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Prevalence and Impact of Peer Victimization Among Gifted Adolescents

By

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Abstract

Prevalence and Impact of Peer Victimization Among Gifted Adolescents

by

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Doctor of Philosophy in Education

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Few studies directly examine the relationship between giftedness and peer victimization. Despite the limited available data, there is an abundance of prescriptive advice addressing the unique challenges for gifted students. Such advice derives from research on the psychosocial characteristics of gifted youth (at best) or outdated misperceptions of gifted youth as inherently vulnerable (at worst). The purpose of this dissertation was to elucidate the giftedness-victimization link by utilizing measurement and sampling that improve upon research to date. The first goal was to assess victimization frequency of gifted youth and make comparisons to similar non-gifted peers. The second goal was to examine whether victimization was more strongly tied to self-worth, anxiety, and depression for gifted youth compared to their non-gifted peers. At the outset of the study, it was hypothesized that no discernible differences would emerge between gifted and non-gifted students.

Data for this dissertation were collected as part of the UCLA Middle School Diversity Project, a multisite longitudinal study of California middle school students from diverse ethnic and socioeconomic backgrounds ($N = 6,058$). The analytical sample in the current study consisted of 2,888 students in Grade 6, 50% of whom had been identified for gifted and talented education (GATE) programs. The other 50% consisted of non-GATE students matched on potential covariates using propensity score analysis. Data were collected using surveys in which students reported their experiences with victimization, their self-perceptions, and symptoms of anxiety and depression.

Contrary to the stated hypotheses, the results indicated that gifted students were victimized significantly less than non-gifted peers for almost every form of victimization. The exception was physical victimization, and several potential interpretations are offered. Analyses examining the impact of victimization were mixed. Victimization was more strongly linked to depressive symptoms for gifted students ($b = .049$), but significant differences did not emerge on measures of self-worth or anxiety. Although the need for future research is clear, these findings represent a meaningful expansion of knowledge in this area and help to refute simplistic characterizations of gifted youth.

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To my aunts Diane, Phyllis, and Lucia: thank you for giving me your unwavering support for as long as I can remember. Along the way, you three have become some of my most important role models. If I'm lucky, I'll live a life that is half as purposeful and rich as yours.

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Prevalence and Impact of Peer Victimization among Gifted Adolescents

There is a common perception amongst education professionals and the popular media that gifted students are susceptible to peer victimization due to superior intelligence, social ineptitude, or difficulty conforming to group norms (Taibbi, 2012). There is a surprising lack of empirical evidence, however, to support or refute this perception. Scholars who research the social-emotional development of gifted students generally fall into two contrasting camps about the role of giftedness on psychosocial well-being (Neihart, 1999). On one hand, it is argued that gifted students' superior cognitive ability results in heightened sensitivity and alienation from peers, which makes them a vulnerable population (Peterson, 2006; Peterson & Ray, 2006a, 2006b). On the other hand, it is argued that gifted students are better equipped for self-reflection and coping with stressful events, rendering them more resilient and adaptable than nongifted peers (Bland, Sowa, & Callahan, 1994).

With only a few studies attempting to directly assess peer victimization in gifted populations, the bulk of knowledge in this area comes from qualitative or theoretical work typically bolstered by research on the psychosocial characteristics of gifted students (e.g., Piechowski, 1997; Webb, 1993). The purpose of the current study is to fill this large gap in the research literature by directly examining the prevalence and psychosocial impact of peer victimization in a sample of middle school students in California. I begin by providing a review of existing literature in the area of peer victimization, most of which centers on general education populations. I then review current perspectives about peer victimization in gifted populations, and summarize the existing literature in this area. Finally, the present study is described in detail.

Defining Peer Victimization and Giftedness

Peer victimization is better known as *bullying* to the general population and both terms are often used interchangeably in academic literature. The term, peer victimization, is used in the current study to emphasize that targets rather than perpetrators of bullying behaviors are being examined. Peer victimization occurs in several ways in school contexts, including face-to-face confrontation (e.g., physical aggression, verbal abuse) and social manipulation (e.g., exclusion, rumor spreading; Juvonen & Graham, 2001). Recent research has also included cyberbullying (i.e., aggression or harassment that occurs over computer or phone) in operational definitions (Wang, Iannotti, & Nansel, 2009). The critical characteristic distinguishing peer victimization from simple conflict is an imbalance of power between the perpetrator and the victim (Juvonen & Graham, 2001). The determinants of power relations in schools are many and varied. However, differences in age, physical size, social standing, and disability are frequently identified as sources of power imbalance between victims and perpetrators (Atlas & Pepler, 1998; Boulton & Underwood, 1992; Rose, Monda-Amaya, & Espelage, 2011; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukianen, 1996). Students tend to be conceptualized as either perpetrators or victims of peer victimization, but a small percentage is identified as both (Nansel et al., 2001).

Whereas a general consensus exists about defining peer victimization, there is less agreement about what it actually means to be *gifted*. Despite numerous definitions of giftedness, no dominant theoretical framework has emerged in the literature (Sternberg & Davidson, 2005). As part of an eclectic, comprehensive framework, Subotnik, Olszewski-Kubilius, and Worrell described giftedness as “the manifestation of performance or production that is clearly at the upper end of the distribution in a talent domain even relative to that of other high-functioning individuals in that domain” (2011, p. 8). Consequently, gifted adolescents may excel in fields

like academics, art, music, athletics, or leadership. Federal guidelines draw from similarly wide-ranging domains for identifying gifted students in public education, stipulating that gifted students demonstrate high levels of intellectual, creative, artistic, or leadership capacities (No Child Left Behind Act, 2002).

In practice, however, schools almost exclusively use general intellectual ability – as measured by group or individually administered standardized tests – to identify students for gifted and talented education (GATE) programs (Callahan, Hunsaker, Adams, Moore, & Bland, 1995). Typically, students who meet or exceed IQ cutoff scores between the 90th and 98th percentiles earn the label *gifted* and participate in GATE programs (Worrell & Erwin, 2011). Such practices help to explain why giftedness is so often equated with a high IQ. In the current study, the term, gifted, is used only to describe youth who have demonstrated superior intellectual or academic ability.

Prevalence of Peer Victimization in Schools

Peer victimization is relatively well studied in the US and abroad, and numerous attempts have been made to estimate its frequency in school. One of the greatest obstacles to this endeavor is choosing a point at which victimization experiences become injurious. Solberg and Olweus (2003) found that two to three victimization experiences within a reasonable amount of time (e.g., the past two months, the past school year) constituted a sufficient lower-bound cutoff to predict psychosocial maladjustment. In the largest ($N = 15,686$), most widely cited survey of bullying behavior in the US, Nansel et al. (2001) found that 10.6% of students in Grades 6–10 reported that they were victimized on a regular basis (*sometimes* or *weekly*) and 6.3% reported that were targets and perpetrators of bullying behavior. In other words, approximately 17% of U.S. students were regularly victimized at school (Nansel et al., 2001). A cross-national survey of bullying and victimization frequency also found that 16.6% of U.S. students could be classified as victims with a smaller (unreported) percent being classified as bully-victims (Craig et al., 2009). Thus, 15% to 20% may be a reasonable estimate for the number of students who are victimized enough to trigger negative psychosocial outcomes.

Although peer victimization can take many forms, students report that verbal and relational forms of bullying occur most frequently. In a survey of 7,182 U.S. students, Wang et al. (2009) reported that prevalence rates of bullying (as victim or perpetrator) at least once in the past two months were 53.6% for verbal incidents, 51.4% for social incidents, 20.8% physical incidents, and 13.6% for electronic incidents. Similar proportions for verbal, social, and physical bullying have been found in other studies, indicating that behaviors such as name-calling and social exclusion are especially widespread in school contexts (Craig et al., 2009; Rivers & Smith, 1994).

Peer Victimization and Psychosocial Adjustment During Adolescence

Interest in peer victimization research has grown over the past two decades primarily due to findings that victimization is associated with numerous adjustment difficulties in childhood and adolescence. Internalizing symptoms such as depression, anxiety, loneliness, and reductions in self-esteem are most commonly identified as negative outcomes of bullying in the research literature (Graham & Bellmore, 2009; Juvonen, Graham, & Schuster, 2003; Nishina, Juvonen, & Witkow, 2005). Meta-analyses of cross-sectional (Hawker & Boulton, 2000) and longitudinal (Reijntjes, Kamphuis, Prinzie, & Telch, 2009) studies have indicated that peer victimization makes a unique contribution to the development of internalizing symptoms ($r = .21$ and $.18$, respectively).

Although there has been less research on maladaptive externalizing behaviors, peer victimization has been linked to fighting, smoking, and difficulty forming peer relationships (Hanish & Guerra, 2002; Nansel et al., 2001). Peer victimization is especially salient to educators due to its impact on academics. Students who are frequently victimized are more likely to perceive their schools as unsafe compared to their peers (Graham & Bellmore, 2009), have increases in absenteeism, demonstrate lower academic performance, and hold negative attitudes toward school (Nishina et al., 2005; Rueger & Jenkins, 2014).

Correlates of Victimization

The likelihood of being victimized by peers, as well as the severity of subsequent maladjustment, is entangled between several mediating and moderating variables. Victim characteristics are generally well studied and research has revealed several patterns about who is likely to be a target of victimization. I briefly review several correlates of peer victimization in the next section to inform the current study.

Age. In the US, the frequency of victimization reaches its peak between Grades 6 and 8, and then begins to decline in high school. For example, Nansel et al. (2001) reported 26.2% of students in Grade 6 were victimized once or twice in the current term compared to 25% of eighth graders, and 18.8% of tenth graders. There are several reasons why this developmental shift occurs. As Graham (2006) noted, such findings are consistent with developmental theory in which adolescence is a critical period to explore social roles. During this time, peer relationships become critical to identity formation and bullying can lead to higher social status (Rodkin, Farmer, Pearl, & van Acker, 2000). There may also be institutional considerations for age-related trends in middle school: Older peers often victimize younger students, which helps to explain why prevalence rates in middle school are lowest in Grade 8 (Olweus, 1994). Finally, pubertal developmental may influence overt aggressive behaviors in the early middle school years (Craig & Pepler, 2003).

Gender. A robust finding is that boys are more likely than girls to be victims and perpetrators of victimization behavior. In the US, for example, 46.7% of males reported having at least one victimization experience during the current school term versus 36.2% of females (Nansel et al., 2001). Solberg and Olweus (2003) also reported gender differences in a sample of Norwegian adolescents, with 34% of boys being victimized at least once during the current school term compared to 29.5% of girls. This trend may not hold in all countries, however. In a cross-national profile of bullying behavior in 40 countries, Craig et al. (2009) revealed that in most countries (29) girls were more likely than boys to report being victimized ($p < .001$).

Another frequently reported finding is that boys tend to engage in outward forms of victimization such as verbal harassment and physical harm whereas girls are more likely to use more covert methods such as social rejection or rumor spreading. In the US, boys are more likely to experience physical (17.2% vs. 8.7%) and verbal aggression (40.3% vs. 34.7%), whereas girls are more likely to experience relational aggression (45.6% vs. 36.0%) and cyberbullying (10.3% vs. 9.2%; Wang et al., 2009). Such differences may emerge due to socialization practices that discourage girls from being aggressive, causing them to engage in less visible (but nonetheless hurtful) aggressive behaviors towards peers (Underwood, Galen, & Paquette, 2003; Wang et al., 2009). However, one meta-analysis of 148 studies indicated a negligible difference amongst boys and girls for indirect aggression ($r = -.03$), leading the authors to assert “indirect aggression can be considered a form [of bullying] that is more equitably enacted by girls and boys than direct aggression” (Card, Stuckey, Sawalani, & Little, 2008, p. 1204). Despite the fact that boys are almost always identified as victims and

perpetrators in higher numbers than girls, more recent research is highlighting how peer victimization interacts with gender in many nuanced ways (e.g., girls and body mass index; Lanza, Echols, & Graham, 2013).

Ethnicity. Studies aiming to identify ethnicity as a predictive variable for victimization have produced inconsistent findings. In Nansel et al.'s (2001) large-scale survey of U.S. youth, 70.1% of Black students reported that they had not been victimized during the current term compared to 59.4% of Hispanic students and 56.3% of White students. Wang et al. (2009) found similar results, with Black students reporting the lowest levels of physical (11.7%), verbal (35.7%), and relational (36.5%) victimization compared to White and Latino peers. In contrast, Hanish and Guerra (2000) found that Latino students had lower mean victimization scores than Black ($p < .01$, $d = -.29$) and White students ($p < .01$, $d = -.27$) using peer nomination methods with elementary school children. Juvonen et al. (2003) also utilized peer nomination procedures and found that Latino students were identified as victims (7%) less than Black (10%), Asian (10%), and White (12%) students. These authors cautioned, however, that victimization was multifaceted and that varying prevalence rates were not evidence of an ethnic predisposition toward victimization (Hanish & Guerra, 2000; Juvonen et al., 2000). More recent research has incorporated an ecological perspective to better explain the relationship between ethnicity and bullying, with school/classroom ethnic diversity becoming a particularly fruitful area for investigation.

Graham (2006) and her colleagues (Bellmore, Witkow, Graham, & Juvonen, 2004; Graham, Bellmore, Nishina, & Juvonen, 2009; Graham & Juvonen, 1998, 2002; Juvonen, Nishina, & Graham, 2006) have conducted several studies indicating that increases in classroom ethnic diversity leads to reductions in reports of peer victimization. This may not be the case outside of the US, however. In studies of Dutch children in multicultural schools, increases in classroom ethnic diversity were associated with increases in peer victimization across all ethnic groups (Tolsma, van Deurzen, Stark, & Veenstra, 2013; Vervoort, Scholte, & Overbeek, 2010). The relationship between ethnicity and peer victimization is a complex one (Espelage & Swearer, 2003) that requires considerably more research before conclusions are drawn about its importance as a correlate of peer victimization.

Academic achievement. Academic achievers are often portrayed in popular media as vulnerable to peer victimization. Some studies support this hypothesis, indicating that verbal victimization will sometimes include content related to being smart, or succeeding in the classroom (Horowitz et al., 2004; Peterson & Ray, 2006b). A far more researched topic is the effect of victimization on academic achievement. The psychosocial consequences of victimization can lead to increases in absenteeism and reductions in school engagement, thereby hindering academic performance (Nishina, et al., 2005). Nakamoto and Schwartz (2010) conducted a meta-analysis of 33 studies and reported a small but statistically significant ($p < .001$) negative association between victimization and concurrent academic achievement ($r = -.12$). Thus, there is small amount of qualitative evidence to indicate academic achievement is an antecedent to victimization, but it is far clearer that there are academic costs to being victimized.

Socioeconomic status. Several studies have linked low socioeconomic status (SES) to both perpetrators and victims (Due et al, 2009; Jansen et al., 2012). A meta-analysis of 28 studies found that victims were more likely to come from lower SES backgrounds, but the authors concluded that the association was weak and had little practical utility (OR = 1.40; Tippet & Wolke, 2014). The tenuous association between SES and victimization is partly due to differences in participant characteristics and operational definitions (Foster & Brooks-Gunn,

2013), but may also be indicative of the need to expand the scope of this research. Recent studies have moved toward identifying the contextual nuances of the relationship between SES and victimization. For example, Foster and Brooks-Gunn (2013) found that residential instability (i.e., high population turnover in neighborhoods) was far more predictive of victimization experiences ($b = .57$) than SES alone ($b = .24$). In general, findings to date indicate that SES may play a role in victimization but the processes underlying this relationship have yet to be revealed.

School environment. There is general agreement that school environments matter in predicting and preventing peer victimization (Hong & Espelage, 2012). School climate is frequently cited as a correlate to victimization rates with schools that are perceived as dysfunctional, unsupportive, and unfair by their students typically having higher rates of victimization (Thapa, Cohen, Guffey, & Higgins-D'Allessandro, 2013; You et al., 2013). Schools with higher victimization rates also tend to have more periods of unsupervised time, reduced levels of adult monitoring, and higher student-teacher ratios (Bradshaw, Sawyer, & O'Brennan, 2009; Tutura et al., 2008). Consequently, two students with identical individual characteristics, but attending different schools, could experience victimization in very different ways.

Peer Victimization among Gifted Youth

Prescriptive advice is frequently offered by scholars and professionals based on the assumption that giftedness is uniquely associated with peer victimization (e.g., Peterson, 2006). Such advice is almost always based on one of two contrasting theoretical perspectives, namely that being gifted leads to either more or less victimization. Some form of this discourse can be traced as far back the 19th century (Lombroso, 1889) with scholarly debate emerging as early as 1925 (Terman). In the current section, I provide an overview of these contrasting perspectives as well as supporting evidence.

Argument 1: Gifted students are vulnerable to victimization and its effects.

Lombroso (1889) wrote that geniuses more often possessed physiological and psychological maladies such as rickets, stammering, sterility, brain lesions, emaciation, alcoholism, and a tendency toward insanity. Although these characterizations have largely lost their place in current research, descriptions of gifted students as sickly and socially uneasy persist in popular media (Robinson, 2008; Subotnik et al., 2011). The contemporary approach to the Lombroso tradition primarily focuses on three personality characteristics believed to negatively impact social standing and psychosocial adjustment. The first of these characteristics is introversion, which may lead gifted students to be less concerned with social agendas and more likely to pursue solitary activities. Because peer interaction is a normative facet of schooling (particularly in adolescence), reserved and isolated students may garner unwanted attention from aggressive peers. Indeed, students report that those who appear different or who are “loners” are frequently targeted for victimization (Peterson & Ray, 2006b, p. 8). Moreover, by withdrawing from the social scene, introverted students may be giving the impression that they are cold, unapproachable, or stuck-up (Pfeiffer & Stocking, 2000; Robinson, 2008).

The evidence indicating that gifted students are, on average, more introverted than their non-gifted peers comes primarily from research using the Myers-Briggs Type Inventory (MBTI). Sak (2004) synthesized data from 19 studies that administered the MBTI to gifted adolescents ($N = 5,723$) and found that gifted students were significantly more likely to be typed as introverted than normative samples (48.7% and 35.2% respectively). There are also studies from outside the field of gifted education examining links between cognitive ability and introversion. A meta-

analysis of 234 studies found a slight positive relationship between *extraversion* and cognitive ability, although the effect sizes were close to zero ($r = -.06 - .05$; Wolf & Ackerman, 2005).

The second characteristic has been described as *overexcitability*, characterized by psychomotor, sensual, imaginal, and emotional sensitivities (Piechowski, 1997). Overexcitability is believed to manifest itself as abundant physical energy, a vivid imagination, extreme intellectual curiosity, and a sophisticated sense of morality and justice (Silverman, 1994). Consequently, teachers unaccustomed to gifted students may find their high levels of intellectual activity boorish and time-consuming. Worse, teachers may interpret psychomotor excitability as evidence of behavior problems (Pfeiffer & Stocking, 2000). With peers, gifted students may also find it difficult to have calm, reciprocal peer relationships due to physical restlessness, and may overreact to minor slights (Robinson, 2008).

There is conflicting empirical evidence regarding overexcitability in gifted youth. Using self-report questionnaires with Canadian students, Ackerman (1997) was able to discriminate 70.9% of gifted and nongifted students based on psychomotor, intellectual, and emotional overexcitability scores ($\chi^2 = 25.73, p < .001$). Psychomotor overexcitability made the greatest contribution (structure coefficients were not reported), leading Ackerman (1997) to conclude, “this sample of gifted students could be described as more energetic, having more drive,” and “exhibiting more movement and chattering” (p. 223). Bouchard (2004) was also able to classify gifted and nongifted students (Wilks Lambda [$df = 5$] = .808, $p < .001$) based on categories of overexcitability, although she utilized teacher ratings rather than self-report. Again, psychomotor overexcitability made the greatest contribution to discriminating between gifted and nongifted students (Wilks Lambda [$df = 5$] = .963, $p = .012$) but in her sample, *nongifted* students were more likely to be characterized as overexcitable ($r = -.741$).

Third, maladaptive perfectionism is also frequently mentioned as a risk factor for gifted students. In many instances, gifted students’ tendency to demand high levels of performance or production drives their ability to cultivate superior skills and knowledge. When the bar is set unrealistically high, however, gifted students may be susceptible to feelings of self-doubt, low self-worth, and guilt due to failing to meet their (unreasonable) expectations (Pfeiffer & Stocking, 2000). Although perfectionism is widely reported as a correlate of giftedness in the literature, there is mixed empirical evidence to support this claim. In one study, Parker and Mills (1996) found little difference between 600 sixth grade gifted students and 418 non-gifted students on perfectionism measures. In another study, gifted students scored significantly higher on scales of adaptive perfectionism and significantly lower on scales of maladaptive perfectionism than their non-gifted peers (LoCicero & Ashby, 2000). Studies that only utilize a gifted sample have found stronger support for a perfectionism-giftedness link. For example, Schuler (2000) found that 87.5% of 112 gifted students could be characterized as perfectionistic. Of these perfectionist students, one-third was considered neurotic ($n = 33$) whereas the remainder fell ($n = 66$) in the typical range of perfectionism (Schuler, 2000).

Some scholars have openly questioned whether there is sufficient evidence to conclude that introversion, perfectionism, and overexcitability are “defining characteristics” of giftedness, suggesting these qualities may arise from other factors, such as mismatches between the student’s ability and his or her instructional environment (Subotnik et al., 2011, p. 10). For instance, without differentiated instruction, a gifted student may be under-stimulated and bored, leading to disengagement or conduct problems (Gallagher, Harradine, & Coleman, 1997). An inappropriate environment may also have social repercussions. Gifted students report that being smart hinders their ability to make friends (Janos, Marwood, & Robinson, 1985), and that they

may hide evidence of their intellectual ability if they feel different from others (Coleman & Cross, 1988; Janos, Fung, & Robinson, 1985). It has also been reported that when gifted students are in mismatched environments, evidence of critical thinking and advanced vocabulary may be misinterpreted as intolerance and arrogance (Pfeiffer & Stocking, 2000). Some scholars have extended this argument to suggest that widespread anti-intellectualism beliefs in the US make it difficult for gifted students to function at their capacity without being singled out as elitist (Robinson, 2008).

Argument 2: Gifted students are resilient to victimization and its effects. Terman's (1925) longitudinal studies of gifted youth indicated that giftedness (measured by IQ) was associated with fewer problems related to psychosocial adjustment. The preponderance of research to date continues to support this view that, *on average*, gifted students fare just as well or better on indicators of psychosocial well-being compared to their non-gifted peers (Neihart, 1999). Some studies have also revealed that gifted children are perceived by their peers as more socially competent and less likely to be a bully or victim than nongifted peers (Cohen, Duncan, & Cohen, 1994). In addition, gifted students perceive themselves as equally proficient or superior to their non-gifted peers in the areas interpersonal competence, sociability, and peer relationships, and do not view their giftedness as an impediment to their social interactions (Lee, Olszewski-Kubilius, & Thomson, 2012).

A relevant finding is that resilient children are more likely to have average or higher cognitive ability (Masten et al., 1999; Sameroff & Rosenblum, 2006). Although not every resilient child is gifted (and vice-versa), high cognitive functioning may facilitate adaptive strategies in response to stressful events. A potentially useful framework for understanding how intellectual capacity translates into effective coping skills is the cognitive appraisal paradigm (Lazarus & Folkman, 1984). It stands to reason that gifted students – owing to advanced development of abstract thinking and deductive reasoning – are better able to judge the quality and severity of stressful interactions, and organize potential coping responses that lead to quicker recovery (Bland et al., 1994; Werner, 1995).

To date, only a handful of studies have examined coping strategies amongst gifted youth. The most consistent finding amongst these studies is that gifted students utilize problem-focused coping strategies (e.g., attempt to solve the problem, work harder) more than any other strategy (Frydenberg & O'Mullane, 2000; Sowa & May, 1997; Tomchin, Callahan, Sowa, & May, 1996). In general, problem-focused strategies are associated with fewer internalizing and externalizing symptoms, and higher levels of social and academic competence in adolescents (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Moreover, gifted students are less likely to utilize ineffective coping strategies (e.g., wishful thinking, smoking or alcohol use, or resigning themselves to living with the problem) than nongifted students (Frydenberg & O'Mullane, 2000).

It is important to note that these findings are not evidence that gifted students are inherently superior to nongifted peers during stressful times. Effective coping strategies vary depending on numerous factors and far more research is needed to draw definitive distinctions between the two groups. It is relevant, however, that qualitative differences appear to exist between gifted and nongifted students' coping preferences, which could inform future research in this area.

Peer Victimization and the Gifted: Empirical Findings

As of this writing, there are three studies from the past decade that directly examine the relationship between giftedness and peer victimization. In one study (Peterson & Ray, 2006a),

432 gifted eighth graders were asked to report about their victimization experiences during each school year dating back to kindergarten. Their findings revealed prevalence estimates that were substantially elevated compared to those in the general population. In peak years (Grades 6 – 8), 33% to 36% of the gifted sample reported being victimized more than once over the course of the school year. By contrast, Nansel et al. (2001) reported rates between 16.9% and 24.2% for a sample of nongifted students in Grades 6 to 8. As with the general population (Wang et al., 2009), gifted students reported verbal aggression (e.g., name-calling, teasing) as the most commonly experienced form of bullying. For gifted students, taunts were most often directed at physical appearance (e.g., “fatboy”, “midget”) or intellectual ability (“dork”, “geek”; Peterson & Ray, 2006a, p. 155).

Despite Peterson and Ray’s (2006a) study being the most frequently cited in this literature (86 at the time of this writing), there are several critical limitations. First, the results are subject to cohort effects due to the lack of a comparison group. Although there are numerous prevalence studies of general education students available, any comparisons are tenuous due to differences in methodology and sampling. Second, Peterson and Ray assessed victimization by asking participants to recall experiences that had occurred up to 10 years in the past. The inherent threats to the validity of retrospective recall are exacerbated by the study’s expansive time frame and the young age at which memories were supposedly formed (Hardt & Rutter, 2004).

In a second study, Peterson and Ray (2006b) provided a more detailed portrayal of the impact of victimization among gifted youth by gathering narrative descriptions from 57 gifted eighth grade students. A major theme that emerged from their analysis was that giftedness represented a unique risk factor for victimization. For one, the students reported that having the gifted label meant teachers would “automatically like” them and be far more permissive than they would with non-gifted students (p. 257). Such favoritism led to jealousy among peers, providing the motivation to tease or harass the gifted students in the class. Second, some gifted students found themselves as targets for bullying due to limited social connections. One student reported, “when it’s not random, [bullies] look for loners” (p. 258).

Third, school structure was often a contributing factor to victimization, including complaints that other students were rarely punished for making disparaging remarks related to giftedness or intellect. Some gifted students were reluctant to seek help from teachers or staff because they feared repercussion or felt that they could solve the problem themselves. Fourth, gifted students expressed heightened sensitivities to nonphysical bullying such as teasing and name calling, noting that the mental anguish associated with verbal abuse evoked far more fear than potential bodily harm caused by physical victimization (Peterson & Ray, 2006b). As in most qualitative research, Peterson and Ray’s (2006b) rich descriptions of victimization came at the expense of limited generalizability to gifted youth outside of their sample. In addition to a small sample size ($n = 57$), there was a disproportionately high representation of male (74%) and White (76%) students compared to gifted population being examined (48% and 68%, respectively; Peterson & Ray, 2006a).

In the only study to utilize a non-gifted comparison group, Peters and Bain (2011) sought to determine whether victimization rates differed between gifted students and high academic achievers (i.e., enrolled in Advanced Placement courses but not identified as gifted). The authors reasoned that high-achieving students would serve as a useful comparison (as opposed to average students) as they shared a very similar academic environment. The sample included 90 high school students (43 gifted) from two schools, who were surveyed using standardized measures of

victimization. The average victimization scores for both gifted and high-achieving students were well within the average range ($T = 47.45$ and 49.42 , respectively) and were not significantly different from one another. In terms of practical significance, gifted students reported lower rates of victimization with a small effect size ($d = -.23$). In contrast to Peterson and Ray (2006a), Peters and Bain's (2011) findings indicated that giftedness was not a risk factor for victimization. However, the generalizability of these results was limited. The small sample was composed primarily of White (91%) students attending two schools from the same suburban Tennessee school district.

To review, the literature on giftedness and victimization is extremely sparse. The current understanding of how giftedness relates to victimization experiences at school is primarily based on peripheral bodies of research pertaining social-emotional development. The three studies that directly examine the gifted-victimization association had several fundamental flaws, most notably an over-reliance on retrospective self-report and limited generalizability findings beyond their samples. Additional research on the prevalence and impact of bullying among the gifted is necessary to inform instruction and to provide necessary insight about important interactions that may lead to victimization for gifted youth.

The Present Study

The purpose of the current study is to test hypotheses about giftedness and peer victimization based on competing claims in the literature. Using a large dataset comprised of ethnically and socioeconomically diverse middle school students in California, I explored the following research questions: (a) Do rates of peer victimization differ between gifted and nongifted populations, and (b) does psychosocial adjustment differ substantially between gifted and nongifted students who have been victimized?

In the only study to compare victimization using gifted and non-gifted students, Peters and Bain (2011) failed to find statistically significant differences between the groups. Accordingly, I hypothesized that gifted students would have similar victimization rates as their general education peers. In terms of psychosocial adjustment to victimization experiences, the preponderance of evidence suggests that that gifted students fare just as well (or better) than nongifted students for overall psychological adjustment and social competence (Neihart, 1999; Robinson, 2008). Thus, I hypothesized that the association between victimization and negative psychosocial outcomes would be similar or weaker for gifted students compared to nongifted students.

Method

Data Set

Data for the current study were collected as part of the UCLA Middle School Diversity Project, a longitudinal study of middle school students in California. Following approval from the Institutional Review Board (see supplemental materials), students from six middle schools in the Los Angeles area were first recruited in the fall of 2009. The project expanded in the fall of 2010 to include 14 additional schools in the Los Angeles and San Francisco Bay Areas. A third and final cohort consisting of six schools was added in the fall of 2011, for a grand total of 26 middle schools participating in the study.

Across the 26 schools, 7,458 consent forms were distributed to sixth grade students in their homeroom classes. Of these consents, 6,058 (81%) were returned with 84% of parents granting permission for their child to participate. Six of these schools did not provide information about GATE identification and were excluded from analysis. The resulting sample consisted of 4,500 participants (51.2% female; $M_{age} = 11.5$ years, $SD = .5$) from 20 middle

schools. Ethnicity was based on student self-report, with 1.2% declining to respond. Of those who did respond, 34% were Latino/Mexican, 18.5% European American/White, 14.2% African American/Black, 13.7% Multi-ethnic/Biracial, 11.1% East/Southeast Asian, 2.4% Filipino/Pacific Islander, 2.3% Middle Eastern, 2% Other (including Native American), and 1.9% South Asian.

Hypothesis tests were conducted using Bonferroni adjusted alpha levels of .002 in order to determine significant differences in GATE and non-GATE enrollment at each school. Of the 20 schools included in the study, eight had significantly ($p < .002$) more GATE students, nine had significantly more non-GATE students, and two only provided information about GATE students. For three schools, the proportions of GATE and non-GATE students were not significantly different ($p > .002$). According to information gathered from participating school district websites, the following measures were used as part of the GATE identification process: 100% of schools reported using standardized achievement scores; 62.5% reported using a measure of cognitive ability; 75% reported using teacher referrals/recommendations; 62.5% reported using parent referrals; 12.5% reported using a formal observation system; and 12.5% reported a minimum GPA requirement.

Standardized achievement and cognitive ability cutoff scores ranged from the 85th to 95th percentile of same-age test-takers. Two school districts explicitly stated that students failing to earn test scores above the cutoff could still be chosen for GATE programs. Districts reported identifying students as early as Grade 1, although the majority of districts (87.5%) began in Grades 2 through 4. All districts reported a process for re-applying to GATE programs if students did not initially qualify. Each district used at least three sources of information in the identification process, and one district used as many as six. With regards to programming, four schools identified GATE magnet programs on site. Three schools identified themselves as science/technology magnet schools but did not indicate whether GATE identification was a requirement for enrollment. Three schools reported having an individualized honors program, and two schools indicated that differentiated GATE instruction took place within general education classrooms. The remaining eight schools did not provide information about GATE programming.

Participants

The final analytical sample consisted of 2,888 participants ($M_{\text{age}} = 11.3$ years; $SD = .46$) after the non-GATE comparison group was selected. The sample was equally divided among GATE participants ($M_{\text{age}} = 11.5$ years, $SD = .42$) and non-GATE participants ($M_{\text{age}} = 11.0$ years, $SD = .37$). The mean age of the non-GATE subsample was significantly lower than the GATE subsample ($p < .001$, $d = 1.26$). Gender, ethnicity, and parent education characteristics for the total sample and GATE/non-GATE subsamples can be found in Table 1. Similar to national patterns (Erwin & Worrell, 2012), Asian and European participants were overrepresented in the GATE sample, and African-American and Latino students were underrepresented. The fifth largest ethnic group, multiethnic, is proportionally represented in both GATE and non-GATE subsamples. Gender representation in GATE programs was not significantly different. In cases where variable information was missing, linear interpolation was used to estimate scores. Single imputation methods such as linear interpolation are more efficient and precise methods of preserving data than naïve techniques such as listwise deletion and mean-value replacement (Schaefer & Graham, 2002). Depressive symptom items contained the highest percentage of missing responses (5.5% – 7.5%), followed by self-worth items (5.7% to 6.3%), anxiety items (3.9% to 5.5%), and victimization items (1.0% to 1.1%).

Procedure

Students were recruited for the study in the fall of their sixth grade year. Research assistants went to classrooms to recruit participants, and sent home a description of the study, parental consent forms, and parent questionnaires. Students who had obtained parental consent completed a survey on a normal school day during class time later in the semester. The survey included measures about students' own behaviors, their classmates' behaviors, perceptions of the school environment, friendships, and their own and classmates' victimization. The survey was group administered by two research assistants in each classroom and took approximately 55 minutes to complete. During the administration, one research assistant read instructions aloud while students answered questions independently. The other research assistant circulated throughout the room to answer questions and ensure that students were able to maintain their privacy. Students received \$5 for completing the survey.

Measures

Covariates. Gender, parent education, academic achievement, and ethnicity were used as covariates in data analysis. Gender was acquired through school records, and coded as a dichotomous variable (0 = *male*, 1 = *female*). Parent education was gathered from packets sent home with participants. One parent indicated his or her highest level of education from six choices: elementary/junior high school; some high school; high school diploma or GED; some college; 4-year college degree; and graduate degree. Choices were then coded on a 6-point scale, with higher values indicating higher levels of educational attainment. Educational attainment is frequently used as an indicator of SES, as it is highly correlated with occupational income and remains stable over the course of a lifetime (Sirin, 2005). Academic achievement was measured by grade point average (GPA) provided by the schools.

Student ethnicity was determined by self-report with students choosing one of 10 options as follows: White/Caucasian; Black/African American; Black/Other country of origin (e.g., Belize, Guyana); Mexican/Mexican-American; Latino/Other country of origin (e.g., Guatemala, El Salvador); East Asian (e.g., Chinese, Korean, Japanese); Southeast Asian (e.g., Vietnamese, Cambodian); Pacific Islander (e.g., Samoan, Filipino); Middle Eastern/South Asian (e.g., Persian, Indian); Other/Multiethnic. Students were also provided space to write their ethnicity if they did not identify with the available choices. Some ethnicities were collapsed into broader pan-ethnic groups (e.g., East/Southeast Asian) for analysis due to low representation.

Giftedness. Giftedness was operationalized as a student's participation in a GATE program at their school. Although federal guidelines exist for GATE identification, procedures can vary widely between schools (Worrell & Erwin, 2011). As mentioned in the data set section, participating schools used a variety of identification tools with standardized achievement scores and parent/teacher referral being the most popular methods.

Peer victimization. Peer victimization was assessed using a 7-item measure created for the UCLA Middle School Diversity Project (Lanza et al., 2013). One item consisted of a specific description of physical victimization, three items described verbal victimization, and three items described relational victimization. Using a 5-point scale (1 = *never* and 5 = *almost every day*), participants indicated how frequently they had been targets of each type of victimization since the beginning of the school year ($\alpha = .85$ in this sample).

In earlier studies (e.g., Wang et al., 2009), victimization scores have been aggregated and reported by the type of behavior. Principal axis factoring was used to determine whether a three-factor structure (physical, verbal, and relational victimization) would emerge from scores in the current sample. One factor was extracted accounting for 52.9% of the variance, with coefficients

between .52 and .77. Accordingly, item scores were not combined into physical, verbal, relational aggregate scores. For prevalence analyses, the results are presented at the item level in preserve information about the type of victimization. For analyses of psychosocial impact, item scores were summed and averaged into a global score consistent with previous research using this measure (Lanza et al., 2013).

Social anxiety. Social anxiety was measured using 12 items from the Social Anxiety Scale for Adolescents (SAS-A; LaGreca & Lopez, 1998). Each item contained descriptive self-statements and is rated on a five-point scale (1 = *not at all*, 5 = *all of the time*). Six items assessed fears, concerns, and worries regarding negative evaluations from peers (e.g., *I worry about what others say about me*). The remaining six items assessed generalized or pervasive social distress, discomfort, and inhibition (e.g., *it's hard to ask others to do things for me*). All item scores were summed and averaged ($\alpha = .79$ in this sample).

Depressive symptoms. Depressive systems were assessed using the 10-item short form of the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). Students were asked to report the frequency (1 = *rarely or none of the time* to 4 = *almost all of the time*) with which they experienced symptoms of depression (e.g., *I was bothered by things that don't usually bother me*) in the past week. Items were then summed and averaged ($\alpha = .67$ in this sample).

Self-esteem. Self-esteem was assessed using the 6-item Global Self Worth subscale of the Self-Perception Profile for Children (SPPC; Harter, 1985). Each item uses a forced-choice format in which the student first chooses between two statements that best describe him or her (e.g., *some kids are often unhappy with themselves BUT some kids are pretty pleased with themselves*). After choosing the statement, the student rates how true it is of them (*really true for me* or *sort of true for me*). Responses were scored on a 4-point scale, then summed and averaged ($\alpha = .77$ in this sample).

Data Analyses

All statistical analyses were conducted in SPSS (Version 22.0). To circumvent the longstanding obstacle of having few viable comparison groups in gifted education (Subotnik et al., 2011), a propensity score matching strategy (Rosenbaum & Rubin, 1985) was used identify a subsample of the non-GATE comparison group that most closely matched the GATE sample on potential covariates. In the current study, the variables most likely to add measurement error (i.e., variables that could confound the likelihood of victimization or giftedness identification) included gender, ethnicity, parent education, academic achievement, and school of attendance. Age was not included as the sample consists of students in the same grade. Using the Propensity Score Matching extension in SPSS, a logit score for each participant in the sample was derived and the *nearest neighbor* method was used to pair each GATE student with a non-GATE student based on the similarity of propensity scores (Barth, Guo, & McCrae, 2008; Fan & Nowell, 2011).

Once an appropriate comparison group was constructed, prevalence estimates were determined in two ways. First, the proportion of victims for GATE and non-GATE groups was calculated. In earlier studies (Nansel et al., 2001; Solberg & Olweus, 2003), participants have been coded as victims if they reported experiencing bullying *2 or 3 times a month*. In the current study, a similar cutoff of *a few times* since the beginning of the semester was used to identify students as victims. Second, mean item scores were compared to determine the effect size of potential group differences. In order to reduce the likelihood of Type I error, all hypotheses were tested using Bonferroni adjusted alpha levels.

In order to examine psychosocial impact, victimization item scores were summed and averaged. Separate linear regression analyses were then conducted for GATE and non-GATE groups to determine the strength of association between overall victimization (independent variable) and each psychosocial outcome (dependent variable). Another multivariate regression model was run using the GATE and non-GATE participants in order to examine potential moderating effects of a GATE by victimization interaction term.

Results

Prevalence of Peer Victimization

The proportion of students identified as victims ranged from 6.6% to 13.2% for GATE students and 10.7% to 23.2% for non-GATE students (Table 2). For every item of the victimization questionnaire, non-GATE students were more likely to identify themselves as victims than GATE students. The proportion of victims in each subgroup was compared using *z*-tests, with significant differences emerging on six of the seven victimization items ($p < .007$). The only item in which significant differences did not emerge related to physical victimization. The mean scores for each item on the victimization scale were significantly lower for GATE students (Table 3) on four of the seven items. The sizes of these effects are considered small when using traditional benchmarks (Cohen, 1988), ranging from $-.08$ to $-.20$. Mean total victimization was also significantly lower for GATE students with a small effect size ($p < .001$; $d = -.15$).

Impact of Victimization

The effect of victimization on psychosocial outcomes was examined in two ways. First, regression equations were run separately for GATE and non-GATE students, where total victimization score was modeled as the independent variable and the psychosocial outcome was the dependent variable. The purpose of this analysis was to determine whether the slope of the regression equation differed from zero, (i.e., that increased victimization affected psychosocial outcomes). Results can be found in Table 4. For GATE and non-GATE students, an increase in victimization was significantly associated with increased depressive symptoms and anxiety, as well as reductions in self-worth. Effect sizes were determined using semi-partial correlation coefficients (sr^2), which provided estimates of the unique contribution of victimization on psychosocial outcomes. The proportion of variance explained by victimization ranged from 5.3% to 13.6% for GATE students, and 8.8% to 14.4% for non-GATE students, which are considered small effects using Cohen's (1988) guidelines.

In the next set of equations, the potential moderating effect of GATE status on psychosocial outcome was assessed following Preacher's (2003) guidelines, including centering both variables and adding a GATE by victimization interaction term to the equation. The results indicate a small, statistically significant ($p < .05$, $d = .11$, $CL = 52.9%$) interaction on depressive symptoms but not self-worth or anxiety (Table 5).

Post-hoc Analyses

Post-hoc comparisons of demographic characteristics revealed that boys reported significantly higher levels of overall victimization than girls, $F(1, 2886) = 28.96$, $p < .001$. Additional regression analyses were conducted to probe this effect further, with GATE by victimization, gender by victimization, and gender by GATE by victimization interaction terms added to the model (Table 6). A small, statistically significant interaction effect was found for GATE status, gender, and victimization on depression ($p < .05$, $d = .23$, $CL = 56.5%$).

Discussion

There are competing claims about gifted students' vulnerability to peer victimization and subsequent psychosocial repercussions. The current study was designed to provide a glimpse of the peer victimization climate for gifted students, as well as provide an empirical foundation to further explore useful hypotheses. Perhaps the greatest strength of the current research is the use of a general education comparison sample matched to gifted students on several covariates that may play a role in peer victimization. I hypothesized that gifted and non-gifted students would experience similar rates of victimization, and that gifted students would cope better with victimization, leading to better psychosocial adjustment. Contrary to the first hypothesis, GATE students were victimized less frequently than their non-GATE peers in terms of verbal and relational victimization. The rate of physical victimization was similar for both groups. The second hypothesis was not supported either. Victimization resulted in increases in anxiety and reductions in self-worth at similar magnitudes both GATE and non-GATE students. Moreover, GATE status had a small but significant moderation effect on depressive symptoms. In other words, giftedness appeared to exacerbate rather than buffer depressive symptoms following victimization.

Prevalence of Victimization for GATE Students

It is estimated that 15% to 20% of adolescents are victimized on a consistent basis at school. The findings from the current study indicate comparable rates for the entire sample, ranging from 8.7% to 20.8%. The increased variation is almost certainly due to the fact that rates in the current study were reported by item, rather than aggregated. GATE students reported lower victimization rates on the whole, ranging from 6.6% to 18.3% whereas non-GATE students ranged from 10.7% to 23.2%. When comparing victimization rates at the item level, GATE students in the current sample were victimized significantly less than their non-GATE peers. The mean scores for overall victimization were also significantly lower for GATE students but with an effect size ($d = -.15$) lower than previous findings ($d = -.23$; Peters & Bain, 2001). An initial (though far-reaching) explanation for these results is that the gifted students in the current sample are simply more socially competent on average. This interpretation is bolstered by research demonstrating gifted students' enhanced social status, interpersonal skills, and social coping abilities compared to non-gifted peers (Cohen et al., 1994; Lee et al., 2012).

A closer look at the results can help inform a more nuanced explanation for the findings. For instance, GATE and non-GATE students' rates of physical victimization were not significantly different. This finding could be innocuous or could be a clue as to why victimization rates differed so greatly between the groups. Physical acts of victimization are unequivocal, leaving very little room to misinterpret the perpetrator's intent as well as the imbalance of power in the peer dyad. In contrast, forms of verbal and relational aggression are subject to the victims' attributions of intent. It may be the case that gifted students were less likely to attribute a peer's behavior as aggressive (or conversely, may be oblivious to aggression). Although the relationship between intelligence and attribution style is complex, individual differences in the interpretation of behavior are associated with individual differences in information processing abilities (Orabio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002).

The comparatively fewer number of victims runs contrary to arguments that gifted students are vulnerable to victimization due to their abilities. Scholarship that advances the belief that gifted students are targets due to inherent teacher favoritism, peer jealousy, and incompatibility with peers (Peterson & Ray, 2006a, b) is popular in the gifted literature, despite

evidence to suggest this is not the case (Peters & Bain, 2011). There appears to be a shift to conceptualize gifted vulnerability as a person-environment mismatch, whereby gifted students are not seen at risk as long as they are cognitively stimulated and surrounded by similarly capable peers (Robinson, 2008). In the current study, GATE students were victimized significantly less even when the school environment was taken into account. Although this does not discount a person-environment fit hypothesis, it may suggest that researchers should also explore why gifted students may be *protected* from victimization rather than *vulnerable* to it (a potential mitigating factor to this argument is discussed in the limitations section).

GATE Status and Victimization Outcomes

Whereas GATE students held a clear advantage over non-GATE peers in terms of victimization frequency, it is less clear whether GATE status played a role in psychosocial outcomes. To be certain, victimization was harmful for both groups leading to adverse psychosocial consequences. It appears that this effect was exacerbated for GATE students on measures of depressive symptoms, but not for anxiety and self-worth outcomes. What do we make of this differential effect? It is highly unlikely that trait-based characteristics such as introversion, overexcitability, and maladaptive perfectionism can fully explain the different outcomes between GATE and non-GATE samples. The central tenet of such hypotheses – that GATE students might be alienated from peer groups due such personality traits – was not supported by the current findings, which showed GATE students were victimized far less than non-GATE students.

This finding does not necessarily preclude the possibility that increased depressive symptoms could be mediated by maladaptive perfectionism following victimization experiences. It makes intuitive sense that unrealistically high expectations for peer interactions could lead to inevitable feelings of sadness and guilt (Pfeiffer & Stocking, 2000). But, as others have noted, there is scant evidence to suggest that gifted students are more likely to harbor maladaptive perfectionist tendencies than their nongifted peers (LoCicero & Ashby, 2000). Second, maladaptive perfectionism is hypothesized to worsen anxiety symptoms (Kawamura, Hunt, Frost, & DiBartolo, 2001) but GATE and non-GATE students did not differ from each other in the current study in terms of statistical or practical significance.

One intriguing hypothesis currently being explored by Graham (2006) and her colleagues (Bellmore et al., 2004; Graham & Juvonen, 1998, 2002; Graham et al., 2009) links attribution styles and school contexts to victimization effects. Ethnic diversity has been the primary focus of this research but this model may be applicable to studies of gifted students as well. In this framework, numerical differences between groups in schools create shifts the balance of power to the group with the majority of students. For instance, Graham and Bellmore (2009) demonstrated that students belonging to the numerical ethnic minority were at increased risk for victimization compared to students in the numerical ethnic majority. But what happens if a student in the numerical majority is victimized? Graham (2006) described it thusly: “Having a reputation as a victim when one’s ethnic group holds the numerical balance of power might be especially debilitating because that person deviates from what is perceived as normative for his or her group” (p. 319). Such increases in debilitating effects occur because victims in the majority are more likely to make maladaptive attributions for others’ behavior (Weiner & Graham, 1999).

Although speculative, the current results could be interpreted under Graham’s (2006) framework. Some GATE students in the current study were involved in programs that clustered them with one another, essentially creating a separate environment from non-GATE population.

The reduced prevalence of victimization could be predicted due to gifted students' advantages in overall social competence (Neihart, 1999; Robinson, 2008). The elevated association between victimization and depressive symptoms would also be explained due to a deviation from the group norm and concomitant increases in detrimental self-attributions (Graham, 2006). Other questions remain unanswered in this model (e.g., the absence of a stronger link between anxiety and victimization for GATE participants), and further research is clearly needed to fully understand whether gifted students respond differently to victimization. However, this model would be an especially ambitious starting point because it would raise significant questions about what constitutes a successful person-environment fit for gifted students. The prevailing wisdom is that gifted students are better off surrounded by their gifted peers (Robinson, 2008; Subotnik et al., 2011), but this framework could append a caveat to such advice.

Finally, post-hoc analyses revealed a small but significant interaction occurred between victimization, GATE status, and gender on depressive symptoms. In other words, female GATE students reported higher levels of depressive symptoms than male GATE students following victimization. One potential explanation relates to covert forms of victimization that go undetected by conventional victimization measures. *Microaggression* is a popular term to describe everyday verbal, nonverbal, and systemic slights toward marginalized groups (including girls and women) that sustain power imbalances (Sue, 2010). Microaggressions toward adolescent girls may include sexual objectification, assumptions of physical and intellectual inferiority, and second-class citizenship (Nadal, Hamit, Lyons, Weinberg, & Corman, 2013). Because children and adolescents may underreport less salient forms of aggression (Card & Hodges, 2008), it is possible that girls are subject to higher rates of victimization than current estimates would suggest. Observational methods have been recommended to capture microaggressions in the classroom, but there are currently no studies that directly link microaggressions and peer victimization.

An additional explanation is that ruminative coping styles – the tendency to passively and repeatedly focus one's own distress – may exacerbate depressive symptoms that result from victimization. In this framework, rumination arises because girls have the dual challenge of experiencing more chronic strain than boys while being simultaneously required to present themselves in positive light (Nolen-Hoeksema, 2001). Several decades of empirical work have supported the theory that a rumination-stress interaction predicts gender differences in the development of depression (Nolen-Hoeksema, Larson, & Grayson, 1999). Moreover, rumination is one of several variables that help to explain why this gender gap emerges in adolescence (Nolen-Hoeksema & Girgus, 1994). On the surface, GATE programs appear to be the perfect environment to cultivate ruminative tendencies: Victimization is a chronic stressor and there may be the need (real or perceived) to constantly present oneself as composed, competent, and successful.

Limitations

One limitation of the current study (and the field of victimization research in general) is the difficulty comparing results across studies, which primarily stems from disparate operational definitions and measurement instruments (Olweus, 2013). In the current study, aggregating victimization scores by type (social, verbal, and physical) would have facilitated comparisons to other studies (e.g., Wang et al., 2009). However, a three-factor structure did not emerge from scores in this sample. Victimization was instead reported by item for prevalence estimates, which allowed important information to be retained but makes comparisons to previous research cumbersome. A single score of overall victimization was to examine psychosocial outcomes and

although this facilitates comparisons to previous research (e.g., Lanza et al., 2013), it obscures potentially nuanced relationships between the type of victimization and subsequent outcomes.

A second limitation is that relatively little is known about the gifted programming for the schools participating in the study. Even when schools appear to have similar terminology for their GATE programs (e.g., *magnet program*, *enrichment*, *acceleration*), there may be differences in how these terms are implemented in practice. For instance, a magnet program with a self-contained building on campus is qualitatively different from a magnet program where students spend the majority of their day in mainstream classes.

Lastly, giftedness is a construct that tends to invite more debate than agreement (Sternberg & Davidson, 2005). There are no perfect markers of giftedness (Worrell & Erwin, 2011) including participation in GATE programs. In the current study, GATE students comprised 32.1% of the sample, which far exceeds what would be expected based on statewide enrollment figures (National Association for Gifted Children, 2013). The high proportion of GATE students in the sample may be due to relaxed admission criteria or higher research participation rates among GATE students. It is likely that both factors played a role in the makeup of the current sample.

Conclusions and Future Directions

The unequivocal finding from the current study is that GATE students are victimized significantly less than non-GATE peers when it comes to verbal and social harassment. Given the consistency of the results, it appears highly unlikely that personality traits such as introversion or overexcitability play a fundamental role in gifted students' victimization experiences. One potential interpretation is that gifted students, by way of advanced social skills or safer environments, are simply victimized less than non-gifted students. However, GATE and non-GATE students reported similar levels physical victimization. Thus, an alternative explanation is that when there is ambiguity surrounding peers' behavior, gifted students are less likely to view peer behavior as threatening. Instances of physical victimization are unambiguous, potential attribution differences between the groups. Exploring gifted students' attributional styles is a fertile research area for the fields of victimization, resilience, and coping.

Whether giftedness factors into the impact of victimization remains uncertain. In the current study, GATE status exacerbated depressive symptoms as victimization experiences increased. But this was not the case for anxiety and self-worth outcomes. Future investigations will need to utilize multilevel models to examine the interacting effects of the gifted student and the school environment. It is also critical that demographic differences are accounted for in future research. In the current study, a small but significant interaction emerged whereby female GATE students were most likely to experience depressive symptoms following victimization. It was possible to speculate about why these differences came about, but no firm conclusions could be drawn without assessing potential mediating variables.

The results of the current study provide a comprehensive examination of victimization in gifted and non-gifted students in order to elucidate the role of giftedness in the face of peer victimization. The current findings indicate that giftedness was *both* a risk and protective factor. On one hand, GATE victimized significantly less than non-GATE students. On the other hand, victimized GATE students reported significantly higher levels of depressive symptoms. Instead of conceptualizing giftedness as a boon or burden, researchers should focus their efforts on the qualities of giftedness that may impact peer victimization experiences. It is not a revelation that giftedness is a complex construct, and numerous researchers have stressed this point as it relates to psychosocial well-being (Robinson, 2008; Subotnik et al., 2011). Yet the notion that being

gifted invites torment from peers stubbornly persists (Peterson, 2006; Peterson & Ray, 2006a, b; Taibbi, 2012). There are undoubtedly numerous instances where this may be the case, which is tragic in its own right. But this conceptualization appears outdated in light of the empirical evidence and does little to advance the understanding of who gets victimized and why. With improved knowledge of these factors, more effective prevention and intervention methods can be cultivated for both gifted and non-gifted youth.

References

- Ackerman, C. M. (1997). Identifying gifted adolescents using personality characteristics: Dabrowski's overexcitabilities. *Roepers Review*, *19*, 229–236. doi:10.1080/02783199709553835
- Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, *92*, 86–99. doi:10.1080/00220679809597580
- Barth, R. P., Guo, S., and McCrae, J. S. (2008). Propensity score matching strategies for evaluating the success of child and family service programs. *Research on Social Work Practice*, *18*, 212–222. doi:10.1177/1049731507307791
- Bellmore, A. Witkow, M. Graham, S., & Juvonen, J. (2004). Beyond the individual: The impact of ethnic diversity and behavioral norms on victims' adjustment. *Developmental Psychology*, *40*, 1159–1172. doi:10.1037/0012-1649.40.6.1159
- Bland, L. C., Sowa, C. J. & Callahan, C. M (1994). An overview of resilience in gifted children. *Roepers Review*, *17*, 77–81. doi:10.1080/02783199409553629
- Bouchard, L. L. (2004). An instrument for the measure of Dabrowskian overexcitabilities to identify gifted elementary students. *Gifted Child Quarterly*, *48*, 339–350. doi:10.1177/001698620404800407
- Boulton, J. J., & Underwood, K. (1992). Bully/victim problems among middle school children. *British Journal of Educational Psychology*, *62*, 73–87. doi:10.1111/j.2044-8279.1992.tb01000.x
- Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2009). A social disorganization perspective on bullying-related attitudes and behaviors: The influence of school context. *American Journal of Community Psychology*, *43*, 204–220. doi:10.1007/s10464-009-9240-1
- Callahan, C. M., Hunsaker, S. L., Adams, C. M., Moore, S. D., & Bland, L. C. (1995). *Instruments used in the identification of gifted and talented students* (Research Monograph 95130). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*, 1185–1229. doi:10.1111/j.1467-8624.2008.01184.x
- Cohen, R., Duncan, M., & Cohen, S. L. (1994). Classroom peer relations of children participating in a pull-out enrichment program. *Gifted Child Quarterly*, *38*, 33–37. doi:10.1177/001698629403800105
- Coleman, L. J., & Cross, T. L. (1988). Is being gifted a social handicap? *Journal for the Education of the Gifted*, *11*, 41–56. doi:10.1177/016235328801100406
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*, 87–127. doi:10.1037/0033-2909.127.1.87
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B.,...HBSC Bullying Writing Group. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, *54*, 216–224. doi:10.1007/s00038-009-5413-9

- Due, P., Merlo, J., Harel-Fisch, Y., Damsgaard, M. T., Holstein, B. E., Hetland, J.,...Lynch, J. (2009). Socioeconomic inequality in exposure to bullying during adolescence: A comparative, cross-sectional, multilevel study in 35 countries. *American Journal of Public Health, 99*, 907–914. doi:10.2105/AJPH.2008.139303
- Erwin, J. O., & Worrell, F. C. (2012). Assessment practices and the underrepresentation of minority students in gifted and talented education. *Journal of Psychoeducational Assessment, 30*, 74–87. doi:10.1177/0734282911428197
- Espelage, D. L., & Swearer, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review, 32*, 365–383.
- Fan, X., & Nowell, D. L. (2011). Using propensity score matching in educational research. *Gifted Child Quarterly, 55*, 74–79. doi:10.1177/0016986210390635
- Foster, H., & Brooks-Gunn, J. (2013). Neighborhood, family and individual influences on school physical victimization. *Journal of Youth and Adolescence, 42*, 1596–1610. doi:10.1007/s10964-012-9890-4
- Frydenberg, E., & O'Mullane, A. (2000). Nurturing talent in the Australian context: A reflective approach. *Roeper Review, 22*, 78–85. doi:10.1080/02783190009554006
- Gallagher, J., Harradine, C. C., & Coleman, M. R. (1997). Challenge or boredom? Gifted students' views on their schooling. *Roeper Review, 19*, 132–136. doi:10.1080/02783199709553808
- Graham, S. (2006). Peer victimization in school: Exploring the ethnic context. *Current Directions in Psychological Science, 15*, 317–321. doi:10.1111/j.1467-8721.2006.00460.x
- Graham, S., & Bellmore, A. D. (2009). Peer victimization and mental health during early adolescence. *Theory into Practice, 46*, 138–146. doi:10.1080/0040584070123308
- Graham, S., Bellmore, A., Nishina, A., & Juvonen, J. (2009). “It must be me”: Ethnic diversity and attributions for peer victimization in middle school. *Journal of Youth and Adolescence, 38*, 487–499. doi:10.1007/s10964-008-9386-4
- Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology, 34*, 587–599. doi:10.1037/0012-1649.34.3.587
- Graham, S., & Juvonen, J., (2002). Ethnicity, peer harassment, and adjustment in middle school: An exploratory study. *Journal of Early Adolescence, 22*, 173–199. doi:10.1177/0272431602022002003
- Hanish, L. D., & Guerra, N. G. (2000). The roles of ethnicity and school context in predicting children's victimization by peers. *American Journal of Community Psychology, 28*, 201–223. doi:10.1023/A:1005187201519
- Hanish, L. D., & Guerra, N. G. (2002). A longitudinal analysis of patterns of adjustment following peer victimization. *Development and Psychopathology, 14*, 69–89. doi:10.1017/S0954579402001049
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: Review of the evidence. *Journal of Child Psychology and Psychiatry, 45*, 260–273. doi:10.1111/j.1469-7610.2004.00218.x
- Harter, S. (1985). *Manual for the Self-Perception Profile for Children and Adolescents*. Denver, CO: University of Denver.

- 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
- Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior, 17*, 311–322. doi:10.1016/j.avb.2012.03.003
- Horowitz, J. A., Vessey, J. A., Carlson, K. L., Bradley, J. F., Montoya, C., McCullough, B., & David, J. (2004). Teasing and bullying experiences of middle school students. *Journal of the American Psychiatric Nurses Association, 10*, 165–172. doi:10.1177/1078390304267862
- Janos, P. M., Fung, H. C., & Robinson, N. M. (1985). Self-concept, self-esteem, and peer relations among gifted children who feel "different". *Gifted Child Quarterly, 29*, 78–82. doi:10.1177/001698628502900207
- Janos, P. M., Marwood, K. A., & Robinson, N. M. (1985). Friendship patterns in highly intelligent children. *Roeper Review, 8*, 46–49. doi:10.1080/02783198509552929
- Jansen, P. W., Verlinden, M., Dommissie-van Berkel, A., Mieloo, C., van der Ende, J., Veenstra, R., ... & Tiemeier, H. (2012). Prevalence of bullying and victimization among children in early elementary school: Do family and school neighbourhood socioeconomic status matter? *BMC Public Health, 12*, 494. doi:10.1186/1471-2458-12-494
- Juvonen, J., & Graham, S. (Eds.). (2001). *Peer harassment in school: The plight of the vulnerable and victimized*. New York, NY: Guilford Press.
- Juvonen, J., Graham S., & Schuster, M. (2003). Bullying among young adolescents: The strong, weak, and troubled. *Pediatrics, 112*, 1231–1237. doi:10.1542/peds.112.6.1231
- Juvonen, J., Nishina, A., & Graham, S. (2006). Ethnic diversity and perceptions of safety in urban middle schools. *Psychological Science, 17*, 393–400. doi:10.1111/j.1467-9280.2006.01718.x
- Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research, 25*, 291–301.
- LaGreca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Psychology, 26*, 83–94. doi:10.1023/A:1022684520514
- Lanza, H. I., Echols, L., & Graham, S. (2013). Deviating from the norm: Body mass index (BMI) differences and psychosocial adjustment among adolescent girls. *Journal of Pediatric Psychology, 38*, 376–386. doi:10.1093/jpepsy/jss130
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal & coping*. New York, NY: Springer.
- Lee, S. Y., Olszewski-Kubilius, P., & Thomson, D. T. (2012). Academically gifted students' perceived interpersonal competence and peer relationships. *Gifted Child Quarterly, 56*, 90–104. doi:10.1177/0016986212442568
- LoCicero, K. A., & Ashby, J. S. (2000). Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review, 22*, 182–185. doi:10.1080/02783190009554030
- Lombroso, C. (1891). *The man of genius*. London, United Kingdom: Walter Scott.
- Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaptation from

- childhood to late adolescence. *Development and Psychopathology*, *11*, 143–169.
doi:10.1017/S0954579499001996
- Nadal, K. L., Hamit, S., Lyons, O., Weinberg, A., & Corman, L. (2013). Gender microaggressions: Perceptions, processes, and coping mechanisms of women. In M. A. Paludi (Ed.), *The psychology of business success* (pp. 193–220). Santa Barbara, CA: ABC-CLIO/Greenwood.
- Nakamoto, J., & Schwartz, D. (2010). Is peer victimization associated with academic achievement? A meta-analytic review. *Social Development*, *19*, 221–242.
doi:10.1111/j.1467-9507.2009.00539.x
- Nansel, T., Overpeck, M., Pilla, R., Ruan, W., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *The Journal of the American Medical Association*, *28*, 2094–2100.
doi:10.1001/jama.285.16.2094
- National Association for Gifted Children. (2013). State of the states in gifted education: 2012–2013. Washington, DC: Author
- Neihart, M. (1999). The impact of giftedness on psychological well-being: What does the empirical literature say? *Roeper Review*, *22*, 10–17. doi:10.1080/02783199909553991
- Nishina, A., Juvonen, J., & Witkow, M. R. (2005). Sticks and stones may break my bones but names will make me feel sick: The psychosocial, somatic, and scholastic consequences of peer harassment. *Journal of Clinical Child and Adolescent Psychology*, *34*, 37–48.
doi:10.1207/s15374424jccp3401_4
- No Child Left Behind Act of 2001, 20 U.S.C. § 6301 et seq. (2002)
- Nolen-Hoeksema, S. (2001). Gender differences in depression. *Current Directions in Psychological Science*, *10*, 173–176. doi:10.1111/1467-8721.00142
- Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological Bulletin*, *115*, 424–443. doi:10.1037/0033-2909.115.3.424
- Nolen-Hoeksema, S., Larson, J., & Grayson, C. (1999). Explaining the gender difference in depressive symptoms. *Journal of Personality and Social Psychology*, *77*, 1061–1072.
doi:10.1037/0022-3514.77.5.1061
- Olweus, D. (1994). Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, *35*, 1171–1190.
doi:10.1111/j.1469-7610.1994.tb01229.x
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, *9*, 751–780. doi:10.1146/annurev-clinpsy-050212-185516
- Orabio de Castro, B. O., Veerman, J. W., Koops, W., Bosch, J. D., & Monshouwer, H. J. (2002). Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Development*, *73*, 916–934. doi:10.1111/1467-8624.00447
- Parker, W. D., & Mills, C. J. (1996). The incidence of perfectionism in gifted students. *Gifted Child Quarterly*, *40*, 194–199. doi:10.1177/001698629604000404
- Peters, M. P., & Bain, S. K. (2011). Bullying and victimization rates among gifted and high-achieving students. *Journal for the Education of the Gifted*, *34*, 624–643.
doi:10.1177/016235321103400405
- Peterson, J. S. (2006). Addressing counseling needs of gifted students. *Professional School Counseling*, *10*, 43–51.

- Peterson, J. S., & Ray, K. E. (2006a). Bullying and the gifted: Perpetrators, prevalence, and effects. *Gifted Child Quarterly*, *50*, 148–168. doi:10.1177/001698620605000206
- Peterson, J. S., & Ray, K. E. (2006b). Bullying among the gifted: The subjective experience. *Gifted Child Quarterly*, *50*, 252–269. doi:10.1177/001698620605000305
- Pfeiffer, S. I., & Stocking, V. B. (2000). Vulnerabilities of academically gifted students. *Special Services in the Schools*, *16*, 83–93. doi:10.1300/J008v16n01_06
- Piechowski, M. M. (1997). Emotional giftedness: The measure of intrapersonal intelligence. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (2nd ed., pp. 366–381). Boston, MA: Allyn and Bacon.
- Preacher, K. J. (2003). *A primer on interaction effects in multiple linear regression*. Retrieved from <http://www.quantpsy.org/interact/interactions.htm>
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–410. doi:10.1177/014662167700100306
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect*, *34*, 244–252. doi:10.1016/j.chiabu.2009.07.009
- Rivers, I., & Smith, P. K. (1994). Types of bullying behaviour and their correlates. *Aggressive Behavior*, *20*, 359–368. doi:10.1002/1098-2337(1994)20:5<359::AID-AB2480200503>3.0.CO;2-J
- Robinson, N. M. (2008). The social world of gifted children and youth. In S. I. Pfeifer (Ed.), *Handbook of giftedness in children* (pp. 33–51). New York, NY: Springer.
- Rodkin, P. C., Farmer, T. W., Pearl, R., & van Acker, R. (2000). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology*, *36*, 14–24. doi:10.1037/0012-1649.36.1.14
- Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, *32*, 114–130. doi:10.1177/0741932510361247
- Rosenbaum, P. R. & Rubin, D.B. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score. *The American Statistician*, *39*, 33–38.
- 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
- Sak, U. (2004). A synthesis of research on psychological type of gifted adolescents. *Journal of Secondary Gifted Education*, *15*, 70–79. doi:10.4219/jsge-2004-449
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, *22*, 1–15. doi:10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T
- Sameroff, A. J., & Rosenblum, K. L. (2006). Psychosocial constraints on the development of resilience. *Annals of the New York Academy of Sciences*, *1094*, 116–124. doi:10.1196/annals.1376.010
- Schaefer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*, 147–177. doi:10.1037//1082-989X.7.2.147

- Schuler, P. A. (2000). Perfectionism and gifted adolescents. *Journal of Advanced Academics, 11*, 183–196. doi:10.4219/jsge-2000-629
- Silverman, L. K. (1994). The moral sensitivity of gifted children and the evolution of society. *Roepers Review, 17*, 110–116. doi:10.1080/02783199409553636
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research 1990-2000. *Review of Educational Research, 75*, 417–453. doi:10.3102/00346543075003417
- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior, 29*, 239-268. doi:10.1002/ab.10047
- Sowa, C. J., & May, K. M. (1997). Expanding Lazarus and Folkman's paradigm to the social and emotional adjustment of gifted children and adolescents (SEAM). *Gifted Child Quarterly, 41*, 36–43. doi:10.1177/001698629704100205
- Sternberg, R. J., & Davidson, J. E. (Eds.). (2005). *Conceptions of giftedness* (2nd ed.). New York, NY: Cambridge University Press.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest, 12*, 3–54. doi:10.1177/1529100611418056
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. Hoboken, NJ: John Wiley & Sons.
- Taibbi, C. (2012, August 26). Bullying and the gifted: Welcome back to school? *Psychology Today*. Retrieved from <http://www.psychologytoday.com>
- Terman, L. M. (1925). *Genetic studies of genius: Mental and physical traits of a thousand gifted children*. Palo Alto, CA: Stanford University Press.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*, 357–385. doi:10.3102/0034654313483907
- Tippett, N., & Wolke, D. (2014). Socioeconomic status and bullying: A meta-analysis. *American Journal of Public Health, 104*, 48–59. doi:10.2105/AJPH.2014.301960
- Tolsma, J., van Deurzen, I., Stark, T. H., & Veenstra, R. (2013). Who is bullying whom in ethnically diverse primary schools? Exploring links between bullying, ethnicity, and ethnic diversity in Dutch primary schools. *Social Networks, 35*, 51–61. doi:10.1016/j.socnet.2012.12.002
- Tomchin, E. M., Callahan, C. M., Sowa, C. J., & May, K. M. (1996). Coping and self-concept: Adjustment patterns in gifted adolescents. *Journal of Secondary Gifted Education, 8*, 16–27. doi:10.1177/1932202X9600800103
- Totura, C. M. W., MacKinnon-Lewis, C., Gesten, E. L., Gadd, R., Divine, K. P., Dunham, S., & Kamboukos, D. (2008). Bullying and victimization among boys and girls in middle school: The influence of perceived family and school contexts. *The Journal of Early Adolescence, 29*, 571–609. doi:10.1177/0272431608324190
- Underwood, M. K., Galen, B. R., & Paquette, J. A. (2001). Top ten challenges for understanding gender and aggression in children: Why can't we all just get along? *Social Development, 10*, 248–266. doi:10.1111/1467-9507.00162
- Vervoort, M. H., Scholte, R. H., & Overbeek, G. (2010). Bullying and victimization among adolescents: The role of ethnicity and ethnic composition of school class. *Journal of Youth and Adolescence, 39*, 1–11. doi:10.1007/s10964-008-9355-y

- Wang, J., Iannotti, R. J., & Nansel, T. J. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*, 368–375. doi:10.1016/j.jadohealth.2009.03.021
- Webb, J. T. (1993). Nurturing social-emotional development of children. In K. A. Heller, F. J. Mönks, & A. H. Passow (Eds.), *International handbook of research and development of giftedness and talent* (pp. 525–538). Elmsford, NY: Pergamon Press.
- Weiner, B., & Graham, S. (1999). Attribution in personality psychology. In L. Pervin & O. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 609–628). New York, NY: Guilford Press.
- Werner, E. E. (1995). Resilience in development. *Current Directions in Psychological Science, 81–85*. doi:10.1111/1467-8721.ep10772327
- Wolf, M. B. & Ackerman, P. L. (2005). Extraversion and intelligence: A meta-analytic investigation. *Personality and Individual Differences, 39*, 531–542. doi:10.1016/j.paid.2005.02.020
- Worrell, F. C., & Erwin, J. O. (2011). Best practices in identifying students for gifted and talented education programs. *Journal of Applied School Psychology, 27*, 319–340. doi:10.1080/15377903.2011.615817
- You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools, 45*, 446–460. doi:10.1002/pits.20308

Table 1
Participant Demographic Characteristics

Demographic Variable	GATE <i>n</i> = 1,444		Non-GATE <i>n</i> = 1,444		Full Sample <i>N</i> = 2,888	
	<i>n</i>	Column %	<i>n</i>	Column %	<i>n</i>	Column %
Ethnicity						
African American/Black	105	7.3	276	19.1	381	13.2
Asian (East/Southeast)	293	20.3	80	5.5	373	12.9
European American/White	362	25.1	229	15.9	591	20.5
Latino/Mexican	341	23.6	517	35.8	858	29.7
South Asian	33	2.3	27	1.9	60	2.1
Filipino/Pacific Islander	49	3.4	28	1.9	77	2.7
Middle Eastern	42	2.9	21	1.5	63	2.2
Other (including Native American)	17	1.2	40	2.8	57	2.0
Multiethnic/Biracial	190	13.2	199	13.8	389	13.5
Did Not Report	12	0.8	27	1.9	39	1.4
Gender						
Male	703	48.7	694	49.7	1397	48.4
Female	741	51.3	750	50.3	1491	51.6
Parent Education						
Elementary/Junior High School	94	6.5	154	10.7	248	8.6
Some High School	83	5.7	100	6.9	183	6.3
High School Diploma or GED	122	8.4	191	13.2	313	10.8
Some College	330	22.9	427	29.6	737	25.5
4-year College Degree	372	25.8	254	17.6	626	21.7
Graduate Degree	335	23.2	228	15.8	563	19.5
Did Not Report	108	7.5	90	6.2	198	6.9

Table 2
Percentage of Victimized Students

Type of Victimization and Item	GATE (<i>n</i> = 1,444)	Non-GATE (<i>n</i> = 1,444)	Full Sample (<i>N</i> = 2,888)
Physical			
Hit, kicked, or pushed you	13.2	14.4	13.9
Verbal			
Threatened you	6.6*	10.7	8.7
Called you bad names	18.3*	23.2	20.8
Made fun of you in front of others	14.9*	19.0	17.0
Relational			
Spread nasty rumors about you	7.5*	11.2	9.3
Tried to keep you out of the group?	11.3*	14.5	12.9
Ignored you on purpose to try to make you feel bad?	10.9*	16.1	13.5

Note. Victimized students reported that incidents occurred *a few times, almost every week, or almost every day* since the beginning of the school year.

*Proportion is significantly lower ($p < .007$) than non-GATE students.

Table 3
Mean Victimization Response by Item and GATE Enrollment

Type of Victimization and Item	Gate <i>M(SD)</i>	Non-GATE <i>M(SD)</i>	<i>t</i>	<i>d</i>
Physical				
Hit, kicked, or pushed you?	1.60 (.83)	1.61 (.89)	0.31	-.01
Verbal				
Threatened you?	1.37 (.67)	1.47 (.80)	3.61*	-.14
Called you bad names?	1.78 (.98)	1.92 (1.09)	3.63*	-.12
Made fun of you in front of others?	1.67 (.89)	1.76 (.99)	2.57	-.10
Relational				
Spread nasty rumors about you?	1.36 (.68)	1.48 (.82)	4.28*	-.16
Tried to keep you out of the group?	1.48 (.86)	1.56 (.92)	2.41	-.08
Ignored you on purpose to try to make you feel bad?	1.44 (.83)	1.61 (.98)	5.03*	-.20

* $p < .007$

Table 4
Victimization Frequency and Prediction of Psychosocial Outcomes for GATE and non-GATE Students

Outcome	Gate				Non-GATE			
	B	(95% CI)	SE	sr^2	B	(95% CI)	SE	sr^2
Self-Worth	-.228*	(-.278, -.178)	.025	.053	-.272*	(-.317, -.227)	.023	.088
Anxiety	.346*	(.297, .396)	.025	.114	.346*	(.303, .390)	.022	.144
Depressive Symptoms	.285*	(.248, .322)	.019	.136	.236*	(.205, .267)	.016	.131

* $p < .001$

Table 5
Multiple Regression Analysis Predicting Psychosocial Outcomes

Predictor Variable	Self-Worth			Anxiety			Depressive Symptoms		
	B	SE	<i>p</i>	B	SE	<i>p</i>	B	SE	<i>p</i>
Victimization	-.250	.017	<.001	.228	.017	<.001	.261	.013	<.001
GATE	.085	.022	<.001	.127	.022	<.001	-.036	.016	.022
Victimization x GATE	.044	.034	.200	.012	.034	.736	.049	.025	.046

Table 6
Post-Hoc Multiple Regression Analysis Predicting Psychosocial Outcomes

Predictor Variable	Self-Worth			Anxiety			Depressive Symptoms		
	B	SE	<i>p</i>	B	SE	<i>p</i>	B	SE	<i>p</i>
Victimization	-.263	.017	<.001	.356	.017	<.001	.273	.013	<.001
GATE	.080	.022	<.001	.022	.021	.315	-.031	.016	.044
Gender	-.073	.022	.001	.050	.021	.019	.064	.016	<.001
Victimization x GATE	.028	.034	.423	.009	.034	.796	.064	.025	.011
Victimization x Gender	-.084	.035	.016	.064	.034	.061	.085	.025	.001
GATE x Gender	-.069	.044	.115	.055	.043	.197	.044	.031	.163
Victimization x GATE x Gender	-.099	.069	.155	.028	.068	.681	.101	.050	.043