Schools 1-5 were used in the analyses reported in this study.

Table 1.2

Correlations among Study Variables

	Social Preference	Victim Reputation	Frequency of Victimization	Academic Teaming	Classroom Academic Performance
Social Preference	---	-0.34***	-0.10*	-0.01	0.13***
Victim Reputation	---	---	0.19***	0.04	0.04
Frequency of Victimization	---	---	---	0.09*	0.02
Academic Teaming	---	---	---	---	-0.30***
Classroom Academic Performance	---	---	---	---	---

Note: *p<.05, **p<.01, ***p<.001.

Table 1.3

Classroom Influences on the Relationship between Social Preference and Victim Reputation in 6th Grade

	Step 1 Est. (S. E.)	Step 2 Est. (S. E.)	Step 3 Est. (S. E.)	Step 4 Est. (S. E.)
Intercept (Spring Victim Reputation)	0.56 (0.09)**	0.60 (0.09)**	0.60 (0.09)**	0.63 (0.09)**
Female	-0.16 (0.09)	-0.16 (0.09)	-0.17 (0.09)	-0.13 (0.09)
African American	0.14 (0.13)	0.17 (0.14)	0.17 (0.14)	0.18 (0.13)
Asian	0.21 (0.12)	0.13 (0.13)	0.13 (0.13)	0.14 (0.13)
White/Caucasian	0.22 (0.13)	0.19 (0.14)	0.19 (0.14)	0.25 (0.13)
Fall Victim Reputation	1.10 (0.05)****	1.11 (0.05)****	1.10 (0.05)****	1.05 (0.05)****
Social Preference	-0.31 (0.05)****	-0.33 (0.05)****	-0.34 (0.05)****	-0.37 (0.05)****
Academic Teaming		0.27 (0.22)	0.24 (0.22)	0.62 (0.23)**
Classmate GPA		0.24 (0.15)	0.25 (0.15)	0.12 (0.15)
Social Preference x Academic Teaming			-0.58 (0.22)**	-1.12 (0.24)****
Social Preference x Classmate GPA				-0.44 (0.13)**
Academic Teaming x Classmate GPA				1.73 (0.54)**
Social Preference x Academic Teaming x Classmate GPA				-1.63 (0.54)**
	AIC 2757.9	2674.7	2669.1	2625.2
	BIC 2757.2	2673.9	2668.3	2624.9

Note: Values in parentheses represent standard errors. *p<.05, **p<.01, ***p<.001. Latino students (members of the largest racial/ethnic group in the sample) served as the reference group.

Table 1.4

Classroom Influences on the Relationship between Social Preference and Frequency of Victimization in 6th Grade

	Step 1 Est. (S. E.)	Step 2 Est. (S. E.)	Step 3 Est. (S. E.)	Step 4 Est. (S. E.)
Intercept (Spring Frequency of Victimization)	1.72 (0.06)****	1.76 (0.06)****	1.75 (0.06)****	1.74 (0.06)****
Female	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.02 (0.05)
African American	-0.01 (0.08)	-0.03 (0.08)	-0.01 (0.08)	0.00 (0.08)
Asian	0.10 (0.07)	0.01 (0.08)	0.01 (0.08)	0.02 (0.08)
White/Caucasian	0.12 (0.08)	0.09 (0.08)	0.10 (0.08)	0.11 (0.08)
Fall Frequency of Victimization	0.56 (0.04)****	0.56 (0.04)****	0.56 (0.04)****	0.57 (0.04)****
Social Preference	-0.07 (0.03)*	-0.08 (0.03)**	-0.08 (0.03)**	-0.08 (0.03)*
Academic Teaming		0.21 (0.14)	0.17 (0.14)	0.11 (0.16)
Classmate GPA		0.22 (0.09)*	0.23 (0.09)*	0.26 (0.1)**
Social Preference x Academic Teaming			-0.38 (0.13)**	-0.45 (0.15)**
Social Preference x Classmate GPA				-0.09 (0.09)
Academic Teaming x Classmate GPA				-0.29 (0.33)
Social Preference x Academic Teaming x Classmate GPA				-0.10 (0.33)
	AIC 915.7	885	878.5	879.9
	BIC 914.9	884.2	877.7	879.2

Note: Values in parentheses represent standard errors. *p<.05, **p<.01, ***p<.001. Latino students (members of the largest racial/ethnic group in the sample) served as the reference group.

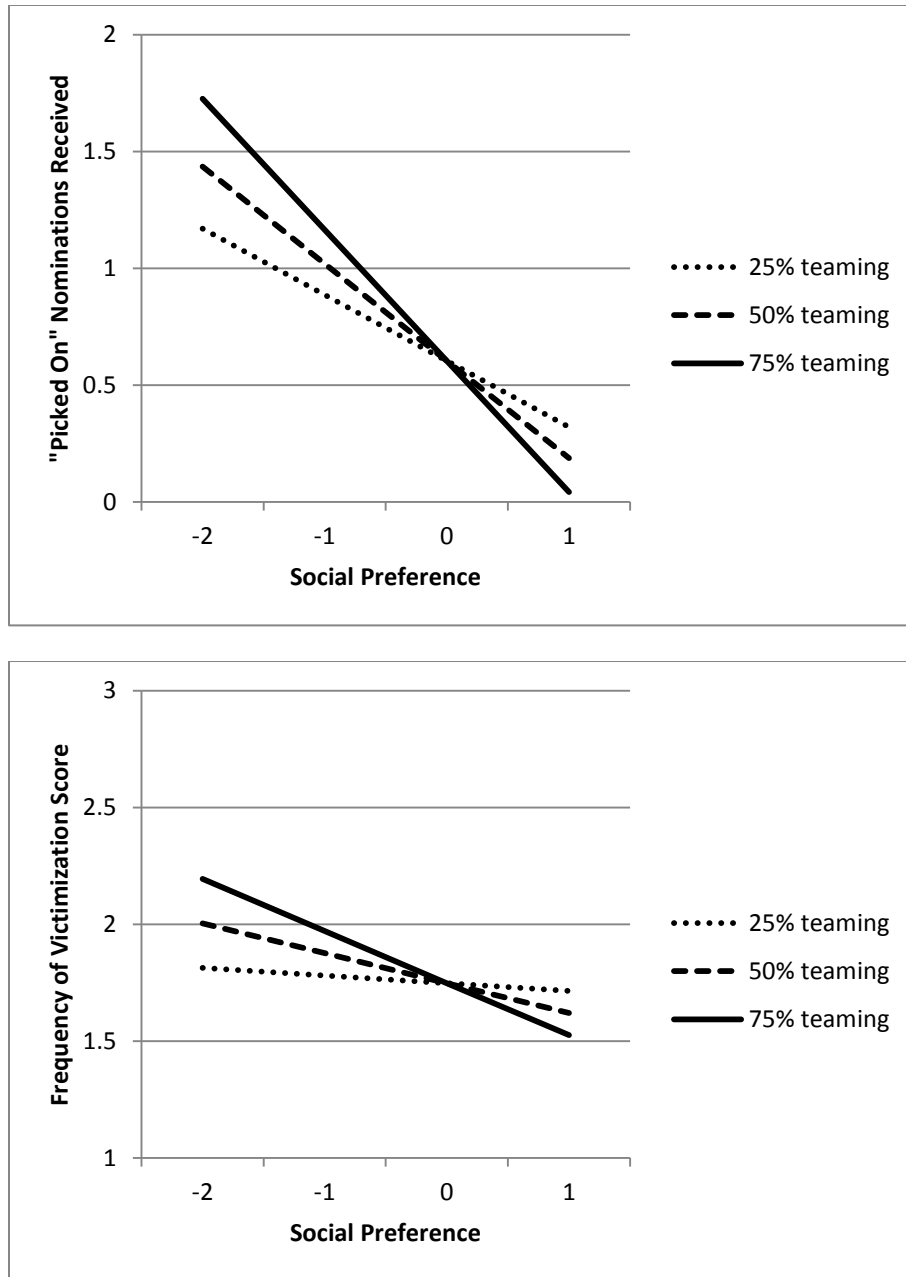


Figure 1.1. The association between social preference and peer victimization at varying levels of academic teaming. Victimization (peer- and self-reported) in the spring of 6th grade is predicted by social preference in the spring of 6th grade controlling for victimization in the fall of 6th grade. Social preference scores shown represent social preference in the peer group at 2 standard deviations below the mean, 1 standard deviation below the mean, at the mean, and 1 standard deviation above the mean, respectively. "Picked on" nominations received ranged from 0 to 20 (M = .60, SD = 1.73). Frequency of victimization scores ranged from 1 to 5 (M = 1.75, SD = .72).

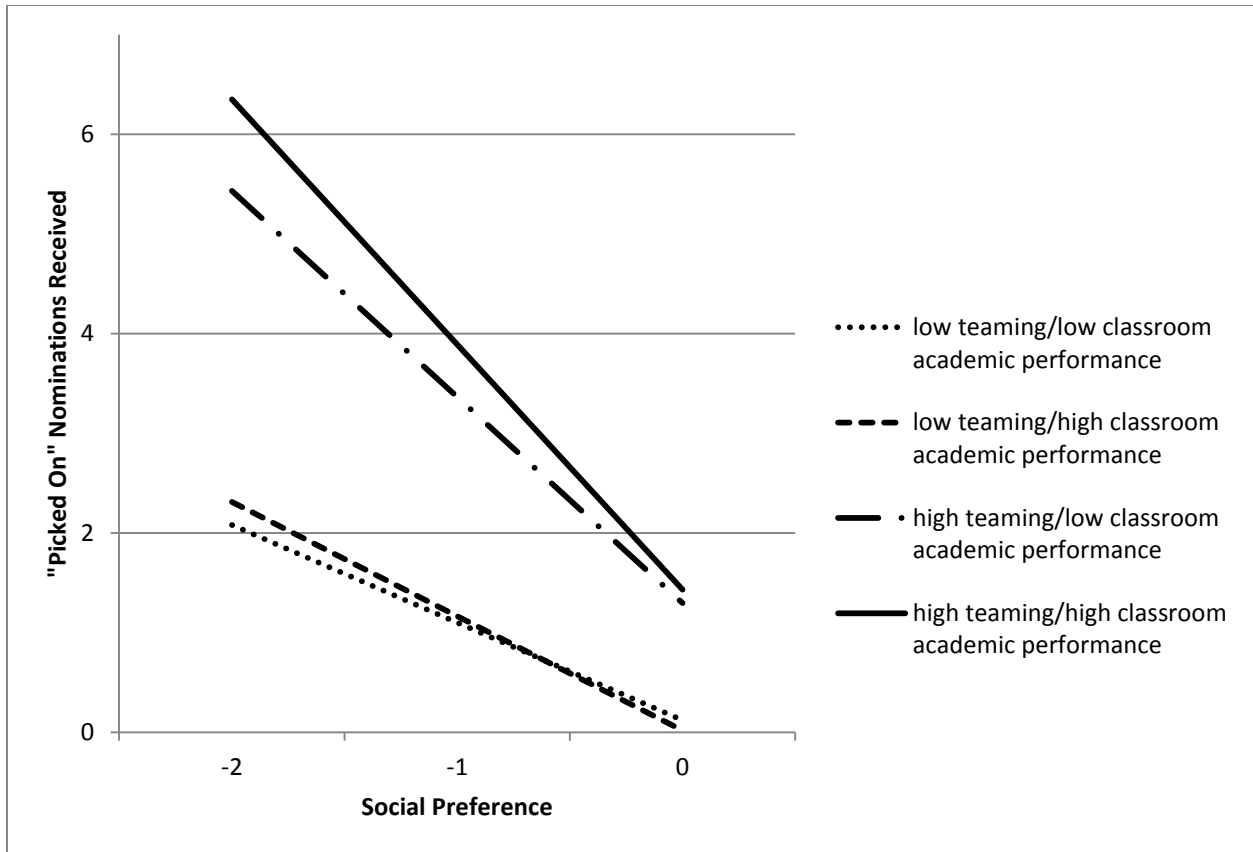


Figure 1.2. The role of academic teaming and classroom academic performance in the association between social preference and victim reputation. Victim reputation (based on “picked on” nominations received) in the spring of 6th grade is predicted by social preference in the spring of 6th grade controlling for victim reputation in the fall of 6th grade. Social preference scores shown represent social preference in the peer group at two standard deviations below the mean, one standard deviation below the mean, and at the mean, respectively. Low teaming is based on academic teaming scores one standard deviation below the mean, while high teaming is based on academic teaming scores one standard deviation above the mean ($M = .32$, $SD = .23$). Classroom academic performance is based on classmate GPA at one standard deviation below and above the mean, respectively ($M = 2.85$, $SD = .35$). “Picked on” nominations received ranged from 0 to 20 ($M = .60$, $SD = 1.73$). The range of social preference scores depicted was restricted to keep “picked on” nominations on scale.

Study 2: Friendship Choices and the Stability of Victim Reputations in Middle School:

It's Who You *Want to Know*

In Don Merten's (1996) classic study on the transition from childhood to adolescence, he described four boys who were the victims of peer rejection and harassment. Known to the peer group as "mels," these boys each engaged in strategies to reduce their social visibility as victimized members of the group. One boy attempted to "hide" himself from his aggressors by wearing a long coat—a tactic that proved only to draw more negative attention to himself. The other three boys, who happened to be friends, chose strategies which included trying to associate with more of their peers (especially the "popular" kids) and disassociating themselves from each other. For William, who made the greatest attempt at changing his reputation by publicly denouncing his friendship with other "mels," his efforts won him both a decrease in harassment and an increase in general peer acceptance. The boys in this study demonstrated that some victimized youth may be aware of their social plight and may utilize friendships with their peers to improve their social standing. In fact, recent empirical evidence confirms that by associating with certain peers and *not* associating with others, some victimized children use their friendship choices strategically to achieve the highly valued goals of social status and acceptance (Scholte et al., 2009).

In middle school, when peer aggression is at its peak (Eslea et al., 2003; Seals & Young, 2003), and the social and academic consequences of chronic victimization are so severe (Hodges, Boivin, Vitaro, & Bukowski, 1999; Juvonen, Wang, & Espinoza, 2010; Nakamoto & Schwartz, 2010), the extreme emphasis that early adolescents place on their peers could make friendship choices a particularly useful and *timely* mechanism for changing one's reputation. However, because social status may vary depending on the context in which social interactions occur,

friendship choices may be more or less effective in changing one's victim reputation in certain school or classroom environments. For example, in ethnically diverse schools numerical ethnic majority status may be associated with greater social status among peers (Cohen, Lotan, & Catanzarite, 1990; Graham & Juvonen, 2002; Verkuyten, Hagendoorn, & Masson, 1996; Verkuyten & Thijs, 2002). As such, students' victim reputation and the effectiveness of their friendship choices may be influenced by their own ethnic group representation as well as the ethnic group representation of their friends.

In the present study, I investigated the role of friendship choices on the stability of students' victim reputation across the first year of middle school. I also examined how the classroom ethnic context influences the relationship between friendship choices and changes in victim status among peers. In doing so, I addressed two major limitations of the previous literature, discussed in turn below.

Victimization and Friendship

The victimization literature highlights the features of children's reciprocal (mutual) friendships that are associated with lower victim status among peers. Generally speaking, friendships buffer: as the number of friendships increases, the likelihood of being victimized over time decreases and the relationship between victimization and poor adjustment outcomes is weakened (see Fox & Boulton, 2006; Hodges, Malone, & Perry, 1997; Pellegrini & Long, 2002; Schwartz, Dodge, Pettit, & Bates, 2000). In addition, high quality friendships evidenced by features such as companionship, social support, and intimacy as well as the absence of conflict and betrayal, are also negatively correlated with peer victimization (Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Hodges et al., 1999; Malcolm, Jensen-Campbell, Rex-Lear, & Waldrip, 2006; Rigby, 2000). Nevertheless, the number of friends and the quality of children's

friendships may both depend on the reputations and peer status of the friends themselves in order for friendships to provide social benefits to victimized children (see Hartup, 1996). To illustrate, the relationship between children's individual characteristics (e.g., internalizing or externalizing behaviors, low social preference) and victimization weakens with increases in the social preference (popularity) of children's friends (Fox & Boulton, 2006). However, regardless of number or quality, friendships with children who are victimized do not appear to provide any protection against victimization for oneself (Pellegrini, Bartini, & Brooks, 1999). Furthermore, children with individual risk factors become *more* susceptible to victimization as their friends are more victimized (Hodges et al., 1997). All in all, the evidence suggests that children's own reputation and the reputations of their friends may co-evolve over time.

It is evident based on prior research that friendships make a difference for the social and emotional adjustment of victimized children, and that the victim reputation of their friends, in particular, may have implications for their own social outcomes over time. However, given that these studies relied on reciprocal friendship nominations, our current understanding of the role of friendship in the stability of victim reputations is limited to victimized children who have at least one reciprocal friend. Since victimized children are less accepted and less likely to *receive* friendship nominations than other children (Hodges et al., 1999), studying only those victims in reciprocal friendships may provide a narrow picture of who chronically victimized children are and how their friendship processes operate over time. The friendship nominations *given but not reciprocated* may, on the other hand, provide a better look at *all* children at risk for being victimized.

Knowing the identity of children's *desired* (unreciprocated) friends (Aloise-Young, Graham, & Hansen, 1994) in addition to their reciprocal friends may also offer a broader

understanding of how victimized children, like William in the Merten (1996) study, use their friendship choices to attain their social goals, such as changing their reputation among peers. For example, in the only study of its kind, Scholte et al. (2009) compared the friendship nominations of victimized adolescents and discovered that desired friends were more socially accepted, less rejected, and less victimized than reciprocal friends. The additional finding that victimized adolescents did not reciprocate the friendship nominations of peers who were less socially accepted than themselves supports the hypothesis that victimized youth are acutely aware of their social standing and may use their friendship choices strategically to manage their peer reputation. Currently, however, there is no empirical evidence that documents the extent to which friendship choices—both reciprocated and non-reciprocated as well as the interaction between the two—influence *change* in victim reputations as perceived by the peer group.

Victimization in Context

The continual transformation of the ethnic composition of the student population over the past few decades (c.f., U.S. Department of Education, 2000, 2010) has made ethnic context increasingly critical to our understanding of peer relations within schools. To date, however, only a small body of research has examined the influence of the numerical representation of students from different ethnic groups on social status among peers (see Graham, 2006; Vervoort, Scholte, & Overbeek, 2010). Although the findings are mixed, there is evidence to suggest that numerical ethnic majority status may lead to greater social status which, in turn, may result in an imbalance of power between members of various ethnic groups (Cohen et al., 1990)—the same imbalance of power that often corresponds with peer victimization (Olweus, 1991). If this is true, numerical ethnic *minority* status could make children more susceptible to maltreatment and lower status among peers. This may be particularly true when the friendships of ethnic minority

students are restricted to same-ethnicity (i.e., other ethnic minority) students in school. On the other hand, friendships with ethnic majority students (i.e., high status peers) may be especially powerful tools for change in the victim status of students from ethnic minority groups.

Understanding the impact of ethnic context requires that we consider not only the ethnic representation of students based on the larger ethnic composition of their school, but also the relative representation of students inside their classrooms. In fact, some researchers attribute the contradictory findings in the school ethnic context literature to disparities in ethnic composition at the *classroom* level (Vervoort et al., 2010). For example, students are often placed in academic tracks that vary in their representation of classmates from different ethnic groups (e.g., Hallinan, 1994), making a single school-level indicator of ethnic composition an inaccurate measure of the school ethnic context, even for students attending the same school. To complicate the matter further, the typical academic structure of middle school, in which students change classrooms for every course in which they are enrolled, presents a major methodological challenge when attempting to measure school contextual variables since students could potentially be exposed to a different racial climate and set of social norms within each classroom. In order to understand the true role of ethnic context in peer relations during middle school, measures of school context must take into account these changing classroom environments. One way to accomplish this is to use *individual*-level indicators of classroom context based on students' course schedules. In this way, the representation of *each* student in his/her classes throughout the school day can be measured. Currently there is no literature that examines the influence of ethnic group representation on the stability of victim reputations in middle school. Nor is there literature on any aspect of middle school ethnic context that takes into account the individual experiences of students based on their unique class schedules.

Summary and Research Questions

The victimization literature highlights the features of children's friendships (e.g., number and/or quality of friendships, social status of friends) that are associated with the stability of victim reputations, yet has relied on reciprocal friends to measure the characteristics of these friendships. In addition to including more youth at risk for chronic victimization by examining reciprocal *and* desired friendships, it may be that desired friends tell us more about victimized students' social awareness and, in particular, efforts to alter their status among peers. In regards to victimization in the school ethnic context, the literature primarily includes studies that have measured ethnic composition at the school level—perhaps resulting in contradictory findings when school and classroom ethnic composition differ. Furthermore, this literature has yet to examine the influence of the ethnic context of schools or the ethnic group membership of children's friends on the stability of victim reputations *over time*. Taking into account students' ethnic representation in the classroom in combination with their friendship choices may not only reveal new understanding about students at risk for chronic victimization but may also shed light on previous inconsistencies in research on victimization and the ethnic context at school.

In this study, I addressed the limitations of the existing research by using both reciprocal and desired friendship nominations and by exploring the moderating role of ethnic group representation, measured at the classroom level and *specific to each student* based on his/her course schedule. To investigate the role of friendship choices on the stability of victim reputations across the first year of middle school, I answered two research questions:

- (1) Compared to reciprocal friends, are desired friends more or less influential in changing one's victim reputation from fall to spring?

(2) What is the conjoint effect of reciprocal and desired friends' victim status on students' own victim reputations over time?

To understand the influence of school ethnic context on the relationship between friendship choices and victim reputation stability, I answered two additional questions:

(3) Do friendship choices matter more depending on students' ethnic majority vs. minority status in their academic courses?

(4) If so, what is the role of same- vs. cross-ethnic friendship choices in the stability of their victim reputations?

Method

Participants

Participants were drawn from a larger sample of approximately 6,000 sixth graders across 3 cohorts of students participating in the UCLA Middle School Diversity Project (MSDP; described in the previous study). At the time of this study, school records were available for 19 out of the original 26 schools (Cohorts 1 and 2). In order to use class schedules to calculate an individualized measure of ethnic group representation in the classroom, only participants from these 19 schools were included.

The ethnic composition of the sample is based on student self-report. Students were asked to select their ethnicity from several options: American Indian, Black/African-American, Black/other country of origin, East Asian, Latino, Mexican/Mexican-American, Middle Eastern, Pacific Islander (including Filipino), South Asian, Southeast Asian, White/Caucasian, Multiethnic/Biracial, and Other. For this study some groups were combined (Black/African-American and Black/other country of origin, East Asian and Southeast Asian, and Latino and Mexican/Mexican-American). The small number of students from the selected schools that did

not fall into one of the 4 major pan-ethnic groups was excluded, resulting in a final sample of 3,779 participants (52% female, 48% male) consisting of 16% African-American, 18% East/Southeast Asian, 21% White, and 45% Latino/Mexican students.

Procedure

Students with signed parental consent completed a questionnaire during a single period in the fall semester of one of their 6th grade classes. Students recorded their answers independently as they followed instructions being read aloud by a graduate research assistant who reminded them of the confidentiality of their responses. A second researcher circulated around the classroom to help students as needed. This procedure was repeated in the spring semester of 6th grade. At both waves of data collection, students were given an honorarium of \$5 for completing the questionnaire.

Measures

Victim reputation. Victim status among peers was determined by peer nomination. Students were presented with a roster containing the names of all students in their grade level at their school, arranged by name (alphabetically by first name) and gender. Using the roster, students were instructed to record the names of their classmates in response to the question, “Which 6th grade students get picked on by other kids (get hit or pushed around, called bad names, talked about behind their backs)?” Students were allowed to record as many names as they desired but were instructed not to nominate themselves. These nominations were tallied for each student and then standardized by gender within each school.

Friendship. At each wave of data collection students were asked to list the names of their good friends in their grade at their school. The response form included seven spaces for listing names inasmuch as previous research suggests that students typically list 3 to 5 names

using this unlimited nomination procedure (e.g., Bukowski, Pizzamiglio, Newcomb, & Hoza, 2006). Students were advised that they could request additional pages if needed.

Desired vs. reciprocal friends. Each friendship nomination was classified as either a *desired* friend when not reciprocated by the nominee or a *reciprocal* friend when reciprocated by the nominee; the two friendships groups were therefore mutually exclusive.

Victim reputation of friends. The standardized victim nominations received by friends was averaged across all desired and reciprocated friendship nominations.

Cross-ethnic friendships. Using students' self-reported ethnic identification (described above), each friendship nomination was designated as either same- or cross-ethnic. Then, the proportion of cross-ethnic out of total friends was calculated for both desired and reciprocal friends.

Ethnic group representation. Using students' self-reported ethnicity and class schedules, the proportion of classmates from students' same ethnic group out of total classmates was estimated (based on participant data) for each academic course in which they were enrolled (i.e., math, science, English, social studies), and then averaged across academic courses to indicate their ethnic group representation.

$$\sum_{i=1}^c \frac{n_{same}}{t} / n_c$$

As shown in the formula above, the sum of same-ethnicity classmates (n_{same}) out of total classmates (t) across all academic courses (c) was calculated for each student (i) and then divided by the total number of academic courses (n_c) in his/her class schedule, resulting in a proportion score ranging from 0 (no same-ethnicity classmates) to 1 (only same-ethnicity classmates).

Because class schedules are unique to each student, students at the same school who shared the

same ethnic background did not necessarily experience the same level of exposure to their group throughout the school day. That is what makes this measure of ethnic representation so novel.

Results

In this study I examined the influence of reciprocal and desired friends' victim status (independently and conjointly) on the stability of students' own victim reputations across the first year of middle school, taking into account the ethnic representation of students in their academic courses as well as the same- vs. cross-ethnic nature of their friendships. To account for non-independence due to clustering within the data (students nested within schools), I employed multilevel modeling using the PROC MIXED procedure in SAS 9.3 (SAS Institute Inc., 2011) and estimated a set of hierarchical linear models. I evaluated model fit using 2 comparative fit indices available in SAS: Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). Each index is used to calculate a chi-square difference test between models while accounting for factors such as sample size and the number of parameters in the model. For both indices, smaller numbers reflect better fit.

Table 2.1 displays the stepwise progression of models used to compare the influence of desired and reciprocal friends' victim status on the stability of students' own victim reputations from the fall to spring of 6th grade. This first set of models estimated victim reputation in the spring based on own victim reputation in the fall and friends' victim reputations in the fall, entered as a series of interaction terms. As shown in Step 1 of Table 2.1, the victim status of both reciprocal and desired friends in the fall had a similar independent influence on students' own victim reputation in the spring, with greater victimization among both types of friends leading to greater victimization among students themselves. Although females' and African Americans' victim reputations were slightly less stable than males' and other ethnic group

members' victim reputations, respectively, there were no gender or ethnic differences in the influence of friends' victim status on students' own victim reputations (gender and ethnic differences not shown).

As shown in Step 2, there was a significant interaction between own victim reputation and reciprocal friends' victim reputations as well as between own victim reputation and desired friends' victim reputations. Greater victimization among reciprocal friends in the fall was associated with greater stability in own victim reputation from fall to spring; however, controlling for victimization among reciprocal friends, victimization among desired friends in the fall was associated with slightly less stability in own victim reputation from fall to spring. Victim status among both types of friends was grand mean centered; therefore, when both terms appear in the same model, the coefficient of 1 is interpreted as its influence when the other is held at the average of the sample population. In this case, when victim status among desired friends is normative (i.e., at the mean), having reciprocal friends who are victimized significantly increases the stability in one's own victimization. However, when victim status among reciprocal friends is normative, the victim status of desired friends does not contribute to stability in one's own victimization and may, in fact, slightly weaken it.

In Step 3, there was a significant 3-way interaction between own victim reputation, reciprocal friends' victim reputations, and desired friends' victim reputations. Figure 2.1 displays this interaction. The four plotted slopes show different combinations of victim reputation (high or low) among both reciprocal and desired friends. The steeper the slope, the more stable the participants' own victimization from fall to spring. Victim reputations were most stable from fall to spring when both reciprocal and desired friends were victimized (top solid line). However, even when reciprocal friends were victimized, having desired friends who

were *not* victimized appeared to provide a buffer against students' own victim reputation stability. In other words, compared to when both reciprocal and desired friends were victimized, when reciprocal friends were victimized but desired friends were not victimized, own victim reputation was less stable. So thus far, the results have shown that reciprocal and desired friends have a differential influence on students' own victim reputation, and that having desired friends who are *not* victimized may be a protective factor for students whose reciprocal friends *are* victimized.

To investigate the influence of ethnic majority vs. minority status in the classroom on the relationship between friendship choices and students' own stability of victim reputation, ethnic group representation was added to the model in Step 4. There was a significant 4-way interaction between own victim reputation, reciprocal friends' victim reputations, desired friends' victim reputations, and ethnic group representation. This interaction is depicted in Figure 2.2. Plotted in the three panels are the relationships between stability of victim reputation and friends' victim reputations as the proportion of same-ethnicity classmates increased from 10 to 50 percent. Victim reputation was most stable when both reciprocal friends and desired friends were victimized and students themselves were in the numerical ethnic minority in their classrooms (left panel). However, the influence of having both reciprocal and desired friends who were victimized on own victim reputation stability diminished as students' ethnic group representation increased (note the decrease in the slope of the solid line across the three panels). In fact, numeric ethnic majority status in the classroom appeared to completely buffer the negative impact of having both reciprocal and desired friends who were victimized (see right panel of Figure 2.2). Interestingly, after taking into account classroom ethnic representation, having desired friends who were not victimized (even if reciprocal friends *were* victimized) was

just as protective as having reciprocal friends who were not victimized, indicating that only ethnic minority students whose reciprocal *and* desired friends were victimized were at risk for a stable victim reputation. This interaction was the same for members of all four racial/ethnic groups in this study.

Because friendship choices appear to matter more for victim reputation stability under certain circumstances of ethnic group representation in the classroom, the next set of models explored the influence of having same- vs. cross-ethnic friends on the stability of students' own victim reputation. Similar to the model depicted in Figure 2.2, the models shown in Table 2.2 tested the extent to which the increase in the relative representation of students' ethnic group in their classrooms (e.g., from 10 to 50 percent same-ethnicity peers) influenced the stability of students' victim reputation depending on the reputation of students' friends *and* the same- vs. cross-ethnic nature of their friendships. These models were estimated separately for reciprocal and desired friends.

Cross-ethnic friendships did not moderate the relationship between reciprocal friends' victim status and victim reputation stability, even after accounting for ethnic group representation (results not shown). However, the same- vs. cross-ethnic nature of desired friends who were victimized had a significant effect on participants' own victim status over time. This interaction is depicted in Figure 2.3. Plotted here are the different combinations of victim reputation (high or low) among both same-ethnic and cross-ethnic desired friends. As shown in the left panel, for students in the numerical ethnic *minority* across their academic classes, having victimized *same*-ethnic desired friends (top dashed line) predicted greater stability in own victim reputation than having victimized cross-ethnic desired friends (solid line). On the contrary, for students in the numerical ethnic *majority* (right panel), having victimized *cross*-ethnic desired

friends (solid line) predicted the greatest stability in own victim reputation. As ethnic group representation *increased*, the negative effect of having victimized cross-ethnic friends also *increased* but the negative effect of having victimized same-ethnic friends *decreased*. In other words, victim reputation stability was greatest for ethnic minority students who had victimized same-ethnic friends *and* for ethnic majority students who had victimized cross-ethnic friends. Cross-ethnic desired friendships (possibly with numerical majority group members) were protective for numerical minority group members, whereas same-ethnic desired friendships were more protective for numerical majority group members. Again, no ethnic group differences in these patterns were observed.

Discussion

Given the serious risks associated with chronic victimization in early adolescence, the primary purpose of this study was to examine the effect of friendship choices on the stability of children's reputation as a victim during the first year of middle school. An important distinction was made between reciprocal and desired friendships. The second purpose of this study was to investigate how friendship choices in conjunction with ethnic group representation in the classroom influence the likelihood of change in victim status among peers. The results indicated that having reciprocal friends with a victim reputation was strongly associated with stability in children's own victim reputation from the fall to spring of 6th grade, especially for children in the numerical ethnic minority in their classrooms.

These findings are consistent with prior research linking the victimization of reciprocal friends to greater stability in children's own victim reputations (e.g., Pellegrini et al., 1999). However, the results demonstrated that *desired* friends may play a unique role in protecting children from future victimization if those friends are themselves not victimized. This finding

was particularly true for numerical ethnic minority students. Ethnic majority students appeared to be least vulnerable to stable victim reputations, regardless of the victim status of their friends, suggesting that numerical ethnic group representation may trump the influence of friends' social status when it comes to children's own victim reputations. These findings were documented across all four pan-ethnic groups examined, suggesting that the findings are robust. The critical ethnic variable is not ethnic group membership per se, but rather the numerical representation of one's group.

Even for numerical ethnic majority students, the same vs. cross-ethnic nature of their desired friendships distinguished children who were more or less likely to be victimized over time. Same-ethnic desired friendships with victimized peers were more protective than cross-ethnic desired friendships with victimized peers for these students. The reverse was true for numerical ethnic minority students, for whom having desired same-ethnic friendships with victimized peers was associated with *greater* stability in students' own victim reputation compared to having cross-ethnic desired friendships with victimized peers. Because the ethnic group representation of students' friends was not directly measured, it is unclear whether the cross-ethnic friendships of minority students were with ethnic majority or other ethnic minority peers. For students in the numerical ethnic majority, however, cross-ethnic friendships would necessarily be with members of an ethnic minority group. As such, these findings suggest that for ethnic majority students, the consequences of having desired friends who are victimized are more severe when these friends are members of an ethnic minority group.

These findings may shed light on the role of choice and access when it comes to the influence of friendships on peer victimization in ethnically diverse middle schools. Students from the numerical ethnic majority group, who have the most access to similar (same-ethnic)

peers, may be seen as particularly deviant when choosing low status, dissimilar (cross-ethnic) friends, making them more likely targets of maltreatment from peers. On the other hand, students from the numerical ethnic minority group, who have the least access to similar peers, may gain certain social rewards from attempting to assimilate into the dominant ethnic group (i.e., choosing friends from the majority group), regardless of their friends' social status. For all students, choosing friends from the numerical ethnic majority group appears to provide the greatest protection against peer victimization across the first year of middle school.

Strategies for Avoiding Victimization in Middle School

Evidence that victim status is more fluid in early adolescence than originally believed (Juvonen, Nishina, & Graham, 2000) suggests that many victimized children in middle school may be able to alter their reputations and improve their overall adjustment. The present study demonstrates that one strategy for doing so may lie in the selection of one's friends. For victimized children in particular, friendships may not simply be buffers against the negative effects of victimization but valuable resources for social status mobility. When making choices about peers with whom to associate, some victimized children may opt for those in their peer group who offer the most social advantages. Although friendship nominations given to higher status peers may not be reciprocated, these *desired* friendships may demonstrate social awareness among certain victimized children and may signal to the peer group an acceptance of group norms (i.e., the value of social status in middle school). These findings contribute to a small body of literature which suggests that unreciprocated attraction may reveal the social motives of adolescents (see Juvonen & Ho, 2008).

The results of this study also provide support for the hypothesis that in ethnically diverse schools, choosing friends from the numerical ethnic majority group—who may enjoy higher

social status regardless of their friends' reputations—may be another strategy for securing higher status oneself. For ethnic minority students, this means having more cross-ethnic friends.

Although previous research has reported mixed findings about the influence of ethnic group representation on victim status, the results reported here clearly demonstrate that numerical representation matters, and it matters both for children themselves and for whom they choose as their friends. In addition to taking classroom ethnic composition into account, considering the ethnic group (i.e., same- vs. other-ethnicity) status of children's friends may clarify our understanding of the role of ethnic group representation in children's victim reputations.

I began this study by describing four “mels” who were victims of peer harassment in middle school and who each engaged in different strategies to improve their reputation (see Merten, 1996). To illustrate the strategies (i.e., friendship choices) observed in the current study, I will contrast the experiences of four hypothetical participants from my sample, each of whom would be at highest risk for chronic victimization (according to my findings) based on their membership in a numerical ethnic minority group in their school and by having reciprocal friends who are also victimized. The first two children (who I label Child A and Child B) report friendships—though not reciprocated—with peers who are not victimized. Child A has same-ethnic desired friends and Child B has cross-ethnic desired friends. The other two children (who I label Child C and Child D) report unreciprocated friendships with peers who *are* victimized. Again, the first of these, Child C, has same-ethnic desired friends and the other, Child D, has cross-ethnic desired friends. The first two children, Child A and Child B, who may be actively seeking friendships with non-victimized peers represent the best case scenario for victimized youth in middle school. They begin 6th grade with a poor reputation but their social awareness and desire for affiliation with higher status peers give them the greatest opportunities for

changing their reputation as victims. For these two children, the same- vs. cross-ethnic nature of their desired friendships is not as critical as the fact that the peers who they are trying to befriend are not themselves victimized. The remaining two children, Child C and Child D, also begin 6th grade with a poor reputation. Perhaps they are not as socially aware as Child A and Child B, or perhaps their strong desire for homophily (see McPherson, Smith-Lovin, & Cook, 2001) influences their motives to befriend other victimized children. The friendship nominations of Child C appear particularly homophilous as they are not only exclusively given to children with victim reputations but children who also share the same racial/ethnic background. Child C represents the worst case scenario for youth in middle school—in which victimization is likely to persist, or even worsen, across time. Child D shares some of the risk of chronic victimization from having both reciprocal and desired friends who are victimized. However, this child displays the willingness to cross *some* social boundaries by seeking out friendships with cross-ethnic peers—peers who are victimized but who maintain a certain amount of social status just by being in the numerical ethnic majority in their school. Thus, for Child D who would otherwise continue to be victimized, these cross-ethnic desired friendships play a special protective role by decreasing the likelihood of victimization over time.

Contributions and Future Directions

This study makes several noteworthy contributions to the literature. First and foremost, by distinguishing between children's reciprocated and desired friendship nominations, this study demonstrates a useful method for including more children in the study of victimization and broadens our understanding of how different types of friendships may serve as either risk or protective factors in children's victim status over time. Next, by examining the ethnic context in which friendships occur, this study provides a backdrop for peer relations that may be more

relevant for today's multiethnic schools. In particular, by considering the ethnic representation of students in their classrooms as well as the same- or cross-ethnic nature of their friendships, this study may help clarify the limited body of victimization research that has reported mixed findings when taking school ethnic context into account. Finally, by using students' course schedules to measure classroom context at the individual level, this study utilizes a novel methodological approach that may be beneficial for any study of school context during the middle and/or high school years.

Despite these contributions, some limitations of this study should be considered. Using school records such as course schedules to create individualized measures of school context is a lengthy and time-intensive process; as such, the results reported here are only based on two time points in the larger longitudinal study from which the data were taken. The inclusion of data from later waves of the study will be critical to understanding important topics such as whether certain individual or school contextual characteristics are associated with desired friendships that *become* reciprocal friendships and whether choosing higher status desired friends (especially those who become reciprocal friends) is associated with more positive social and academic adjustment outcomes later in middle school.

A second limitation relates to the measurement of ethnic representation. In this study, school ethnic context was measured by students' own ethnic group representation (i.e., numerical minority/majority standing in the classroom) without taking into consideration the overall balance of ethnic groups in their classrooms or at their school. It is therefore unclear how social reputations may be shaped differentially when there are a varying number of ethnic groups in the student population. For example, being in the numerical ethnic minority may be more or less of a risk factor for chronic victimization when there are multiple other ethnic minority groups vs.

when there is a small, single ethnic minority group and a large, single ethnic majority group. Future research using individual measures of diversity that account for the size *and* number of ethnic groups present in students' classrooms should further explore this important feature of the classroom ethnic context.

A Final Cautionary Note

The results of this study imply that for early adolescents who are trying to improve their peer reputation, associations with low status (e.g., rejected or victimized) peers could come with social costs that outweigh the benefits of befriending such children, suggesting that discarding these friendships to pursue friendships with higher status peers may afford children the best chance of avoiding victimization themselves. While effective, this approach could result in greater victimization among those at the bottom of the social hierarchy, especially if former victims, as was the case with William in the Merten (1996) study, engage in harassment of lower status peers in order to distance themselves from their past status. The findings reported here serve to document the way social status hierarchies may operate during middle school, but they are not intended to inform intervention approaches directly. In other words, although certain friendship strategies may be successful in the avoidance of chronic victimization, more prosocial approaches should be considered when designing interventions for victimized youth in order to protect the children at greatest risk. For example, helping victimized children expand their circle of friends while encouraging peer accepted children to intervene on behalf of their less accepted peers may help create a positive social climate in middle school that benefits children on both ends the social status spectrum.

Table 2.1

Victim Status of Reciprocal vs. Desired Friends, Ethnic Group Representation, and Victim Reputation Stability from Fall to Spring of 6th Grade

	Step 1	Step 2	Step 3	Step 4
	Est. (S.E.)	Est. (S.E.)	Est. (S.E.)	Est. (S.E.)
Intercept	-0.03 (0.03)	-0.03 (0.03)	-0.04 (0.03)	-0.06 (0.04)
Sex	0.01 (0.04)	0.01 (0.04)	0.01 (0.04)	0.02 (0.04)
Fall Victim Reputation	0.42 (0.02)***	0.42 (0.02)***	0.42 (0.02)***	0.3 (0.04)***
Victim Reputation of Reciprocal Friends	0.07 (0.02)**	0.06 (0.02)**	0.04 (0.02)	0.04 (0.05)
Victim Reputation of Desired Friends	0.08 (0.02)**	0.08 (0.02)**	0.07 (0.02)**	0.17 (0.05)**
Ethnic Group Representation				0.05 (0.08)
Fall Victim Reputation x Victim Reputation of Reciprocal Friends		0.11 (0.02)***	0.07 (0.02)**	-0.2 (0.06)**
Fall Victim Reputation x Victim Reputation of Desired Friends		-0.05 (0.02)*	-0.06 (0.02)**	0.01 (0.05)
Victim Reputation of Reciprocal Friends x Victim Reputation of Desired Friends			0.03 (0.03)	0.16 (0.08)*
Fall Victim Reputation x Ethnic Group Representation				0.27 (0.09)**
Victim Reputation of Reciprocal Friends x Ethnic Group Representation				0 (0.11)
Victim Reputation of Desired Friends x Ethnic Group Representation				-0.19 (0.1)
Fall Victim Reputation x Victim Reputation of Reciprocal Friends x Victim Reputation of Desired Friends			0.07 (0.03)**	0.23 (0.05)***
Fall Victim Reputation x Victim Reputation of Reciprocal Friends x Ethnic Group Representation				0.59 (0.13)***
Fall Victim Reputation x Victim Reputation of Desired Friends x Ethnic Group Representation				-0.1 (0.07)
Victim Reputation of Reciprocal Friends x Victim Reputation of Desired Friends x Ethnic Group Representation				-0.2 (0.14)
Fall Victim Reputation x Victim Reputation of Reciprocal Friends x Victim Reputation of Desired Friends x Ethnic Group Representation				-0.43 (0.11)**
AIC	4140.9	4126.0	4120.6	3989.8
BIC	4142.8	4127.9	4126.5	3990.7

Note. Intercept values based on standardized “picked on” nominations received in the spring of 6th grade. Values in parentheses represent standard errors. *p<.05, **p<.01, ***p<.001.

Table 2.2

Victim Status of Desired Friends, Cross-Ethnic Friendships, Ethnic Group Representation, and Victim Reputation Stability from Fall to Spring of 6th Grade

	Step 1	Step 2	Step 3	Step 4
	Est. (S.E.)	Est. (S.E.)	Est. (S.E.)	Est. (S.E.)
Intercept	0 (0.03)	-0.01 (0.03)	-0.01 (0.03)	-0.06 (0.06)
Sex	-0.01 (0.04)	-0.01 (0.03)	0 (0.03)	0.01 (0.04)
Fall Victim Reputation	0.5 (0.02)***	0.52 (0.02)***	0.53 (0.02)***	0.35 (0.06)***
Victim Reputation of Desired Friends	0.08 (0.02)**	0.08 (0.02)**	0.02 (0.03)	0.07 (0.08)
Cross-Ethnic Friendships	0.01 (0.04)	0.01 (0.04)	0.01 (0.04)	0.09 (0.09)
Ethnic Group Representation				0.08 (0.11)
Fall Victim Reputation		0.07 (0.02)**	0.05 (0.02)*	0.3 (0.04)***
x Victim Reputation of Desired Friends				
Fall Victim Reputation		-0.06 (0.04)	-0.07 (0.04)	0.15 (0.09)
x Cross-Ethnic Friendships				
Victim Reputation of Desired Friends			0.15 (0.05)**	0.05 (0.11)
x Cross-Ethnic Friendships				
Fall Victim Reputation				0.31 (0.12)**
x Ethnic Group Representation				
Victim Reputation of Desired Friends				-0.08 (0.13)
x Ethnic Group Representation				
Cross-Ethnic Friendships				-0.19 (0.19)
x Ethnic Group Representation				
Fall Victim Reputation			0.1 (0.05)*	-0.58 (0.12)***
x Victim Reputation of Desired Friends				
x Cross-Ethnic Friendships				
Fall Victim Reputation				-0.48 (0.06)***
x Victim Reputation of Desired Friends				
x Ethnic Group Representation				
Fall Victim Reputation				-0.41 (0.2)*
x Cross-Ethnic Friendships				
x Ethnic Group Representation				
Victim Reputation of Desired Friends				0.22 (0.22)
x Cross-Ethnic Friendships				
x Ethnic Group Representation				
Fall Victim Reputation				1.46 (0.25)***
x Victim Reputation of Desired Friends				
x Cross-Ethnic Friendships				
x Ethnic Group Representation				
AIC	6044.9	6037.9	6032.4	5825.1
BIC	6045.9	6038.9	6033.3	5826.1

Note. Intercept values based on standardized “picked on” nominations received in the spring of 6th grade. Values in parentheses represent standard errors. *p<.05, **p<.01, ***p<.001.

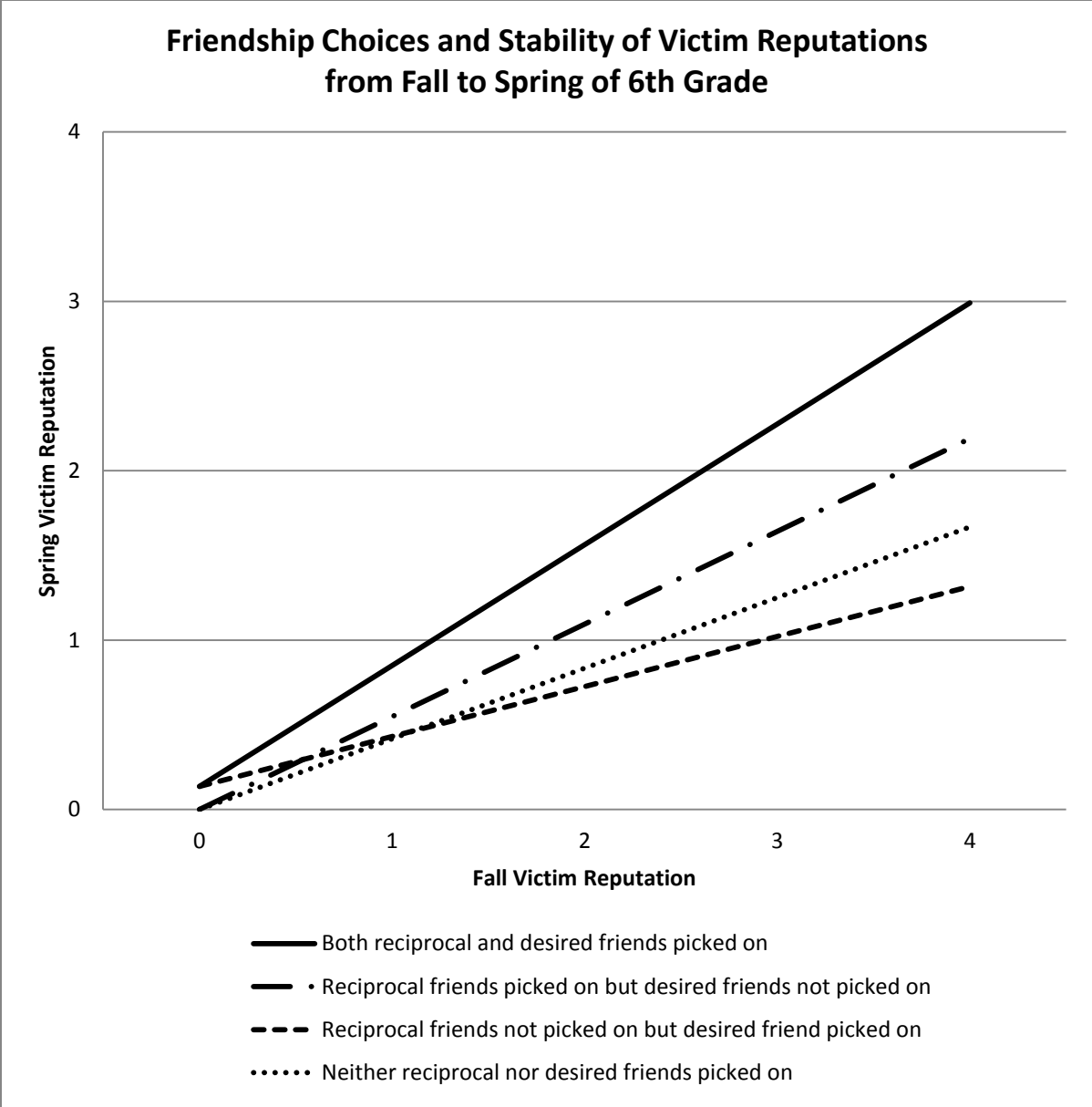


Figure 2.1. Friendship choices and stability of victim reputations in 6th grade. Victim reputations in fall and spring of 6th grade based on standardized “picked on” nominations received.

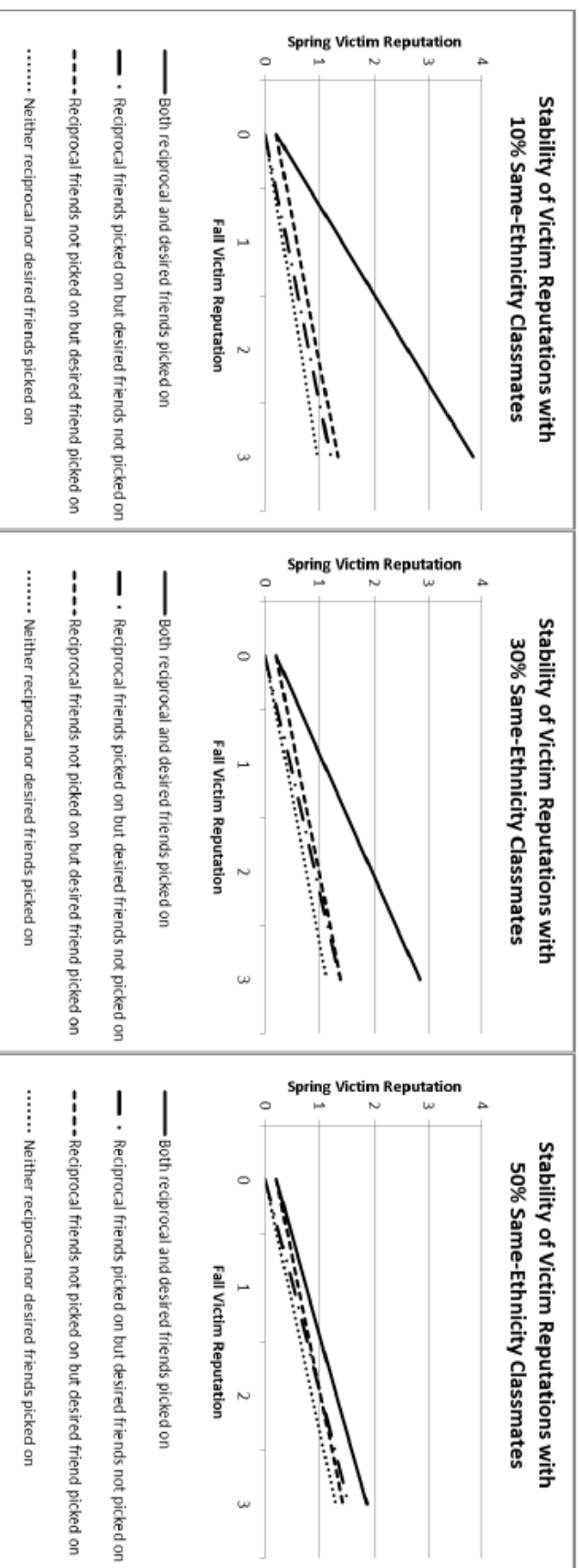


Figure 2.2. Friendship choices and stability of victim reputations by ethnic group representation in the classroom. Victim reputations in fall and spring of 6th grade based on standardized “picked on” nominations received.

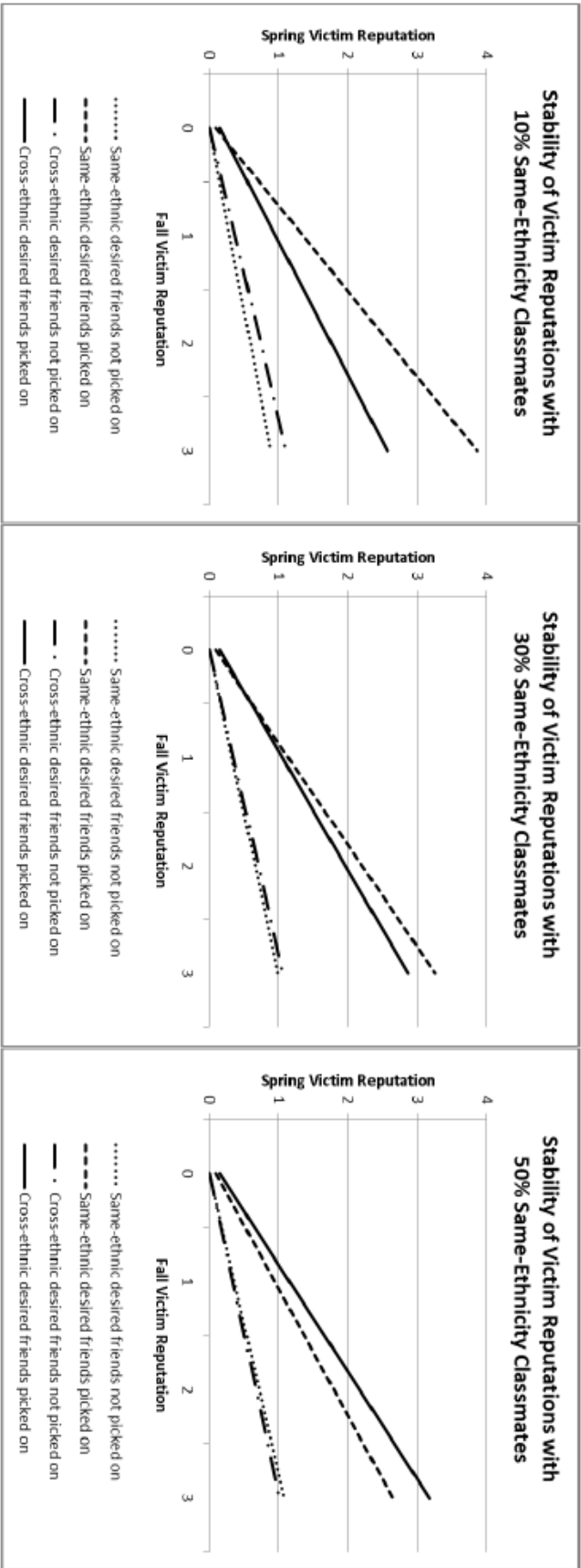


Figure 2.3. Cross-ethnic friendship choices among desired friends and stability of victim reputations by ethnic group representation in the classroom. Victim reputations in fall and spring of 6th grade based on standardized "picked on" nominations received.

General Discussion

In this dissertation, I investigated features of the classroom context—together with individual risk and protective factors—that influenced peer victimization in the first year of middle school. Using measures of classroom context unique to each student based on his/her course schedule, I observed a complex set of relationships between students, their peers (including friends and classmates), and the demographic and structural characteristics of their classrooms.

In the first study, I found that social preference was more strongly correlated with peer victimization the more children shared classes with the same classmates throughout the school day. In the spring of 6th grade, children who experienced higher levels of academic teaming were more likely to be victimized if they had low social preference among peers and less likely to be victimized if they had high social preference among peers. The effect of teaming was significantly more pronounced in higher performing classrooms, suggesting that peer aggression may be more common in more academically oriented contexts. The relationship between social preference and peer victimization was weakest at low levels of academic teaming, regardless of classroom academic performance.

In the second study, I found that having reciprocal friends with a victim reputation was strongly associated with stability in children's own victim reputation from the fall to spring of 6th grade. This was particularly true for children in the numerical ethnic minority in their classrooms. Being in the numerical ethnic *majority*, however, appeared to buffer the effect of having reciprocal friends who were victimized in that victim reputations of ethnic majority children were least stable, regardless of the victim status of either their reciprocal or desired friends. Desired (i.e., unreciprocated) friendships with non-victimized peers also appeared to play a protective role against chronic victimization. Choosing non-victimized desired friends,

even when reciprocal friends *were* victimized, decreased the likelihood of having a stable victim reputation in 6th grade.

Because numerical ethnic representation in the classroom had such a strong impact on the relationship between friends' victim status and children's own victim reputation over time, I also explored the same- vs. cross-ethnic nature of children's friendships. I found that reciprocal same-ethnic and cross-ethnic friends were equally likely (or unlikely, depending on their victim status) to contribute to children's chronic victimization. However, *desired* same-ethnic and cross-ethnic friends had a differential influence on children's victim reputation. Victim status from fall to spring of 6th grade was most stable for ethnic *minority* children whose desired *same-ethnic* friends were victimized and ethnic *majority* children whose desired *cross-ethnic* friends were victimized. Overall, the results of my second study suggest that the reputation of desired friends may be particularly influential when it comes to children's own susceptibility to chronic victimization, and that the ethnic representation of children *and* their friends predicts social status in middle school.

Peer victimization is one of the most serious problems children face in middle school today. While common intervention programs (e.g., Olweus Bullying Prevention Program, KiVa Anti-Bullying Program) have been somewhat successful in reducing victimization, these approaches focus on school-wide efforts to increase the collective responsibility of all students. However, decreasing tolerance for aggression at the school level is just one component of bullying prevention/intervention. That is, it may be equally important to have targeted approaches that help victimized youth develop their own set of coping skills (see Graham, 2010). The findings from my dissertation suggest that one of these skills may include expanding one's friendship network beyond a single group of homogeneous peers.

Taken together, my two studies also demonstrate that although middle school children themselves may have some influence on their own vulnerability in the peer group (e.g., through their friendship choices), their experiences with peer victimization may be largely dependent on the characteristics of the classrooms in which they reside at school. As such, researchers and practitioners alike should consider features of the classroom context that would promote the most positive social adjustment among children in middle school. For example, the findings from both studies suggest that heterogeneity in individual characteristics of students, such as their academic performance, their social status, and their ethnic group membership, may be an especially protective feature of classrooms. Classrooms with a range of academic performance levels among students may reduce the concentration of socially dominant and therefore more aggressive children, which may reduce the risk of victimization among their low status peers. Since social status is also linked to numerical ethnic representation, classroom ethnic diversity may promote a balance of power between ethnic groups which may reduce race-based victimization (Juvonen et al., 2006). Even heterogeneity in students themselves (i.e., taking classes with different sets of classmates each period) may be important in preventing victimization as low levels of academic teaming appear to reduce the social visibility of low status children in their classrooms. Creating more academically, socially, and ethnically balanced classroom environments and providing students with the greatest exposure to a variety of different classmates are simple and pragmatic intervention approaches that can be implemented directly by schools in order to maximize children's positive experiences during the school day.

On a methodological note, in this dissertation I used students' class schedules to create individualized measures of classroom characteristics. This appears to be a promising new

approach to measuring classroom context for students in secondary education settings and has some noteworthy advantages. First, this method makes it possible to detect differences in the influence of classroom context at various levels of measurement: between classrooms and schools, between students depending on their course schedules, and even between courses taken by the same student. Next, this method may remove the need for multilevel modeling if nearly all the variance in classroom context resides between students and not between classrooms or schools. When multilevel modeling *is* necessary, classroom context measured at the individual level may substantially increase the number of level-2 units (e.g., if classroom characteristics across courses are nested within individuals nested within schools). Most importantly, by using this method, the individual experiences of children in middle and high school can be understood in ways never before examined. Instead of relying on measures of context specific to one classroom or school, this method makes it possible to investigate context across classrooms specific to each child. In other words, the entire school day as experienced by individual children as they travel from class to class can now be observed. While the primary contribution of my dissertation is substantive, it is my hope that this novel approach to measuring classroom context will also make a significant methodological contribution to the literature.

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