5-2020

Examining the Relationships Between College and High School Relational and Physical Victimization and its Effects on Self-Esteem

Tylore Gross
tsgross@unomaha.edu

Juan F. Casas
University of Nebraska at Omaha

Examining the Relationships Between College and High School Relational and Physical Victimization and its Effects on Self-Esteem

Tylore S. Gross

University of Nebraska at Omaha

Abstract

The purpose of the current study is to investigate the relationship between high school and college peer relational and physical victimization and its effects on self-esteem, as well parallel associations between relational victimization in romantic relationships and its effects on self-esteem. Participants were recruited at a Midwest University to participate in an online study through the Psychology Department wherein they completed a series of questionnaires. A total of 317 college students participated in this study, including 245 females (77%) and 72 males (23%). Participants received extra credit in their psychology class for participating. Self-reports of self-esteem were measured using the Rosenberg's Self-Esteem Scale (Rosenberg, 1965). In assessing peer victimization in high school and college we used two of the three subscales on a peer victimization in high school and college measure. Correlations were run to test for relationships among high school and college self- reports of peer relational and physical victimization, self-esteem, and relational victimization in romantic relationships. All the correlations were in the expected direction, and all but two were significant. Three hierarchical multiple regression analyses were also conducted on the outcome variable of college self-esteem as predicted by type of victimization and two of the models were significant. This research suggests the importance of understanding the long-lasting impact of peer victimization for professionals working with students on mental health issues.

Keywords: Relational victimization, physical victimization, self-esteem, peer relationships, romantic relationships

Examining the Relationships Between College and High School Relational and Physical Victimization and its Effects on Self-Esteem

There is evidence the presence of relational and physical aggression in school environments may contribute to making a less safe school environment for students (Dahlen, Czar, Prather, & Dyess, 2013). Crick and Grotpeter (1995) define relational aggression as behaviors that damages another person's feelings of inclusion or friendships by peer groups (e.g., spreading rumors about a person that might hurt friendships or withdrawing from a friendship in order to hurt someone's feelings). Physical aggression includes actions that can damage physically (e. g., kicking, hitting, pushing) or threats of such actions (Crick, & Grotpeter, 1995; Dahlen et al., 2013). Importantly, victimization has been studied in peer and dyadic relationships across different points in the lifespan.

Victimization Across Developmental Periods

Research has been done on peer victimization and school contexts across a range of developmental periods. Relational victimization has been found in children as early as preschool. Krygsman and Vaillancourt (2019) studied preschoolers to see if there were associations between relational peer victimization and depression symptoms. It was found that relational victimization by peers was related to an increase in depression symptoms. Crick, Casas, and Ku (1999) also sought to study relational and physical peer victimization in preschoolers. Their results showed males were more likely to be victims of physical aggression and that girls were more often victims of relational aggression. Also, children who were both physically and relationally victimized exhibited behaviors that were more likely to make them appear vulnerable or different to peers which likely contributed to their maltreatment.

Crick and Grotpeter (1995) found relational aggression appeared more among females than males in fifth and sixth-graders. Baly, Cornell, and Lovegrove (2014) conducted a longitudinal study that found the more victimization that students faced in middle school predicted higher risky behaviors, lower academic achievement, and more negative attitudes about school. Boys were also found to express aggressive attitudes and were less likely to seek help and less willing to report victimization than girls. There have also been studies that investigated limiting forms of victimization in middle schools. Morgan-Lopez, Saavedra, Yaros, Trudeau, and Buben (2020) found that a school-based mental health approach, which has schools collaborate with other mental health agencies from outside resources, has a significant positive effect on lessening aggression and victimization in middle schools. However, gender differences were not looked at to see if boys or girls responded better to it. Van Ryzin and Roseth (2018) found that cooperative learning in middle school can significantly limit the negative repercussions that victimization causes on students, but this study also did not examine gender differences. Godleski, Kamper, Ostrov, Hart, and Blakely-McClure (2015), found that teacher accounts of peer rejection predicted an increase in researcher assistant accounts of relational victimization, above and beyond the roles of emotion regulation, relational and physical aggression, and relational victimization at their first time point of data collection when the participants were 14 years old. Moreover, social reaction increased children's vulnerability for negative peer experience into the future (Godleski et al., 2015). However, Godleski et al. (2015) did not test for gender differences.

Victims of peer victimization have been studied and understood among children and early adolescents, but there is less known about victimization in late adolescence and emerging adulthood. Schmeelk, Sylvers, and Lilienfeld (2008) looked at bridging the gap by looking at

young adults. The university setting provides an ideal setting for studying relational and physical victimization because of the important periods of transitions from adolescence to emerging adulthood. According to Schmeelk et al. (2008), for many student's college is their first opportunity to live on their own. As such, it may also be their first opportunity for intimacy, career planning, spreading malicious rumors, gossip, and social exclusion, which can be extremely disruptive during this period. Schmeelk et al. (2008) found males scored significantly higher on scores of relational aggression than female counterparts. Dahlen et al. (2013) examined relational aggression and victimization in college students. The study found clear support for many correlates of relational aggression and victimization with overlaps in peer and romantic relational victimization among college students. Findings also showed alcohol misuse and emotional problems predicted both peer/general and romantic relational aggression, separate of their respective forms of victimization. Dahlen et al. (2013) also found emotional problems predicted romantic relational aggression, separate from forms of victimization.

Victimization and Adjustment Difficulties

Crick (1996) found positive links between physical and relational aggression in both children and adolescent samples in emotional and interpersonal difficulties, such as depression and maladaptive personality traits. Rueger and Jenkins (2014) found that experiencing peer victimization can have adverse effects on depression, anxiety, school grades, attitudes, and attendance such that actual frequency of peer victimization events affect overall academic performance. These adjustment difficulties were shown for both males and females. Ruger and Jenkins (2014) also found that females were more likely to report lower levels of self-esteem and higher levels of anxiety and depression compared to males.

There have been numerous studies conducted to look at the relationships between types of victimization and self-esteem specifically. A meta-analysis by Van Geel, Goemans, Zwaanswijk, and Gini (2018) examined the association between self-esteem and relational peer victimization. It was concluded that peer victimization can predict self-esteem, and that lower self-esteem can predict future peer victimization, however, the study did not look at gender differences. Another meta-analysis by Hawker and Boulton (2000) strongly suggests victims of peer aggression often encounter more negative affect and more critical thoughts about themselves than children who have not experienced peer aggression. Hawker and Boulton (2000) did not examine gender differences between studies. Graham and Juvonen (1998) found that students who perceive themselves as victimized are susceptible to loneliness, social anxiety, and low self-worth. It was also found that victims tend to be more unhappy, insecure, and have lower self-esteem than their non-victimized counterparts. However, gender differences were not examined in this study.

Gender Differences

Several studies have suggested that there are important gender differences in how males and females respond to relational and physical victimization by their peers. Males, for example, may have higher rates of conflict than females (Miller, Danaher, & Forbes 1986). Females, on the other hand, may respond with fear of negative impacts on their social relationships. Lento (2006) found that males were more likely to report being targets of physical aggression by peers than females. However, both males and females in college frequently referenced relational aggression in romantic relationships as particularly damaging. Males were more likely to admit to being targets of peer physical aggression than females. Males were significantly more physically aggressive than females. While these are important gender differences, past studies

have also found some similarities. Crick, Bigbee, and Howes (1996) found that verbal insults directed to the same-sex were cited as being common among both males and females. Also, males and females reported being targets of relationally aggressive acts.

Romantic Relationships

Most research has examined peer victimization because studies suggest that young adults are more likely to be victimized by peers than romantic partners. Nevertheless, Linder, Crick, and Collins (2002) suggest that studies on aggression in romantic relationships have value and, importantly, should be sure to include an examination of relational victimization in addition to physical victimization. This study also found that males and females reported using equal amounts of relational aggression in the dyadic relationship context. Moreover, regardless of gender, victimization and romantic relational aggression was associated with poorer views of romantic relationship quality. Further, people who reported partaking in relational aggression reported being less trusting and more clingy, frustrated, and jealous in their romantic relationships. Importantly, Lento (2006) found that while young adults are more prone to relationally aggressive acts by peers than romantic partners, both physical and relational victimization in peer relationships were associated with victimization in romantic relationships.

Novak and Furman (2016) examined both relationship and individual level risk factors and their association with physical victimization. The study found both individual and relationship level variables were significantly related to risk for partner violence. However, for individuals reporting an experience of partner aggression did not significantly alter a person's risk of future partner violence. Wolf et al. (2001) examined studies that measure abusive behavior in dating partners in adolescents using the Conflict in Adolescent Dating Relationships Inventory (CADRI). Their work suggests reports of relational and sexual abuse varied by age

and gender that acts of verbal abuse, whereas reports of physical abuse, and threatening behaviors were mostly underlying factors.

The Present Research

The purpose of this study is to expand on the available literature examining peer victimization and its effects on self-esteem in high school and college. Based on the Baly et al. (2014) findings with victimization in adolescence, it is hypothesized that there will be a significant, positive relationship between high school relational victimization and college relational victimization. Similarly, it is also hypothesized that there will be a significant, positive relationship between high school physical victimization and college physical victimization. Based on the van Geel et al. (2018) findings, it is also hypothesized that there will be a significant, negative association between self-esteem and peer relational and physical victimization. Finally, based on findings from Linder, Crick, and Collins (2002), it is hypothesized that there will be a significant, negative association between romantic relationship relational victimization and self-esteem.

Method

Participants

Participants were recruited at the University of Nebraska at Omaha to participate in an online study through the Psychology department. The participants ranged from first year students to graduate students, with the majority being undergraduate upperclassmen (61% were upperclassmen). A total of 317 college students participated in this study, including 245 females (77%) and 72 males (23%). Participants were given extra credit in their psychology class for taking part in the study.

Procedure

Participants sign up to partake in the online research study. After they signed up for the research and provided consent, students then answered a series of questionnaires. The responses were recorded, and participants were awarded extra credit for their respective psychology classes.

Measures

Self-reports of self-esteem were measured using the Rosenberg's Self-Esteem Scale (Rosenberg, 1965). Sinclair et al. (2010) examined whether the Rosenberg Self-Esteem Scale was appropriate over different demographics and to see if this is an appropriate measure to test for self-esteem. It found that the Rosenberg Self-Esteem Scale is a generally satisfactory scale for use across different demographics. The scale included 10 items (e.g., "At times I think I am no good at all"), five of which were reverse-coded (e.g., "I take a positive attitude toward myself"). Participants responded to items using a 4-point Likert scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). The scale demonstrated good reliability in the current sample ($\alpha = .92$). Scores for self-esteem were calculated by obtaining the mean of the 10 items. High scores indicated less self-esteem and low scores indicated more self-esteem.

In assessing peer victimization in high school and college we used two of the three subscales on the peer victimization in high school and college measure. Specifically, relational peer victimization was measured in high school with five self-reported items (e.g., "How often did other students leave you out on purpose when it was time to do an activity in high school") and demonstrated good reliability ($\alpha = .87$). Physical peer victimization in high school was measured with four self-reported items (e.g., "How often did you get hit by another student in high school") and also demonstrated good reliability ($\alpha = .85$). The final scale consisted of five

items for relational peer victimization and four items for physical victimization. Participants responded to items using a 5-point Likert scale ranging from 1 (*never*) to 5 (*all the time*). High scores indicated increased victimization on both the relation and physical victimization and low scores indicated less victimization on both the relational and physical victimization.

Relational peer victimization in college was measured with five self-reported items (e.g., "How often does another student tell lies about you to make other students not like you anymore in college") and demonstrated good reliability (α = .89). Physical peer victimization in college was measured with four self-reported items (e.g., "How often did you get hit by another student at school in college"). Physical peer victimization also demonstrated good reliability (α = .95).

Romantic relationship relational victimization was measured in high school with five self-reported items (e.g., "My significant other/partner ridiculed or made fun of me in front of others") and demonstrated good reliability (α = .95). Participants responded to items using a 4-point Likert scale ranging from 1 (*never*) to 4 (*often*). Relational romantic relationship victimization was measured in college with the same five self-reported items. Adequate reliability was also demonstrated for college relational romantic relationship victimization (α = .74). High scores indicated higher occurrence of romantic relational victimization and low scores indicated lower occurrence of romantic relational victimization.

Results

Correlations

Descriptive statistics were reported for key variables in this project (see Table 1). We ran correlations to test for relationships among high school and college self- reports of relational and physical victimization, self-esteem, and relational victimization in romantic relationships (see table 2). All the correlations were in the expected direction, and all but two were significant.

Associations between self-esteem and peer victimization in high school and college. There was a significant negative correlation between high school peer physical victimization and self-esteem, such that higher levels of high school peer physical victimization were associated with lower levels of self-esteem, $r(305) = -.22$, $p < .01$. There was also a significant negative correlation between self-esteem and high school peer relational victimization, such that higher levels of high school peer relational victimization were associated with lower levels of self-esteem, $r(305) = -.31$, $p < .01$. There was a significant negative correlation between self-esteem and college relational victimization, such that higher levels of college relational victimization were associated with lower levels of self-esteem, $r(304) = -.15$, $p < .01$. There was also a significant negative correlation between self-esteem and college relational victimization in romantic relationships, such that higher levels of college relational victimization in romantic relationships were associated with lower levels of self-esteem, $r(300) = -.14$, $p < .05$.

Associations between relational and physical victimization in high school and college. There was a significant positive correlation between high school peer physical victimization and high school relational victimization, such that higher levels of high school peer physical victimization were associated with higher levels of high school relational victimization, $r(316) = .44$, $p < .01$. There was a significant positive correlation between high school peer physical victimization and college peer physical victimization, such that higher levels of high school peer physical victimization were associated with higher levels of college peer physical victimization, $r(316) = .66$, $p < .01$. There was a significant positive correlation between high school peer physical victimization and college relational victimization, such that higher levels of high school peer physical victimization were associated with higher levels of college relational victimization, $r(314) = .42$, $p < .01$. There was a significant positive correlation between high

school peer physical victimization and high school relational victimization in romantic relationships, such that higher levels of high school peer physical victimization were associated with higher levels of high school relational victimization in romantic relationships, $r(313) = .25$, $p < .01$. There was a significant positive correlation between high school peer physical victimization and college relational victimization in romantic relationships, such that higher levels of high school peer physical victimization were associated with higher levels of college relational victimization in romantic relationships, $r(310) = .13$, $p < .05$**.**

There was a significant positive correlation between high school peer relational victimization and college peer physical victimization, such that higher levels of high school peer relational victimization were associated with higher levels of college peer physical victimization, $r(314) = .27$, $p < .01$. There was a significant positive correlation between high school peer relational victimization and college relational victimization, such that higher levels of high school peer relational victimization were associated with higher levels of college relational victimization, $r(312) = .38$, $p < .01$. There was a significant positive correlation between high school peer relational victimization and high school relational victimization in romantic relationships, such that higher levels of high school peer relational victimization were associated with higher levels of high school relational victimization in romantic relationships, $r(311) = .37$, $p < .01$. There was a significant positive correlation between high school peer relational victimization and college relational victimization in romantic relationships, such that higher levels of high school peer relational victimization were associated with higher levels of college relational victimization in romantic relationships, $r(308) = .28$, $p < .01$.

There was a significant positive correlation between college peer physical victimization and college relational victimization, such that higher levels of college peer physical victimization

were associated with higher levels of college relational victimization, $r(313) = .70$, $p < .01$. There was a significant positive correlation between college peer physical victimization and high school relational victimization in romantic relationships, such that higher levels of college peer physical victimization were associated with higher levels of high school relational victimization in romantic relationships, $r(311) = .14$, $p < .05$. There was a significant positive correlation between college peer physical victimization and college relational victimization, such that higher levels of college peer physical victimization were associated with higher levels of college relational victimization in romantic relationships, $r(308) = .26$, $p < .01$.

Associations between relational victimization in romantic relationships in high school and college. There was a significant positive correlation between college relational victimization and college relational victimization in romantic relationships, such that higher levels of college relational victimization were associated with higher levels of college relational victimization in romantic relationships, $r(306) = .24$, $p < .01$. There was a significant positive correlation between high school relational victimization in romantic relationships and college relational victimization in romantic relationships, such that higher levels of high school relational victimization in romantic relationships were associated with higher levels of college relational victimization in romantic relationships, $r(308) = .40$, $p < .01$. Taken together, this pattern of correlations across variables indicated the utility of completing follow-up regression analyses.

Regression Analyses

Three hierarchical multiple regression analyses were conducted on the outcome variable of college self-esteem as predicted by type of victimization using the following model. In the first block, each form of college peer/dyadic victimization was entered (i.e., college relational victimization, college physical victimization, college romantic relationship relational

victimization). This block was followed by another block controlling for gender, with the third and final block examining the unique variance accounted for by each corresponding form of high school peer victimization (i.e., high school relational victimization, high school physical victimization, high school romantic relationship relational victimization). More specifically, in the first block for each of the hierarchical regressions, the college level of the peer/dyadic victimization were controlled for using the ANCOVA approach. Thus, successive blocks predicted changes in the outcome variable. The second block examined unique variance accounted for by gender above and beyond the college form of victimization, and the final block examined unique variance accounted for by the high school form of victimization above and beyond the same college form of victimization and gender.

Hierarchical high school relational victimization regression predicting change in self-esteem. The first hierarchical regression predicted change in college self-esteem from relational victimization (see Table 3). The full model was marginally significant and accounted for 2% of the variance in college self-esteem, $R^2 = .02$, $F(3, 298) = 2.17$, $p < .10$. The first block, which added college relational victimization, was not significant, $\Delta R^2 = .00$, $\Delta F(1, 300) = .41$, $p > .05$. The second block was marginally significant, with a marginally significant amount of variance accounted for by the addition of gender, $\Delta R^2 = .01$, $\Delta F(1, 299) = 2.85$, $p < .10$. Specifically, gender had a marginally significant, unique effect on change in college self-worth ($\beta = .10$, $t(299) = 1.69$, $p < .10$), such that girls had lower college self-worth than boys. The final block, examining change in college self-worth predicted by high school relational victimization was also marginally significant, $\Delta R^2 = .01$, $\Delta F(1, 299) = 3.23$, $p < .10$. Specifically, high school relational victimization had a marginally significant, unique effect on change in college self-

worth (β = -.11, $t(298) = -1.80$, $p < .10$), such that lower high school relational victimization was associated with higher levels of college self-esteem.

Hierarchical high school physical victimization regression predicting change in self-esteem. The second hierarchical regression predicted change in college self-esteem from physical victimization (see Table 4). The full model was significant and accounted for 5% of the variance in college self-esteem, $R^2 = .05$, $F(3, 300) = 5.23$, $p < .05$. The first block, which added college physical victimization, was not significant, $\Delta R^2 = .00$, $\Delta F(1, 302) = .06$, $p > .05$. The second block was marginally significant, with a marginally significant amount of variance accounted for by the addition of gender, $\Delta R^2 = .01$, $\Delta F(1, 301) = 3.52$, $p < .10$. Specifically, gender had a marginally significant, unique effect on change in college self-worth (β = .11, $t(301) = 1.88$, $p < .10$), such that girls had lower college self-worth than boys. The final block, examining change in college self-worth predicted by high school physical victimization was significant, $\Delta R^2 = .04$, $\Delta F(1, 300) = 11.97$, $p < .05$. Specifically, high school relational victimization had a significant, unique effect on change in college self-worth (β = -.27, $t(300) = -3.46$, $p < .01$), such that lower high school physical victimization was associated with higher levels of college self-esteem.

Hierarchical high school relational victimization in romantic relationships predicting change in self-esteem. The final regression examining the unique variance in college self-esteem accounted for by romantic relationship relational victimization was not significant, $R^2 = .01$, $F(3, 294) = 1.09$, $p > .05$.

Discussion

This research project helps to fill a gap within the literature by examining the relationship between peer and dyadic victimization and self-esteem during adolescence and emerging

adulthood. The findings from this study show, among other things, that self-reports of high school physical and relational victimization can predict self-esteem levels into the college years even when controlling for other similar concurrent variables. The first hypothesis suggesting stability between high school and college peer relational victimization was supported since the correlation coefficient was significant and positive between high school and college relational victimization. The second hypothesis regarding high school and college peer physical victimization was also supported since the correlation coefficient was significantly positive between high school and college physical victimization. These are consistent with findings from Kwan, Gordon, Minnich, Carter, and Troop-Gordon (2017) and suggests stability between high school and college peer victimization experiences.

The third hypothesis was also supported as there was a significant, negative relationship between self-esteem and physical victimization. This is consistent with findings from Schmeelk et al. (2008) which found that both relational and physical victimization in emerging adulthood can have negative effects in their lives. This is consistent with findings from Rueger and Jenkins (2014) who found that experiencing peer victimization can have harmful effects on adjustment difficulties. Crick (1996) also found positive links between physical and relational aggression in both children and adolescents with various types of adjustment difficulties. Taken together, these findings suggest that both aggressors and victims are likely to have psychosocial adjustment difficulties. Moreover, the findings from this study show just how impactful high school peer victimization experiences can be. The follow-up regression analyses indicated that, with respect to self-esteem, they were still impacting how people thought of themselves well into college even with college peer victimization experiences accounted for.

In terms of the dyadic findings, although there was an important concurrent association between romantic relationship relational victimization in college and self-esteem, the fourth hypothesis was not supported in that high school relational victimization did not predict college self-esteem. This is somewhat consistent with the Linder et al. (2002) study that suggests the value of looking at romantic relationship relational victimization. Since there was a relationship between college romantic relationship relational victimization and self-esteem, the results were not significant between high school romantic relationship relational victimization and college self-esteem. It will be important for future studies to research romantic relationship relational victimization to investigate more causal relationships and gain a better understanding of these mixed findings.

Among other things, the findings from this research also suggests the importance of understanding the long-lasting impact of peer victimization for professionals working with youth on mental health issues. In particular, it highlights the importance of early intervention in order to limit victimization experiences and thereby improve adjustment outcomes. Moses and Williford (2017) found that early intervention for peer victimization can help with developmental impacts including adjustment difficulties.

In terms of study limitations, the sample size was relatively small. A larger and more diverse sample could provide a more comprehensive view. For example, the participants in the study were disproportionally female (72%). It would be of value to know whether a more gender balanced sample would lead to similar findings. Also, given that this was a retrospective methodological approach in that the participants were asked to recall high school experiences of victimization, memory and forgetting could have impacted the accuracy of the study and filtered

more current experiences of victimization. Studies by Frost (2000) and others have found that over longer periods of time (i.e., more than a week) memory becomes less reliable.

Future studies could take a prospective methodological approach so that data collection was being collected at the different time periods, this would increase data validity as participants would not be in the position of having to recall memories from the past. Other components could look at other potential variables such as anger, aggression, or bullying, or focus on the relationship between peer and dyadic victimization and other adjustment indices such as depression, or social anxiety. For example, anger has been linked to victimization in college students previously. Dahlen et al. (2013) found that victimization has many correlations between anger, depression, and anxiety in college age students.

In conclusion, the present study aids in the growing understanding of the harmful effects of physical and relational peer and romantic relationship victimization among adolescents and emerging adults. Specifically, it suggests high school physical and relational victimization predicts college self-esteem and thus strengthens the need for additional work focusing on understanding and ameliorating the negative impact of peer and romantic relationship experiences.

References

Baly, M. W., Cornell, D. G., & Lovegrove, P. (2014). A longitudinal investigation of self- and peer reports of bullying victimization across middle school. *Psychology in the Schools, 51*, 217–240. doi:10.1002/pits.2147

Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Developmental Psychology, 67*, 2317–2327. doi:10.2307/1131625

Crick, N. R., Bigbee, M. A., & Howes, C. (1996). Gender differences in children's norative beliefs about aggression: How do I hurt thee? Let me count the ways. *Child Development, 67*, 1003–1014. doi:10.2307/1131876

Crick, N. R., Casas, J. F., & Ku, H.-C. (1999). Relational and physical forms of peer victimization in preschool. *Developmental Psychology, 35*, 376–385. doi:10.1037/0012-1649.35.2.376

Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*, 710–722. doi:10.2307/1131945

Dahlen, E. R., Czar, K. A., Prather, E., & Dyess, C. (2013). Relational aggression and victimization in college students. *Journal of College Student Development, 54*, 140–154. doi:10.1353/csd.2013.0021

Frost, P. (2000). The quality of false memory over time: Is memory for misinformation "remembered" or "known"? *Psychonomic Bulletin & Review, 7*, 531–536. doi:10.3758/BF03214367

Godleski, S. A., Kamper, K. E., Ostrov, J. M., Hart, E. J., &Blakely-McClure, S. J. (2015). Peer victimization and peer rejection during early childhood. *Journal of Clinical Child & Adolescent Psychology, 44*, 380–392. doi:1080/15374416.2014.940622

Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology, 34*, 587–599. doi:10.1037/0012-1649.34.587

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, 41*, 441–455. doi:10.1111/1469-7610.00629

Krygsman, A., & Vaillancourt, T. (2019). Peer victimization, aggression, and depression symptoms in preschoolers. *Early Childhood Research Quarterly, 47*, 62–73. doi:10.1016/j.ecresq.2018.09.006

Kwan, M. Y., Gordon, K. H., Minnich, A. M., Carter, D. L., & Troop-Gordon, W. (2017). Peer victimization and eating disorder symptoms in college students. *Journal of Social and Clinical Psychology, 36*, 419–436. doi:10.1521/jscp.2017.36.5.419

Lento, J. (2006). Relational and physical victimization by peers and romantic partners in college students. *Journal of Social and Personal Relationships, 23*, 331–348. doi:10.1177/0265407506064200

Linder, J. R., Crick, N. R., & Collins, W. A. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development, 11*, 69–86. doi:10.1111/1467-9507.00187

Miller, P. M., Danaher, D. L., & Forbes, D. (1986). Sex-related strategies for coping with interpersonal conflict in children aged five and seven. *Developmental Psychology, 22,* 543–548. doi:10.1037/0012-1649.22.4.543

Morgan-Lopez, A. A., Saavedra, L. M., Yaros, A. C., Trudeau, J. V., & Buben, A. (2020). The effects of practitioner-delivered school-based mental health on aggression and violence victimization in middle schoolers. *School Mental Health*. doi:10.1007/s12310-020-09361-2

Moses, M., & Williford, A. (2017). Individual indicators of self-reported victimization among elementary school-age students: A latent class analysis. *Children and Youth Services Review, 83,* 33–40. doi:10.1016/j.childyouth.2017.10.006

Novak, J., & Furman, W. (2016). Partner violence during adolescence and young adulthood: Individuals and relationship level risk factors. *Journal of Youth and Adolescence, 45*, 1849–1861. doi:10.1007/s10964-016-0484-4

Rosenberg, M. (1965). Society and adolescent self-image. Princeton, NJ: Princeton University Press.

Rueger, S. Y., & Jenkins, L. N. (2014). Effects of peer victimization on psychological and academic adjustment in early adolescence. *School Psychology Quarterly, 29,* 77–88. doi:10.1037/spq0000036

Schmeelk, K. M., Sylvers, P., & Lilienfeld, S. O. (2008). Trait correlates of relational aggression in nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders, 22,* 269–283. doi:10.1521/pedi/.2008.22.3.269

Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg self-esteem scale: Overall and across

demographic groups living within the united states. *Evaluation & the Health Professions, 33*, 56–80. doi:10.1177/0163278709356187

van Geel, M., Goemans, A., Zwaanswijk, W., & Gini, G. (2016). Does peer victimization predict low self-esteem, or does low self-esteem predict peer victimization? Meta-analyses on longitudinal. *Developmental Review, 49*, 31–40. doi:10.1016/j.dr.2018.07.001

Van Ryzin, M. J., & Roseth, C. J. (2018). Cooperative learning in middle school: A means to improve peer relations and reduce victimization, bullying, and related outcomes. *Journal of Educational Psychology, 110*, 1192–1201. doi:10.1037/edu0000265

Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C & Straatman, A.-L. (2001). Development and validation of the conflict in adolescent dating relationship inventory. *Psychological Assessment, 13*, 277–293. doi:10.1037//1040-3590.13.2.277

Table 1

Descriptive Statistics for Adjustment Variables and Peer Victimization

	N	*M*	*SD*	Minimum	Maximum
Self-Esteem	308	13.24	2.92	0	20
High School Peer Physical Victimization	321	5.15	2.19	4	18
High School Peer Relational Victimization	319	10.47	3.87	5	25
College Peer Physical Victimization	319	4.44	1.81	4	15
College Peer Relational Victimization	317	6.54	2.80	5	20
High School Romantic Relationship Relational Victimization	316	6.82	2.76	5	20
College Romantic Relationship Relational Victimization	313	5.98	1.81	5	17

Table 2

Intercorrelations Among Study Variables

	1.	2.	3.	4.	5.	6.	7.
1. Self-Esteem		-.22**	-.31**	-.15**	-.15**	-.06	-.14**
2. High School Peer Physical Victimization			.44**	.66**	.42**	.25**	.13**
3. High School Peer Relational Victimization				.27**	.38**	.37**	.28**
4. College Peer Physical Victimization					.70**	.14*	.26**
5. College Relational Victimization						.08	.24**
6. High School Relational Victimization Romantic Relationship							.40**
7. College Relational Victimization Romantic Relationship							

Note. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$.

Table 3

Hierarchical Regression Predicting Change in College Self-Esteem from Relational Victimization

Model	*b*	*SE*	*t*	β	*F*	R^2	Δ*F*	ΔR^2
Block 1					.41	.00	.41	.00
College Relational Victimization	-0.04	.06	-.64	-.04				
Block 2					1.63	.01	2.85^{+}	.01
Gender	0.67	.40	1.69^{+}	.10				
Block 3					2.17^{+}	.02	3.23^{+}	.01
High School Relational Victimization	-0.09	.05	-1.80^{+}	-.11				

Note. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$.

Table 4

Hierarchical Regression Predicting Change in College Self-Esteem from Physical Victimization

Model	*b*	*SE*	*t*	β	*F*	R^2	Δ*F*	ΔR^2
Block 1					0.06	.00	0.06	.00
College Physical Victimization	-0.02	.09	-0.25	-.02				
Block 2					1.79	.01	3.52^{+}	.01
Gender	0.75	.40	1.88^{+}	.11				
Block 3					5.23^{**}	.05	11.79^{**}	.04
High School Physical Victimization	-0.36	.10	-3.46^{**}	.10				

Note. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$.