

Perspectives on Bullying

Research on Childhood, Workplace, and Cyberbullying

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Editor

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Introduction

The prospect of elevating one's social status is a common motivating factor for bullying in college, just as it is in elementary school... A recent survey found that 35 percent of the U.S. workforce report being bullied at work... A majority of American school districts have no policies protecting LGBT students from bullying.

Once thought to be solely the bane of children in school settings, bullying is now understood among social scientists to affect adolescents and adults in the workplace and the cyber world—often resulting in substantial, long-term emotional and physical harm. This collection of prominent research articles published in the peer-reviewed journal *Violence and Victims* focuses much-needed attention on a serious problem that has been long ignored and is now on the rise. Bullying experts from a variety of disciplines—psychology, psychiatry, sociology, criminology, counseling, and social work—provide comprehensive, interdisciplinary coverage of bullying in school settings, adulthood, the workplace, and online. They present current research related to predictive factors for bullying, perpetrators of bullying, victimization, and prevention programs. These articles have been selected on the basis of those most frequently downloaded from the online editions of *Violence and Victims*.

This diverse collection of writings opens with “Gender, Bullying Victimization, and Education,” which focuses on gender in regard to the type of bullying experienced and its link to educational outcomes. Bullying has traditionally been associated with early adolescence, a topic addressed in both “Short-Term Stability and Prospective Correlates of Bullying in Middle-School Students: An Examination of Potential Demographic, Psychosocial, and Environmental Influences” and “Understanding Ecological Factors Associated With Bullying Across the Elementary to Middle School Transition in the United States.” Since early adolescent bullying is a worldwide problem, “Individual and Social Network Predictors of Physical Bullying: A Longitudinal Study of Taiwanese Early Adolescents” discusses the relationship between the perpetrators of bullying, their economic status, and family life. Cyberbullying has segued from the adolescent to the adult population and is on the rise. This is particularly problematic since legislation regarding cyberbullying has not kept pace with its increase, leaving many law enforcement personnel at a loss as to how to best handle it. “Psychometric Properties of the Cyberbullying Questionnaire Among Mexican Adolescents” demonstrates the use of this questionnaire, an instrument for measuring the perpetration and victimization of adolescent bullying via new technology along with an analysis of gender differences within cyberbullying. “Do Networking Activities Outside of the Classroom Protect Students Against Being

Bullied? A Field Study With Students in Secondary School Settings in Germany,” discusses the effect of external network activities on reducing bullying within a classroom setting that is conducive to bullying. “The Differential Impacts of Episodic, Chronic, and Cumulative Physical Bullying and Cyberbullying: The Effects of Victimization on the School Experiences, Social Support, and Mental Health of Rural Adolescents,” examines the impacts of past, current, and chronic physical bullying and cyberbullying on youth in rural settings.

Bullying of adults occurs with a surprising frequency. “Teachers Bullied by Students: Forms of Bullying and Perpetrator Characteristics,” surveyed 70 teachers who were bullied by students and examines the form of bullying they received, the characteristics of students who bully, and how the students who bully behave in their peer relationships. Workplace bullying has always existed but was not closely examined as a phenomenon in the past. “Perpetrators and Targets of Bullying at Work: Role Stress and Individual Differences” and “Workplace Bullying, Emotions, and Outcomes” both discuss workplace bullying and the adverse effects it has on employees. Perpetrators of workplace bullying are often very aggressive and its victims include those with low self-esteem and poor social competency. Workplace bullying can affect not only individual employees who are bullied but can have adverse effects on the workplace as a whole.

Whether someone is a perpetrator, victim, or bystander, bullying can have an adverse impact on people of every gender, nationality, and age, and can occur in any number of settings. This collection of scholarly articles from prominent bullying experts worldwide discusses the most current understanding and thinking about bullying that will hopefully lead to solutions toward its reduction.

Gender, Bullying Victimization, and Education

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School bullying has detrimental consequences for its victims, including undermining students' educational outcomes. Furthermore, gender has been shown to play a significant role in determining the type of bullying victimization experienced and educational outcomes. This research examines whether an interaction between gender and bullying victimization exists as well as its impact on educational outcomes (i.e., academic self-efficacy and educational achievement). Multivariate regression analyses, drawing on the Educational Longitudinal Study of 2002, reveal that the interaction between gender and bullying victimization is linked to disparate educational outcomes. The findings and their implications are discussed regarding understanding the relationship between gender, bullying victimization, and education.

Keywords: bullying; gender; youth violence; schools

Bullying victimization has garnered more attention in recent years because of the change in the perception of bullying as a "rite of passage" to a serious social problem that has lasting, negative consequences for its victims (Espelage & Swearer, 2010; Hong & Espelage, 2012; Peguero, 2012). Most of the research on the consequences of bullying victimization has focused on the psychological and social effects on the individual; however, limited research has explored the association between bullying victimization and educational outcomes. Some studies have found that bullying victimization is associated with diminished educational outcomes (Hanson, Austin, & Zheng, 2010; Juvonen, Wang, & Espinoza, 2011; Nakamoto & Schwartz, 2010). In addition, research also recognizes gender differences in bullying victimization (Faris & Felmlee 2011; Klein, 2012; Wilcox, Tillyer, & Fisher, 2009). For instance, there is some research that suggests that girls are more likely to be victims of verbal aggression, insults, gossip, manipulation, and social isolation by their peers, whereas boys are more likely to be victims of physical aggression (Dukes, Stein, & Zane, 2010; Finkelhor, 2008; Popp & Peguero, 2011);

however, there is also research suggesting that, for girls, there is an increasing trend of engaging in physical bullying (Espelage & Swearer, 2003; Klein, 2012; Swearer, 2008). Although the research literature reveals a gendered pattern in the type of bullying victimization, it is not clear whether the consequences of being bullied are, themselves, gendered in terms of educational outcomes.

Given that educational attainment lays the foundation for adulthood—not just in terms of economic success but across several psychological, social, and physical dimensions—it is imperative to explore factors that are associated with negative educational outcomes. Two measures of educational outcomes, academic self-efficacy and educational achievement, have received considerable amounts of attention over the past decade (Caprara, Vecchione, Alessandri, Gerbino, & Barbaranelli, 2011; Kao & Thompson, 2003; Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2003). Academic self-efficacy reflects the student's level of confidence or belief that he or she can successfully accomplish educational assignments and tasks (Bandura, 1977; Caprara et al., 2011; Pajares, 2008). Educational achievement is typically measured as a student's standardized test scores (Buchmann, Condrón, & Roscigno, 2010; Kao & Thompson, 2003). The research literature suggests that there are extensive gender differences in academic self-efficacy and educational achievement. For example, as girls progress through the school system, their academic self-efficacy diminishes (Huang, 2013; Pajares, 2008) and there is an established gender disparities in test scores, which has remained relatively consistent over time (Buchmann, DiPrete, & McDaniel, 2008). The important question that remains is why does this gender difference in educational outcomes exist? Because bullying has serious negative consequences for its victims and the bullying experience is gendered, it is possible that gender disparities in educational outcomes may be related to this type of school-based victimization. Further research exploring the relationships between gender, bullying victimization, and educational outcomes (i.e., academic self-efficacy and educational achievement) is warranted.

This study extends the literature on gender, bullying victimization, and educational outcomes in the following ways. First, by examining two different educational outcome measures: academic self-efficacy and educational achievement. Second, this study explores the relationship between direct and indirect bullying and educational outcomes, extending current literature, because much of the previous focus has been on the direct bullying rather than indirect bullying. Finally, this study examines whether or not gender moderates bullying victimization and academic self-efficacy and educational achievement. To explore these issues, this study uses data from the Educational Longitudinal Study of 2002, a nationally represented stratified sample of 10,440 10th-grade public school students, and employs regression analyses.

LITERATURE REVIEW

Bullying Victimization

Typically, bullying victimization is defined as a systematic and reoccurring type of aggression by more powerful peers toward a weaker individual (Espelage & Swearer, 2010; Hong & Espelage, 2012; Olweus, 1993). The research emphasizes two broad categories of bullying victimization: direct and indirect. Direct bullying victimization is physical aggression and harassment, such as hitting, pushing, kicking, and the destruction of

property (Espelage & Swearer, 2010; Hong & Espelage, 2012; Olweus, 1993). Indirect bullying victimization is described as verbal aggression, gossiping, manipulation, and social isolation of the victim, which is intended to damage the victim's social status and self-esteem (Dukes et al., 2010; Klein, 2012; Swearer, 2008). Studies also reveal that gender plays a significant role in the type of bullying victimization a student experiences. Girls are more likely to experience indirect forms, whereas boys are more likely to experience direct forms of bullying victimization (Dukes et al., 2010; Finkelhor, 2008; Popp & Peguero, 2011); on the other hand, there are findings indicating that girls are increasingly getting into physical forms of bullying (Espelage & Swearer, 2003; Klein, 2012; Swearer, 2008).

The consequences of bullying victimization tend to be serious, negative, and long-lasting regardless of type of bullying. Bullying victimizations have commonly been associated with psychological and behavioral problems (Espelage & Swearer, 2010; Finkelhor, 2008). In addition, research also finds that girls experience greater psychological distress than boys as a result of experiencing indirect bullying, which may be caused by the heightened importance girls place on the social group (Faris & Felmlee, 2011; Klein, 2012; Young, Boyle, & Nelson, 2006).

Although there is substantial research exploring the psychological and social consequences of bullying victimization, limited research has addressed the effect of bullying victimization on educational outcomes, especially academic self-efficacy (most of the existing research has focused on educational achievement). This is surprising because bullying victimization among adolescents frequently takes place within the school context (Espelage & Swearer, 2010; Hong & Espelage, 2012; Peguero, 2012) and it is, therefore, reasonable to expect that it will have a negative effect on the student's academic success. Research demonstrates that bullying victimization is associated with lower levels of educational achievement (Juvonen, 2011; Juvonen et al., 2011; Nakamoto & Schwartz, 2010) and that such detrimental effects may be mediated by resulting psychological and adjustment problems (Schwartz, Gorman, Nakamoto, & Toblin, 2005; Wei & Williams, 2004). To date, research has not found gender disparities among the effects of bullying victimization and educational outcomes. However, Wei and Williams (2004) argued that their model works equally well for both boys and girls, but they did not distinguish between direct and indirect forms of bullying.

Gender and Education: Academic Self-Efficacy and Educational Achievement

Although there are no gender differences in innate intellectual potential, gender disparities exist in educational outcomes and are the result of external factors such as societal expectations and student experiences in school (Buchmann et al., 2008; Morris, 2012). To understand and improve student performance, gender disparities in educational outcomes have remained a central topic of empirical analyses, especially regarding gender disparities among academic self-efficacy and educational achievement (Buchmann et al., 2008; Huang, 2013; Morris, 2012; Pajares, 2008). From the onset of formal education, boys are at higher risk of delayed entry into kindergarten (Malone, West, Denton, & Park, 2006). Overall, there is substantial evidence that girls academically outperform boys in reading, grades, and test scores (Buchmann et al., 2008; Tach & Farkas, 2006).

Academic self-efficacy is defined as an individual's expectations, convictions, confidence, and beliefs about what he or she can accomplish in various educational situations

(Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Caprara *et al.*, 2011; Pajares, 2008). The perceptions that students hold about themselves, in relationship to their academic competence, have considerable impact on what the students do with the knowledge and skills they possess. Academic self-efficacy impacts a student's decisions about effort, determination, and his or her belief in the ability to effectively accomplish the assigned academic tasks (Caprara *et al.*, 2011; Urdan & Pajares, 2006). Higher levels of student self-efficacy are, in turn, associated with increases in educational achievement and attainment (Caprara *et al.*, 2011; Pajares, 2008; Urdan & Pajares, 2006).

During elementary school, girls and boys report similar levels of confidence about their ability to achieve educational success; however, by middle school, girls' academic self-efficacy begins to diminish (Huang, 2013; Pajares, 2008). Because academic self-efficacy is influenced by school-based interactions and relationships (Pajares, 2008; Urdan & Pajares, 2006), it is possible that bullying victimization could be associated with the academic self-efficacy, and the relationship may differ by gender because boys and girls experience different types of bullying.

Although educational achievement historically referred to students' grades or grade point average, contemporary research has measured educational achievement primarily using standardized test scores (Buchmann *et al.*, 2008; Morris, 2012). Research has found a positive relationship between the influence of educational achievement on the student's future educational attainment, employment, physical health, and psychological well-being (Buchmann *et al.*, 2008; Morris, 2012). Furthermore, because educational achievement is an important indicator of future success, and gender disparities exist in these outcomes, researchers are concerned with identifying the factors that produce gender disparities in educational achievement (Buchmann *et al.*, 2008).

Gender disparities in educational achievement have been attributed to many factors, including gender disparities among teacher expectations; differential parenting styles; and race, ethnicity, and socioeconomic status (Brown & Iyengar, 2008; Entwisle, Alexander, & Olson, 2007; Wood, Kaplan, & McLoyd 2007). What remains unresolved, however, is the mechanism through which gender operates to produce different outcomes in academic self-efficacy and educational achievement. Furthermore, because there are established gender differences in educational outcomes and bullying victimization (Buchmann *et al.*, 2008; Klein, 2012; Peguero, 2012), it is probable that the effects of bullying victimization on educational outcomes is moderated by the student's gender.

Additional Factors Associated With Bullying and Education

Research points to various student and school factors that are related to bullying and education (*i.e.*, academic self-efficacy and educational achievement). For student characteristics, studies suggest that race and ethnicity affect the likelihood of bullying victimization and educational inequality (Bradshaw, Waasdorp, Goldweber, & Johnson, 2013; Kao & Thompson, 2003; Peguero, 2012). Recent research indicates that family socioeconomic status is correlated with being a victim of bullying, academic self-efficacy, and educational achievement (Brown & Iyengar, 2008; Peguero & Williams, 2011; Urdan & Pajares, 2006). In general, research suggests that schools that are larger, with higher levels of poverty, and in urban locations typically have increased levels of violence, bullying victimization, and barriers to educational progress for students (Bradshaw *et al.*, 2013; Hong & Espelage, 2012; Morris, 2012; Wood *et al.*, 2007).

THE CURRENT STUDY: GENDER, BULLYING VICTIMIZATION, AND EDUCATIONAL OUTCOMES

In summary, this study explores the relationship between gender, bullying victimization, and educational outcomes. This study extends the existing literature by exploring the effect of bullying victimization on educational outcomes and investigating whether gender interacts with bullying victimization to create gender-specific effects on educational outcomes.

METHOD

Data Source

Data for this research is drawn from the Educational Longitudinal Study of 2002 (ELS). ELS is a longitudinal survey administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the U.S. Department of Education. ELS is designed to monitor the transition of a nationally representative sample of young people as they progress from 10th grade through high school and on to postsecondary education and/or the world of work (NCES, 2004). These data include information about the experiences and backgrounds of students, parents, and teachers and descriptions of the schools the students attended. The sample for these analyses included 5,320 female and 5,120 male public school students who are White American, Black/African American, Latina/Latino American, and Asian American. Racial and ethnic minority groups are oversampled in ELS to obtain a sufficient representation for statistical analyses. In turn, the sample weights used in the analyses are calculated by NCES to compensate for the sampling design and for nonresponse bias.

Educational Outcomes: Academic Self-Efficacy and Educational Achievement. To measure academic self-efficacy, students were asked to describe their understanding and mastery of educational material during the first semester or term of the 2001–2002 school year. This measure was constructed from student reports in which they describe themselves as being confident on (a) doing an excellent job on math tests, (b) understanding the most difficult material presented in math tests, (c) understanding the most complex material presented by my math teacher, (d) mastering the skills being taught in math class, (e) doing an excellent job on math assignments, (f) doing an excellent job on English tests, (g) understanding the most difficult material presented in English texts, (h) understanding the most complex material presented by my English teacher, (i) mastering the skills being taught in English class, and (j) doing an excellent job on English assignments. Reliability of the scale was determined using Cronbach's alpha, which is a measure of internal consistency, and the Cronbach's alpha for academic self-efficacy is .92.

Educational achievement is measured by using the standardized measure preconstructed by RTI and NCES. ELS includes a reading and math composite score based on standardized tests developed by the Educational Testing Service (ETS) in math and reading. The composite score is the average of the math and reading standardized scores, restandardized to a national mean of 50.0 and standard deviation of 10 (see NCES, 2004 for further detail).

Bullying Victimization. There are two distinct types of bullying victimization that can be measured: direct and indirect. Direct bullying victimization is measured by four items, including (a) someone threatened to hurt me at school, (b) someone hit me, (c) someone

used strong-arm or forceful methods to get money or things from me, or (d) someone bullied me or picked on me. Indirect bullying is measured by two items, including (a) in class, I often feel “put down” by my teachers; and (b) in class, I often feel “put down” by other students. The measures of bullying victimization were dichotomized to indicate whether the student experienced bullying victimization during the first semester or term of 2001–2002. The reference categories are not being a victim of direct or indirect bullying.

Gender. Gender is measured as the student’s self-report as male or female. Male was the reference category.

Student and School Characteristics. As noted, previous studies have established that both student and school characteristics are associated with bullying victimization, academic self-efficacy, and educational achievement. Student characteristics such as race, ethnicity, and socioeconomic status as well as school characteristics including location, size, and economic affluence are related to bullying victimization, academic self-efficacy, and educational achievement. Students self-reported their race or ethnicity; four racial and ethnic groups were considered: White American (the reference category), Black/African American, Latina/Latino American, and Asian American. Family socioeconomic status is a preconstructed measure that is a standardized (z score) variable based on five equally weighted, standardized components: father’s/guardian’s education, mother’s/guardian’s education, family income, father’s/guardian’s occupational prestige, and mother’s/guardian’s occupational prestige (see NCES, 2004 for further detail). School location is measured by the type of community: urban, suburban (the reference category), or rural. School size is measured as the number of 10th-grade students enrolled in the school. School poverty is measured by the percentage of students who receive free or reduce-priced lunches at the school. Descriptive statistics for academic self-efficacy, educational achievement, and other study variables are reported in Table 1.

Procedures and Analysis of Data

Because ELS is designed as a cluster sample in which schools are sampled with unequal probability and then students are sampled within these selected schools, the subsample of ELS would violate the assumption of independent observations. Although hierarchical linear modeling is often used to address the issue of nesting with school survey data, school factors are not central to the research questions. Thus, this study accounts for this nonindependence and nesting by using a survey estimation technique in *Stata*, which takes into consideration the clustering in the sample design. The survey estimators are adjusted for clustering, stratification, and weighting to ensure a nationally representative sample. Ordinary least squares (OLS) regression analysis is used to examine the relationship between gender, bullying victimization, and educational outcomes (i.e., academic self-efficacy and educational achievement) while controlling for the effects of student and school characteristics.

The analyses proceed in several steps. Table 1 presents the descriptive statistics and the results from the analysis of variance (ANOVA). Table 2 displays the results of the regression analysis of the relationships between gender, bullying victimization, and academic self-efficacy. In the baseline model of Table 2, academic self-efficacy is regressed on gender and other student and school characteristics. In the second model, the effect of the bullying victimization measures (i.e., direct and indirect) are analyzed. In the final model, the interactions between gender and bullying victimization are added to the analysis of

TABLE 1. Descriptive Statistics of Education Longitudinal Study of 2002 10th-Grade Sample by Gender

Variable	Total		Male Students		Female Students	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Educational outcomes						
Academic self-efficacy	12.07	8.85	11.73	9.22	12.39	8.45***
Educational achievement	49.61	10.03	49.39	10.31	49.84	9.74*
Student bullying victimization						
Direct bullying	0.40	0.49	0.46	0.50	0.34	0.47***
Indirect bullying	0.25	0.43	0.24	0.43	0.26	0.42*
Student and school characteristics						
Black/African American	0.16	0.36	0.16	0.36	0.15	0.36
Latino/Latina American	0.17	0.37	0.17	0.37	0.17	0.37
Asian American	0.11	0.31	0.11	0.32	0.11	0.32
White American	0.57	0.49	0.57	0.50	0.57	0.49
Family SES	-0.07	0.71	-0.07	0.70	-0.09	0.72
School size	368.80	232.27	371.45	229.55	366.21	234.90
School poverty	28.67	21.33	28.65	21.11	28.69	21.51
Urban	0.27	0.44	0.27	0.44	0.28	0.44
<i>N</i>	10,440		5,120		5,320	

Note. SES = socioeconomic status.

Significant differences between males and females are denoted with asterisks which are based on analysis of variance (ANOVA) tests.

* $p \leq .05$. *** $p \leq .001$.

academic self-efficacy. Table 3 presents a similar regression analysis, as just described, but with the relationships between gender, bullying victimization, and educational achievement being analyzed.

RESULTS

Descriptive statistics for the dependent and independent variables are reported in Table 1. The results of the ANOVA analyses indicate that there are statistically significant differences between girls and boys. Girls indicate higher levels of academic self-efficacy ($M = 12.39$, $SD = 8.45$, $p \leq .001$) and educational achievement ($M = 49.84$, $SD = 9.74$, $p \leq .05$) in comparison to boys' academic self-efficacy ($M = 11.73$, $SD = 9.22$, $p \leq .001$) and educational achievement ($M = 49.39$, $SD = 10.31$, $p \leq .05$). Girls report fewer incidents of direct bullying victimization ($M = 0.34$, $SD = 0.47$, $p \leq .001$) in comparison to boys' direct bullying victimization ($M = 0.46$, $SD = 0.50$, $p \leq .001$). On the other hand, girls

TABLE 2. Ordinary Least Squares Regression Results of Selected Predictors on Academic Self-Efficacy (*N* = 10,440)

	Model 1		Model 2		Model 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Direct bullying victimization			−0.54**	0.20	−0.29	0.28
Female					−0.52**	0.40
Indirect bullying victimization			−0.97***	0.22	−0.30	0.32
Female					−1.35**	0.44
Student characteristics						
Female	0.51**	0.20	0.44*	0.20	0.98***	0.27
Black/African American	−2.06***	0.36	−2.12***	0.36	−2.08***	0.36
Latino/Latina	−1.73***	0.39	−1.72***	0.39	−1.72***	0.39
Asian American	−0.61	0.46	−0.67	0.46	−0.69	0.46
Family SES	2.24***	0.16	2.20***	0.16	2.19***	0.17
School characteristics						
Urban	−0.14	0.35	−0.15	0.35	−0.16	0.35
Rural	−0.37	0.40	−0.37	0.40	−0.36	0.40
Size	0.21*	0.09	0.20*	0.09	0.20*	0.09
Poverty	−0.01	0.01	−0.01	0.01	−0.01	0.01
Intercept	12.44		12.95		12.66	
<i>R</i> ²	0.07		0.09		0.09	

Note. SES = socioeconomic status.
The reference categories are male, no direct or indirect bullying victimization, White American (non-Hispanic), and suburban schools.
p* ≤ .05. *p* ≤ .01. ****p* ≤ .001.

report higher incidents of indirect bullying victimization (*M* = 0.26, *SD* = 0.42, *p* ≤ .05) in comparison to boys’ indirect bullying victimization (*M* = 0.24, *SD* = 0.43, *p* ≤ .001). These findings are consistent with previous research findings, indicating that there are gender differences related to educational outcomes and bullying victimization.

Table 2 displays the results of the linear regression analysis of the relationships between gender, bullying victimization, and academic self-efficacy. Model 1 presents the baseline linear regression analysis. Gender is related to academic self-efficacy; while controlling for other factors, girls report an increase of 0.51 in their academic self-efficacy score compared to boys. Furthermore, family socioeconomic status and school size are positively related to academic self-efficacy; however, being Black/African American or Latino/Latina American is negatively related to the student’s academic self-efficacy.

In Model 2, measures of bullying victimization are included in the analysis. Bullying victimization has a negative link with academic self-efficacy. While controlling for other

TABLE 3. Ordinary Least Squares Regression Results of Selected Predictors on Educational Achievement ($N = 10,440$)

	Model 1		Model 2		Model 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Direct bullying victimization			-1.03***	0.19	-0.48*	0.28
Female					-1.14**	0.41
Indirect bullying victimization			-2.56***	0.23	-2.28***	0.31
Female					-0.56	0.48
Student characteristics						
Female	0.42*	0.19	0.28	0.19	0.87***	0.25
African American/Black	-6.48***	0.36	-6.59***	0.35	-6.55***	0.36
Latino/Latina	-4.99***	0.37	-4.95***	0.37	-4.95***	0.37
Asian American	0.55	0.49	0.43	0.49	0.41	0.49
Family SES	4.63***	0.17	4.54***	0.16	4.52***	0.17
School characteristics						
Urban	-0.29	0.39	-0.31	0.39	-0.32	0.39
Rural	0.05	0.35	0.04	0.35	0.05	0.34
Size	0.05	0.08	0.04	0.08	0.04	0.08
Poverty	-0.03***	0.01	-0.03***	0.01	-0.03***	0.01
Intercept	52.30		53.46		53.14	
R^2	0.26		0.28		0.28	

Note. SES = socioeconomic status.

The reference categories are male, no direct or indirect bullying victimization, White American (non-Hispanic), and suburban schools.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

predictors of academic self-efficacy, students who report being a victim of direct bullying have a decrease of 0.54 in their academic self-efficacy score in comparison to students who reported not being a victim of direct bullying. Students who report being a victim of indirect bullying have a decrease of 0.97 in their academic self-efficacy score in comparison to students who reported not being a victim of indirect bullying. Being female remains positively related to academic self-efficacy; however, the strength of the relationship is slightly reduced from the previous model. Family socioeconomic status and school size still have a positive association with academic self-efficacy, although being Black/African American or Latino/Latina American continues to have a negative association with academic self-efficacy.

In Model 3 of the analysis, the interaction terms for gender and bullying victimization are added. While controlling for other factors, girls who report being a victim of direct bullying have a decrease of 0.52 in their academic self-efficacy score, whereas for boys, being a victim of direct bullying is not associated with their academic self-efficacy. Girls

who report being a victim of indirect bullying have a decrease of 1.35 in their academic self-efficacy score, whereas for boys, being a victim of indirect bullying is not associated with their academic self-efficacy. Not only does being female remain positively associated with academic self-efficacy; while controlling for girls' bullying victimization, the strength of the relationship increases from the previous model. In other words, girls have an increase of 0.98 reflected in their academic self-efficacy score in comparison to boys. Family socioeconomic status and school size continue to have a positive role with academic self-efficacy, although being Black/African American or Latino/Latina American continues to have a negative effect on academic self-efficacy.

Table 3 displays the findings from the regression analysis of gender, bullying victimization, and educational achievement. Model 1 presents the baseline regression model. There is a gender difference in educational achievement. Being female is positively linked with educational achievement; while controlling for other predictors, girls report an increase of 0.42 in their educational achievement in comparison to boys. Family socioeconomic status has a positive effect on educational achievement, and being Black/African American, being Latino/Latina American, and the school poverty have a negative effect on the student's educational achievement.

In Model 2 of Table 3, measures of bullying victimization are now considered in the analysis. Bullying victimization has a negative effect on educational achievement. While controlling for other factors, students who report being a victim of direct bullying have a decrease of 1.03 in their educational achievement score in comparison to students who reported not being a victim of direct bullying. Students who report being a victim of indirect bullying have a decrease of 2.56 in their educational achievement scores in comparison to students who reported not being a victim of direct bullying. Gender does not have a statistically significant effect on educational achievement scores in this model. Family socioeconomic status remains positively related to educational achievement. Being Black/African American, being Latino/Latina American, and school poverty continue to be negatively linked with educational achievement.

In Model 3 of the educational achievement analysis presented in Table 3, the interaction terms for gender and bullying victimization are added. While controlling for other variables, girls who report being a victim of direct bullying experience a decrease of 1.62 reflected in their educational achievement scores, whereas boys who report being a victim of direct bullying have a 0.48 decrease in their educational achievement. The relationship between indirect bullying victimization and educational achievement is not gendered. Both boys and girls who report being a victim of indirect bullying have a decrease of 2.28 reflected in their educational achievement scores. In this model, gender has a statistically significant effect on educational achievement. Girls have an increase of 0.87 reflected in their educational achievement in comparison to boys. Family socioeconomic status has a positive effect on educational achievement, and being Black/African American, being Latino/Latina American, and school poverty have a negative effect on educational achievement.

DISCUSSION

Gender is consistently associated with educational outcomes; female students have better educational outcomes than male students in terms of both academic self-efficacy and educational achievement. In light of this finding, schools need to consider how to improve

boys' educational experiences so that boys develop a similar level of academic self-efficacy and, in turn, educational achievement as their female counterparts.

As expected, bullying victimization is negatively associated with educational outcomes. In terms of direct and indirect bullying and academic self-efficacy, there are gender disparities: Girls who are victims of direct and indirect bullying have lower academic self-efficacy, whereas the link between direct and indirect bullying victimization for boys' academic self-efficacy are not statistically significant. Schools must be more proactive in curtailing both direct and indirect bullying, particularly for girls, because both negatively impact academic self-efficacy. Academic self-efficacy is too important to be undermined by either form of bullying because it is a prerequisite to other educational outcomes (Caprara et al., 2011; Huang, 2013; Young et al., 2006).

Bullying victimization negatively impacts the victim's educational achievement. It appears direct bullying has a gender-specific effect on educational achievement. Interestingly, the detrimental effect of direct bullying victimization appears to be greater for girls than boys. Girls experiencing direct bullying may be more concerned about their personal safety because of the bully's physical attacks, threats, and/or destruction of the girls' personal property than about achieving their educational goals. This supports previous research, which suggests that although bullying negatively impacts both genders, girls experience greater psychological distress as a result (Klein, 2012; Young et al., 2006), which in turn is undermining their ability to perform on standardized tests.

On the other hand, there is no gender difference in terms of the consequences of indirect bullying victimization on educational achievement. Being a victim of indirect bullying undermines students' educational achievement for both boys and girls. The verbal attacks, insults, gossiping, and social isolation not only impacts girl but also have a significant impact on boys' educational achievement. Indirect bullying undermines the students' psychological well-being, which in turn affects their performance in school. It was unexpected to find that indirect bullying has a negative effect on boy's educational achievement. Although the study by Dukes et al. (2010) explored the gender distinctions with the effect of direct and indirect bullying on carrying weapons, they also did unexpectedly find that indirect bullying resulted in increased weapon carrying for boys. Dukes et al. suggest that "physical bullying may be a more accepted behavior (especially among adolescent boys), so bonding and social development may be weaker among relational bullies" (p. 527). In other words, because direct bullying victimization is argued to be more common for boys, do boys have the coping skills and/or social support that acknowledges that indirect bullying victimization may be damaging? Hampel, Manhal, and Hayer (2009) indicate that indirect bullying results in maladaptive coping, including rumination for both girls and boys.

Gender still impacts educational outcomes in a significant manner, and a better understanding of the mechanism that creates these gender disparities is needed to alleviate these differences. In particular, research should explore how girls are able to develop academic self-efficacy in an environment riddled with hidden curriculum messages and gendered student expectations and yet outperform their male counterparts on many of the measures of educational success (Buchmann et al., 2008; Morris, 2012). In light of the progress made by girls and women in education (Buchmann et al., 2008; Morris, 2012), research needs to explore whether the hidden curriculum is still in place and the extent to which it is a meaningful barrier to the educational success of female students.

Because bullying begins prior to high school, more research needs to be conducted in middle schools to determine the consequences of bullying victimization and determine if other demographic disparities in the consequences of bullying exist. Not only are there

gender differences in bullying victimization but there are also racial and ethnic disparities in bullying victimization (Bradshaw et al., 2013; Peguero, 2012; Peguero & Williams, 2011). It would not be surprising if future research were to determine that consequences of bullying are race-specific. It stands to reason that the consequences of intraracial bullying might differ from interracial bullying victimization. Because this analysis did not consider whether the school the student attends has an active antibullying program in place, future research should examine the role of antibullying programs that may indeed ameliorate bullying as well as its detrimental effects. Schools with an antibullying program may mitigate the consequences of bullying on the student and his or her educational outcomes. In addition, future research should explore the role of friendship networks. The research literature on bullying makes it clear that having social support from teachers, administrators, and peers that can come to your aid when you are being bullied is critical to ending bullying victimization (Espelage & Swearer, 2010; Hong & Espelage, 2012); it is reasonable to assume that having friends may be important in determining the educational consequences of bullying.

The results of this study indicate that gender and bullying victimization have significant impacts on both academic self-efficacy and educational achievement. In addition, the results suggest that the effect of bullying victimization on educational outcomes is moderated by the student's gender. Despite the educational gains made by female students, schools are still gendered places, and a student's gender has consequences in that environment, which needs to be considered further. Last, this study illustrates the importance of differentiating between the forms of bullying and exploring their respective impacts on educational outcomes.

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