The Impact of the Word *Bully* and Providing the Definition of *Bullying* on the Reported Rate of Bullying Behavior

by

Allison Schaffer Kert

A dissertation submitted to the Graduate Faculty in Educational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2008

This manuscript has been read and accepted for the Graduate Faculty in Educational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Georgiana Tryon, Ph.D.

_____	_____
Date	Chair of Examining Committee

Mary Kopala, Ph.D.

_____	_____
Date	Executive Officer

Supervisory Committee
Dr. John Bahadourian
Dr. Robin Codding
Dr. Marian Fish
Dr. Alan Gross

THE CITY UNIVERSITY OF NEW YORK

THE CITY UNIVERSITY OF NEW YORK

Abstract

The Impact of the Word *Bully* and Providing the Definition of *Bullying* on the Reported Rate of Bullying Behavior

by

Allison Schaffer Kert

Advisor: Georgiana Shick Tryon, Ph.D.

Advisor in Abstensia: Robin Codding, Ph.D.

This study examined whether the definition and use of the word bully would result in lower self-reported rates of bullying behavior. The study also examined the impact of grade level on self-reported bullying behavior by randomly assigning fifth and eighth grade students to complete either: (1) a self-report measure with no reference to the word bully, (2) a self-report measure with the definition of the word bully followed by use of the word bully in each questionnaire item, or (3) a self-report measure with only the definition of the word bully at the beginning of the questionnaire and no mention of the word bully in the items. Participants ($N = 114$) anonymously completed surveys, and scores were compared to examine the impact of the word bully on reports of bullying behavior, along with overall differences in rates of bullying behavior. It was hypothesized that students exposed to the definition or the definition and repeated exposure to the word bully would report less bullying than those who hadn't been exposed to these variables. It was also hypothesized that older students would be more sensitive to the word bully, and therefore report lower rates of bullying behavior than younger students. Statistical

analyses indicated that respondents who were exposed to the definition or the definition and repeated exposure to the word bully reported less bullying behavior than those who were not exposed to the word. The grade level of the respondents had no effect on sensitivity to the definition or use of the word bully.

Acknowledgements

I am so very appreciative of all the support that helped to make my goal attainable. Dr. Robin Codding has been constructive, attentive, and encouraging. She has guided me through what seemed to be an insurmountable task, and broke it down into manageable steps. I am grateful to have had the opportunity to study under someone with such dedication and commitment. Thank you to Dr. Georgiana Tryon for the guidance, assistance, and input that gave me the focus I needed to reach my end goal. Much appreciation to Dr. Marian Fish, Dr. Alan Gross, and Dr. John Bahadourian for their valuable advice and time. I would like to extend thanks to Mariya Shiyko for taking the time to teach, demonstrate, and clarify with infinite patience.

Finally, I would like to thank my family. My parents encouraged and supported me throughout this process, as they have for the last 31 years. My daily phone calls with them never failed to decrease my stress level and increase my confidence level. My sister, Ilan, has cheered me on during my most challenging moments, and celebrated with me during my most exciting ones. A great big thank you to my husband, David, who has always listened while I vented and advised when I questioned, while at the same time helping me to maintain perspective…and laugh.

Table of Contents

List of Tables

Chapter I

Introduction

School officials are focusing on making schools safer places where all students feel secure and respected (Espelage & Swearer, 2003). There is an urgent call to develop empirically based bullying prevention programs that can effectively reduce bullying in our schools (Power, 2007). These efforts come as a result of increasing reports of violence and bullying behaviors. There have been at least 28 cases of school shootings in middle and high schools in the United States since 1982 (Kimmel & Mahler, 2003). Investigations into these school shootings have revealed that a majority of the students who opened fire at schools were retaliating in response to years of ruthless bullying behavior. Michael Carneal, a freshman at a high school in rural Kentucky, killed three of his peers after firing 12 shots into a school assembly. Carneal reported that his rage was in response to years of being bullied (Hazler & Carney, 2000; Kimmel & Mahler). Andy Williams, now serving 50 years to life for shooting and killing two peers in Santee, California, had been taunted and picked on by his classmates on a daily basis (Kimmel & Mahler). After years of merciless bullying, Eric Harris and Dylan Klebold opened fire at Columbine high school, killing 15 people including themselves.

While high-level forms of aggression such as physical attacks and murder receive the most media attention, low-level forms of violence, such as bullying, have now gained the attention of school personnel and researchers (Whitted & Dupper, 2005). A 1994 study conducted by the National Association of Secondary School Principals found that principals reported students' fear of bullies as one of the greatest concerns for a quarter of

the students surveyed (Batsche & Knoff, 1994). In addition, as many as 29% of students in sixth through tenth grade considered themselves a bully, a victim, or a bully and a victim (Nansel et al., 2001). According to research, 25% of children in the United States report being victimized by a bully, and 20% define themselves as a bully (Lumsden, 2002). While there is tremendous variability in the reported prevalence of bullying in schools, there is no question that bullying is a pervasive problem. Because bullying is complex and influenced by a variety of ecological contexts (Espelage & Swearer, 2003), it is especially important to have a clear understanding of when, where, how often, and to whom it is occurring in schools.

Prevalence of Bullying Behavior

Children of all kinds are bullied every day in the United States and abroad (U.S. Department of Education, 1998). To address increasing problems with bullying, schools have implemented various anti-bullying programs. In order for these programs to successfully target bullying, practitioners need to have an empirically based understanding of how to accurately measure bullying behavior. For example, measures of the prevalence of these behaviors can be used to make comparisons among groups and time periods, thereby assisting with the evaluation of the effectiveness of bullying prevention and intervention programs (Solberg & Olweus, 2003). Common methods of evaluating bullying behavior include self-report, peer nominations, teacher nominations, and behavioral observations (Espelage & Swearer, 2003).

Both school personnel and researchers have identified self-report scales as the preferred method of assessing bullying behavior in schools (Cole, Cornell, & Sheras, 2006; Espelage & Swearer, 2003). Despite the advantages that self-report measures have

over other methods of assessing bullying behaviors, debate surrounds the use of these scales. One limitation of using self-report measures to assess bullying behaviors is that children may have preconceived notions of what a bully is and may respond inaccurately because of this false perception (Espelage & Holt, 2001). Another limitation is that children may want to portray themselves in a positive light, and will therefore not respond honestly (Solberg & Olweus, 2003). The child's gender and age may further impact the desire to portray oneself in a positive light. For example, some theorists suggest that shame is more easily induced in females than in males, therefore possibly discouraging girls from acknowledging their bullying behavior (Brody, 1985). Each of these limitations may contribute to invalid reports of bullying behavior.

While there is an abundance of research examining the effects of bullying, there is very little research examining the validity of the tools used to assess bullying behavior (Parada, Marsh & Craven, 2004). Considering the fact that educators and researchers prefer to utilize self-report measures of bullying to identify the extent of this problem within their respective schools, research needs to directly examine the extent to which the definition and term bullying affect student responding. Research also needs to examine whether variables such as gender and age affect any reporting differences.

Variables Associated with Bullying Behavior

Although bullying affects a large percentage of the school-age population, several demographic variables (i.e., age, gender, and socioeconomic status) seem to impact frequency and type of bullying behavior. Although bullying behavior is prevalent throughout the school years, the frequency of bullying behavior changes as children move from elementary school through high school (Espelage & Swearer, 2003).

According to Nansel et al. (2001), there is an increase in bullying during early adolescence, and a decrease during high school. Espelage and Swearer point out that bullying prevention and intervention efforts should therefore focus greater attention on middle school students. In a study that examined the association between peer dynamics and bullying behavior among early adolescents, Espelage and Holt (2001) found that eighth grade students self-reported significantly more bullying than sixth grade students. Reynolds (2003) found a trend suggesting that reports of bullying behavior increase in the upper grades as compared to the lower grades.

In addition to age group, bullying behavior differs according to gender. Research suggests that regardless of grade, boys universally bully more than girls (Batsche, 1997; Olweus, 2003). Seals and Young (2003) found that of the bullies identified in their study, 67% were males. According to Olweus (1991), 60% of victimized girls reported boys as the perpetrators, and more than 80% of victimized boys reported being bullied by other boys. Reynolds (2003) found that boys self-reported significantly more bullying behavior than girls. Most researchers agree that both physical and verbal bullying are more common among boys, while girls who bully often do so through relational aggression (Ma, 2002; Olweus, 2003; Sharp & Smith, 1991). The final variable that researchers have explored is socioeconomic status (SES). While most research suggests that SES has little or no affect on the rate at which children bully (e.g., Bosworth, Espelage, & Simon, 1999; Ma, 2002; Olweus, 1994), it is important to investigate this relationship further to help determine whether the SES of the school students does affect the rate of bullying behavior, or other aspects of bullying, as results of such investigations may help direct policies and interventions (Wolke, Woods, Stanford, & Shulz, 2001). Wolke et al.

suggest that it is important to investigate fully the association between SES and bullying, as SES often varies by school, and any relationship that is detected should be considered in developing individually tailored anti-bullying programs as opposed to universal approaches. For example, Wolke at al. point out the possibility that research may reveal a link between SES and bullying such that children from low SES backgrounds may, for example, be more likely to participate in a certain type of bullying behavior (e.g., physical, verbal) in a certain location (e.g., schoolyard, classroom).

Purpose of Present Study

Despite the call to examine how the use and definition of the term "bullying" affects students' reported rates of bullying (Espelage & Swearer, 2003), only one study has directly examined this topic. Kert, Codding, and Shiyko (2006) conducted a pilot study among students in grades six through eight and found that when they presented students with a definition of bully along with continued use of the word bully in questionnaire items, the students reported significantly less bullying behavior than when they did not present students with the word bully. While Kert et al. found this effect across all grade levels, it was more pronounced among the older students. The eighth grade students also reported significantly more bullying than sixth and seventh grade students, regardless of the group they were in. However, it should be noted that due to the small sample size and the use of a brief measure with limited evidence of validity, these results should be considered preliminary. Furthermore, there was no other information (i.e., disciplinary records) to corroborate students' reported rates of bullying. This is problematic as it is unknown whether the prevalence rates that either the control or experimental groups reported are accurate. That is to say, both groups may have under or

over reported rates of bullying. Therefore, an additional measure that also assesses bullying behavior among the groups would help to clarify bullying prevalence. The present study sought to address these concerns.

This study addressed several objectives. The primary goal of this study was to examine whether the definition and explicit use of the word bully would result in lower self-reported rates of bullying behavior. Considering that the majority of studies assessing bullying behavior utilize self-report measures that reference the word bully (e.g., Cole, Cornell, & Sheras, 2006; Solberg & Olweus, 2003; Salmivalli, Karhunen, & Lagerspatz, 1996), it is of utmost importance to examine how the use of the word affects student responding. For example, without a clear estimate of the prevalence of bullying behavior before an intervention, it is not possible to gauge the success of the intervention after it's implementation. The study also examined the impact of grade level on self-reported bullying behavior by randomly assigning fifth and eighth grade students to complete one of three measures: (1) a self-report measure with no reference to the word bully, (2) a self-report measure with the definition of the word bully followed by the use of the word bully in each questionnaire item, and (3) a self-report measure with only the definition of the word bully at the beginning of the questionnaire and no mention of the word bully in the items. Participants each anonymously completed the surveys, and scores were compared statistically to examine the impact of the use of the word bully on participants' reports of bullying behavior, along with overall differences in rates of bullying behavior. Because it cannot be assumed that differences in overall reported rates of bullying behavior indicate that one version of the survey is more valid than another, I correlated

teacher reports of bullying behavior with student reports in order to provide external evidence to verify the self-reported rates of bullying behavior.

Thus, one hypothesis of this dissertation was that students who have been exposed to the word bully and its definition would report significantly less bullying behavior than students who have not been exposed to these variables. Another hypothesis stated that students who have been exposed to only the definition of bullying would report significantly more bullying behavior than students who were exposed to both the definition and the repeated use of the word bully in the items. Bosworth et al. (1999) theorize that children who feel uncomfortable describing their behavior towards others as bullying may provide unreliable results when completing self-report surveys. Thus, the repeated presentation of the word bully in each questionnaire item identifies the behavior in the items as bullying over and over again and stands in contrast to having students simply read the definition of bullying at the beginning of the questionnaire and apply it to the items at their own discretion. The study also examined impact of grade on bullying behavior in an effort to determine if the differences found in Kert et al.'s (2006) study persist with a larger sample of students. Research suggests that bullying is at its height during the middle school years (Nansel et al., 2001; Smith, Moody & Madsen, 1999). For example, Espelage and Holt (2001) and Espelage, Holt, and Henkel (2003) found that bullying behavior increases as students move up in grade level through middle school. Furthermore, research suggests that older students may be more sensitive to the word bully than younger students (Kert et al.; Smith et al.).

A second goal of the study was to examine the correspondence between self- and teacher-reported bullying behavior. The associated hypothesis was that the scale that does

not reference the word bully would be more predictive of actual bullying behavior and would therefore correlate more highly with teacher reports of bullying behavior than would the other scales.

A third objective of this study was to compare responses in terms of gender and socioeconomic status of the participants in order to detect differences as they relate to these demographic variables. This study therefore examined whether the use of the word bully would have a greater effect on the self-reported rate of bullying behavior of girls than boys. It also examined whether boys self-report more overall bullying behavior than girls. This study also examined whether boys report significantly more physical and verbal bullying behavior than girls - when each of these variables are examined separately. The final hypothesis was that SES and the reported rates of bullying behavior will not be significantly correlated.

Results indicated that respondents who were exposed to the definition or the definition and the repeated exposure to the word bully reported less bullying behavior than those who were not exposed to the word. Neither grade nor gender of the respondents had an effect on the respondents' sensitivity to the definition of the word bully. Scores on the scale that did not reference the word bully (i.e., control group) had a significantly higher correlation with teacher report of bullying behavior than did scores on the other bully groups. Boys reported more bullying behavior than girls. There was no difference between the self-reported rate of bullying behavior among high and low SES students.

Chapter II

Literature Review and Rationale

This chapter reviews research examining the prevalence and assessment of bullying behavior in schools. The purpose of this chapter is five-fold. First, the chapter discusses the history, impact, and prevalence of bullying behavior. Second, the chapter introduces various methods of assessing bullying behavior. Third, the chapter compares research on the use of self-report measures to identify bullies. Fourth, the chapter examines the demographics of bullies and their sensitivity to the word bully. Fifth, the chapter presents the rationale for the study and hypotheses to be tested.

Definitions and History of Bullying Behavior

While there is no single universally accepted definition of bullying that exists in literature, most definitions describe bullying as a subset of aggression (Espelage & Swearer, 2003). These definitions posit bullying as proactive aggression because bullies target the victim in response to little or no aggravation on the part of the target. Therefore, Olweus (1994) defines bullying as verbal, physical, and/or relationally aggressive behavior that occurs repeatedly in a relationship characterized by an unequal distribution of power. Because of the power inequality inherent in this relationship, the victim is often unable to protect him or herself (Espelage & Swearer, 2003). Regardless of whether bullying is physical, verbal, or relational, the perpetrator intentionally and repeatedly harms the victim in order to feel superior within the social context – most often in a school (Finger, Marsh, Craven, & Parada, 2005).

Bullying has been likened to teasing and simply regarded as a normal interaction between children (Whitted & Dupper, 2005). However, bullying is different from typical

childhood conflicts because bullies initiate fights that they are sure to win because of the unequal distribution of power between them and their victims. Physical, verbal, or indirect attacks (also called relational aggression) on the victim characterize these fights (Crothers & Levonson, 2004; Whitted & Dupper). These are the three main categories of bullying behavior.

Physical bullying includes hitting, punching, strangling, beating, holding, and biting (U.S. Department of Education, 1998). Face-to-face confrontations causing physical harm to the victim characterize this type of bullying (Espelage & Swearer, 2003). The perpetrator of physical bullying does so with the intent to injure or inflict discomfort on the victim (Olweus, 1994). While many consider bullying a physically violent act, it is important to consider that this is just one type of bullying.

Verbal bullying is the most common of all types of bullying, and includes name-calling, teasing, threatening, humiliating, taunting, and degrading (Clarke & Kiselica, 1997; Smith, 1999; U.S. Department of Education, 1998). It is also considered verbal bullying when one student says nasty or unpleasant things to another student (Espelage & Swearer, 2003). Similar to physical bullying, verbal bullying is also a direct, face-to-face act intended to inflict harm on the victim (Crothers & Levinson, 2004; Olweus, 1994). However, in contrast to physical bullying, the perpetrator intends to harm the victim psychologically.

The third subset of bullying is relational aggression. It entails indirect attacks such as spreading rumors or encouraging others not to play with the victim (Whitted & Dupper, 2005). Relational aggression often involves the destruction of friendships or relationships with the intent to inflict emotional pain on another person (Crothers &

Levinson, 2004). Unlike physical or verbal bullying, relational aggression requires the involvement of a third party. For example, a relationally aggressive child may threaten to exclude another student from a desirable activity with other children if he or she does not abide by what the aggressor is saying (Espelage & Swearer, 2003). Relational aggression can be just as harmful as direct forms of aggression, such as physical or verbal bullying (Olweus, 2003).

It was not until after three Norweigan boys committed suicide in 1982 as a result of severe harassment from classmates that school officials started acknowledging bullying as a major concern (Espelage & Swearer, 2003). The Ministry of Education in Norway implemented a nation-wide effort aimed against bullying that established prevention programs in nearly all schools across the country. Many countries including the United States have followed Norway's initiative and identified bullying as a major issue (Espelage & Swearer).

During Clinton's presidency, he signed into law eight National Education Goals in Goals 2000 (Batsche & Knoff, 1994). The sixth goal aims to have every American school free of drugs, violence, firearms and unauthorized alcohol, as well as offering a disciplined environment conducive to learning. School officials and parents now consider school violence as including "any conditions or acts that create a climate in which individual students feel fear or intimidation in addition to being the victims of assault, theft, or vandalism" (Batsche & Knoff, p.1). The authors point out that this definition of school violence clearly includes bullying.

Violence among adolescents is a critical problem in America (Behrens, Dahlberg, & Toal, 1998). Violence is not only a component of bullying behavior, but also an

unfortunate response to it (Crothers & Levinson, 2004). While there are a plethora of programs that address violence in our schools, there has been no determination of the most effective programs. Schools that are involved with the development and implementation of bully prevention activities rarely follow through with outcome evaluations. Researchers are working diligently to identify the interventions that are effective at reducing violence, and to identify the most reliable and valid means of assessing changes in violent behaviors (Behrens et al.). Closely monitoring and documenting results of anti-bullying programs and thereby having a clearer understanding of the prevalence of the problem, will help to reduce violence and prevent it in the future (Behrens et al.; Solberg & Olweus, 2003). If researchers use self-reports of bullying to monitor intervention success, they need to know how reactive these self-report measures are. This study investigated this by varying the definition and prevalence of appearance of the term bully.

Impact of Bullying Behavior on Victims

It is important to assess the prevalence of bullying accurately because bullying threatens the educational and developmental goals of all students and has both immediate and long-reaching consequences (Parada et al., 2004; Whitted & Dupper, 2005). Those students who are the victims of physical bullying may experience immediate injury such as bruises and cuts, or damaged property such as destroyed books or torn clothing (Smokowski & Kopasz, 2005). Victims of bullies are more likely to dislike school, become truant, and face poor academic performance (Batsche & Knoff, 1994). They report significantly more internalizing problems than bullies and students who are not involved in bullying at all (Holt, Finkelhor, & Kantor, 2007). As a result of their fear of

bullies, victims have difficulty focusing on learning while at school (Whitted & Dupper). They may learn to see themselves as outcasts and failures (Smokowski & Kopasz). The lack of self-confidence experienced by most victims of bullying increases the likelihood that they will respond in an ineffective manner (e.g., crying, failing to defend themselves) to the torment (Hall, 2006). Many victims are likely to avoid certain places within the school that they perceive as danger zones, while others eventually avoid school altogether (Smokowski & Kopasz).

Such pervasive feelings of fear ultimately affect the school culture (Batsche & Knoff, 1994). For example, in response to their fear of bullies, these students may eventually engage in illegal activities, such as bringing a gun, knife, or club to school. Brockenbrough, Cornell, and Loper (2002) conducted a study in which more than 10,000 seventh, ninth, and eleventh grade students attending middle and high school in Virginia responded to a self-report school safety survey. The authors found that victims with aggressive attitudes were more likely than other victims or bullies to report that they had carried weapons, engaged in underage drinking, and gotten into physical fights with their classmates. There may be a considerable risk for these aggressive victims of becoming school shooters or engaging in a lifetime of delinquent behavior (Smokowski & Kopasz, 2005). The impact of bullying therefore not only affects the immediate social context in which it is experienced, but also influences future social and psychological health.

Several studies have revealed that children who are bullied over an extended period of time may experience problems later in life, such as physical and psychological distress, difficulty in concentrating, higher levels of depression, and more negative self-concepts than do their peers who have not been bullied (Crothers & Levinson, 2004). Due

to feelings of powerlessness and prolonged suffering, victims may eventually retaliate with self-destructive acts or violence towards others (Garrity & Jens, 1997). Research suggests that students identified as bullies in middle school are four times more likely to become criminals as adults than their peers (Olweus, 1991). In fact, Olweus (1994) found that 60% of students identified as bullies in the sixth through ninth grades, were arrested at least once by the age of 24. On the other hand, only 10% of students not identified as bullies were arrested at least once by that same age.

Baker (1998) suggested that such negative peer interactions during early phases of children's lives lay the groundwork for future social interactions. Tritt and Duncan (1997) studied the relationship between childhood bullying and young adult self-esteem and loneliness. Two hundred and six undergraduate students completed the Domain Specific Self-Esteem Inventory, the Revised UCLA Loneliness Scale, and the Peer Relations Questionnaire, a 20-item measure of childhood peer relationships. While results indicated similar reports of self-esteem across the groups, the young adults who had been victimized as children reported significantly more loneliness than non-victims. Given the grief associated with loneliness, the authors suggest that young adults who had experienced bullying as children may be experiencing other forms of anguish resulting from their role as a bully's victim. Long-term victimization has a significant positive correlation with internalizing disorders such as depression and anxiety (Brockenbrough et al., 2002). It is clear that there is a need for researchers to recognize effective means of identifying bullies so that they can help school personnel prevent victimization and its lifelong impact (Cole et al., 2006).

Victims of bullies are not the only ones who face negative consequences of bullying behavior (U.S. Department of Education, 1998). Bystanders of bullying may be reluctant to associate with the victim for fear of threatening their own social status and ultimately becoming a target as well. Bystanders who remain silent because they don't want to be labeled a "snitch" may experience feelings of guilt for not helping to protect their peers. Failing to take action against the perpetrators may lead to insecurity and feelings of loss of control. Worse than standing by and doing nothing, some bystanders may succumb to peer pressure and eventually become a bully (U.S. Department of Education).

Prevalence

While there is universal agreement that bullying is a persistent problem in our schools that requires the immediate attention of both researchers and practitioners, the prevalence of this problem is still under debate (Batsche & Knoff, 1994). This variability in reported rates of bullying behavior is due to a number of factors (Solberg & Olweus, 2003). First, the different means by which researchers measure prevalence rates (e.g., behavioral observations, self-report measures, peer and teacher nominations) may cause varied results. Second, the time frame used to measure bullying behavior is not consistent. For example, while some researchers ask participants to answer questions based on their experiences during the past month (Espelage & Holt, 2001), others ask participants to answer questions based on their experiences during the past 3 months (Baldry & Farrington, 2004). Third, researchers use different criteria for identifying bullies and non-bullies. For example, Solberg and Olweus (2003) identify a behavior as bullying when it has occurred more than twice a month, while Cole et al. (2006) identify

a behavior as bullying when it has occurred more than once a week. Finally, some researchers reference the word bully when relying on self-report measures, while others do not.

For all of these reasons, it is difficult to establish a precise prevalence rate of bullying behavior and consequently these rates vary by study. According to Lumsden (2002), 20% of students identify themselves as a bully. Findings from research presented below suggest that the range of reported bullying behavior represents between 2.3% and 24% of all students (Cole et al., 2006; Seals & Young, 2003). For example, Espelage and Holt (2001) examined bullying behavior among 422 middle school students in a rural midwestern community via self-reports and peer nominations. These methods identified approximately 14.5% of participants as bullies. Kilpatrick and Kerres (2003) found similar bullying rates when examining the perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims. Results from their self-report surveys identified 12% of the students as bullies. In an effort to establish a greater understanding of the prevalence of both bullying and victimization, Solberg and Olweus (2003) conducted a study in Norway with 5,171 students in the fifth through ninth grades. The investigators found that approximately 6.5% of students between the ages of 11 and 15 reported that they had bullied another student at least 2 or 3 times a month. Finally, Seals and Young studied the prevalence of bullying and victimization among 454 junior high school students in Mississippi by using the Peer Relations Questionnaire, a survey that describes bullying, presents an example of bullying, and then asks general questions about bullying. Results indicated that 24% of the participants reported some bullying involvement, 10% bullied others more than once

per week, 13% were bullied by others more than once per week, and 1% were bully-victims more than once per week. These studies demonstrate that differences in the reported rate of bullying behavior are both a function of the population being studied, and the means by which the given population is being assessed.

As stated previously, school faculty and administrators are focusing on minimizing the rate of bullying behavior in schools (Espelage & Swearer, 2003). To address increasing problems with bullying, schools have implemented various anti-bullying programs. However, the success of these programs and the development of future programs depend greatly on the accurate assessment of bullying behavior. For example, measures of the prevalence of these behaviors can be used to make comparisons among groups and time periods, thereby assisting with the evaluation of the effectiveness of bullying prevention and intervention programs (Solberg & Olweus, 2003).

Assessment Methods

The assessment of bullying behavior should be based on an ecological model that addresses the many influences in a student's life and how these influences interact with one another (Power, 2007). It is therefore recommended that bullying be assessed through multiple approaches (Leff, 2007). Common methods of evaluating bullying behavior include peer nominations, teacher nominations, behavioral observations, and self-report measures (Espelage & Swearer, 2003). Peer nomination tools request that students list names of students for various descriptors. Researchers then sum the nominations and categorize students with a substantial number of nominations as bullies. For example, while studying peer influences and psychosocial correlates of bullying behavior, Espelage and Holt (2001) asked students to list the names of students who are often

teased by their peers and students who often tease other students. The authors then converted the names to participant numbers, and tallied the number of nominations in both of the categories to represent the number of students who nominated each of the classmates. A major advantage of peer nominations is that peers have the opportunity to spend time with their classmates in various settings such as the classroom, schoolyard, and bus (Leff, Kupersmidt, Patterson, & Power, 1999). Unfortunately, it is ethically questionable to assess bullying behavior by asking students to nominate other students who have engaged in bullying behavior (Espelage & Swearer).

Teacher nomination measures are similar but rely on teachers to generate lists of students for various descriptors. For example, Leff et al. (1999) provided teachers with a class list and asked them to indicate which children bully others by hitting, pushing, or teasing, and which children were picked on or called names a lot. Teacher nominations/reports have both advantages and disadvantages (Espelage & Swearer, 2003). While students have the opportunity to spend time with their peers in multiple settings, teachers are typically limited to classroom interaction with the students (Leff et al.). As a result of teachers' limited exposure to children in unstructured settings, they may not have the occasion to witness bullying behavior that may be occurring.

Although teacher nominations can be useful for identifying bullies, these measures are primarily used in research studies and not necessarily in schools (Espelage & Swearer). This may be the result of several problems associated with the nominations. First, this form of assessment does not provide data for all students. That is, teachers generally identify only the students responsible for the most overt bullying behavior (Espelage & Swearer). Second, researchers tend to use somewhat arbitrary and relatively

complex cutoff methods to identify a bully (Solberg & Olweus, 2003). Third, there is some evidence to suggest that teacher nomination may be less valid after elementary school because teachers have less interaction with students as a result of frequent classroom changes (Espelage & Swearer). Leff et al. found that teachers identified bullies and victims more accurately for elementary school students than they did for middle school students when peer nominations were the standard of comparison. The authors suggest that this finding may reflect the fact that middle school teachers have less contact with the children than do elementary school teachers, who spend most of the day with the same class.

This lack of extended contact between middle school teachers and their students may result in children not being identified as bullies via teacher nominations until the problem becomes an urgent one. In general, if children are not behavior problems, teachers may focus more on their academic performance, while their social relationships go unnoticed. A recent study found that differences examined between student and staff perceptions of bullying behavior led to staff underreporting bullying behavior in elementary, middle, and high school when compared to student reports (Bradshaw, Sawyer, & O'Brennan, 2007). Finally, as is the case with peer nominations, similar ethical dilemmas arise when gathering students' names using teacher nominations (Espelage & Swearer).

Behavioral observation is an extremely valuable method of acquiring information about bullying patterns and prevalence (Pepler & Craig, 1995). This method may provide a better alternative to peer and teacher nominations, particularly at the middle and high school level. When conducting an observation, the observer selects a time and location in

which bullying is likely to occur (Crothers & Levinson, 2004). Because bullying is often reported in unstructured settings, observers will often station themselves in playgrounds, lunchrooms, restrooms, locker rooms, and gym classes. The observer should attempt to be as inconspicuous as possible, and conduct the observations at various times and in various locations. Use of multiple observation settings will help to provide a more realistic picture of any bullying behavior that may be occurring.

Behavioral observations are often viewed as a desirable means of collecting data because they utilize faculty within the school, are inexpensive, and can provide a lot of information about frequency, duration, and intensity of bullying behavior (Crothers & Levinson, 2004). When researchers use clear definitions and establish interrater reliability, observational methods can provide objective and unbiased reports of student socialization patterns. Although behavioral observations provide important data, they have several limitations. One limitation is that these measures can be time consuming. As a result, educators may rely on fewer samples of behavior across fewer settings. This may be problematic, as observations conducted in only a small sampling of school environments may not provide a complete or accurate picture of the problem (Espelage & Swearer, 2003). This may contribute to the fact that these observations often do not correlate well over time (Crothers & Levinson). Additionally, bullying usually occurs in places and at times when there are few adults present (Pellegrini & Bartini, 2000). Children are adept at bullying other students in a covert manner, often making it difficult for even a trained observer to detect. For these reasons, researchers and school personnel often rely on self-report measures (Esplage & Swearer).

Both school personnel and researchers identify self-report scales as the preferred method of assessing bullying behavior in schools (Cole et al., 2006; Espelage & Swearer, 2003; Leff, 2007). While the previously mentioned measures should be part of a complete assessment of bullying, self-report scales are often the primary methods of bullying assessment for numerous reasons (Espelage & Swearer; Power, 2007). Self-report measures require that individuals reveal behaviors they engage in or are subjected to (Crothers & Levonson, 2004; Salvia & Ysseldyke, 1991). While self-report measures of bullying behavior vary, they often provide participants with a multiple item standardized instrument. The items typically represent the tendency to bully others and the tendency to be victimized. Participants usually rate on a likert scale how often they have experienced each statement over a specified time period. For example, Espelage et al. (2003) administered the nine-item Illinois Bully Scale in an effort to assess the frequency of bullying behavior. The scale asked students how often in the past 30 days they teased other students, excluded other students, harassed other students, and so on. Response options included: (a) never, (b) 1 or 2 times, (c) 3 or 4 times, (d) 5 or 6 times, and (e) 7 or more times. Test developers of self-report measures take care to ensure readability and comprehension for the intended populations (Reynolds, 2003). Self-report measures, such as the Illinois Bully Scale, require few personnel, are inexpensive, and do not present as many time-related challenges as observational methods (Crothers & Levinson). Another advantage of self-report measures is that data can be collected at multiple times to assess changes in bullying behavior as a result of the implementation of interventions (Espelage & Swearer).

Despite the advantages that self-report measures have over other methods of assessing bullying behaviors, use of these scales is not without debate. For example, they yield estimates of the prevalence of bullying but do not help school mental health professionals identify the specific bullies and victims since they are usually completed anonymously (Cole et al., 2006). Secondly, self-report measures are usually likert-type scales that are vulnerable to extreme responses. These extreme measures may result in unreliable results. A third disadvantage of self-report measures is that when respondents are unmotivated or careless, their answers may be inconsistent with their actual attitude or behavior (Oskamp & Schultz, 2005). Another limitation leading to inaccurate responding is that some researchers argue that students who bully often do not perceive what they do as bullying (Espelage et al., 2001). One of the most troublesome reasons for inconsistent or inaccurate self-reporting of bullying behavior is social desirability. Social desirability refers to the inclination to respond in the most socially acceptable manner (Oskamp & Schultz). For example, students often perceive bullying behavior as socially undesirable, and may respond inaccurately, stemming from a desire to be viewed positively (Espelage & Holt, 2001).

It is postulated that girls may be inclined to portray themselves in a more socially desirable light than boys (Eisenberg & Lennon, 1983). Social and cognitive theorists suggest that it is easier to induce shame in females than in males, therefore possibly discouraging girls from acknowledging their bullying behavior – a potentially shameful and socially undesirable act (Brody, 1985; Espelage, Bosworth, & Simon, 2001). In an examination of students' attitudes toward bullying, Boulton, Bucci, and Hawker (1999) found that, while all participants expressed anti-bullying attitudes, this attitude was more

extreme in girls, who found bullying to be a more undesirable act than boys. Eisenberg and Lennon's (1983) research indicates that while it has been frequently reported that girls are more empathic than boys, this gap is more a function of self-reports of empathy, rather than actual feelings and behaviors. The authors found that girls' responses were more subject to social desirability pressures than boys, and may not be an accurate reflection of actual experiences. Since most people consider bullying to be a socially undesirable trait, it is understandable that inaccurate responding is of concern when measuring this behavior.

Research indicates that as children get older, they may be more sensitive to exposure to the word bully. As discussed previously, there is tremendous variability as to the reported rates of bullying behavior across grade levels (Boulton, Trueman, & Flemington, 2002; Espelage et al., 2003; Ma, 2002). Espelage et al., Espelage and Holt (2001), and Reynolds (2003) each assessed bullying behavior by using self-reports that did not reference the word bully, and in each of these studies the rate of reported bullying behavior was greater in higher grade levels. On the other hand, Ma (2002) and Olweus (1993) each assessed bullying behavior by using self-reports that referenced the word bully, and in both of these studies, the rate of reported bullying behavior was lower at higher grade levels. Smith et al. (1999) suggest that younger children have not yet been socialized into understanding the weight of the negativity associated with bullying behavior. In other words, while older children understand just how socially undesirable bullying is, younger children may not necessarily realize the importance of bullying. Kert et al. (2006) compared the self-reported rate of bullying behavior among students who were exposed to the word bully and its definition, with those who were not exposed to the

word. Their findings indicated that the older students were more sensitive to the word than younger students, reporting significantly less bullying behavior than those students not exposed to the word bully in comparison to the younger students.

Debate over Use of the Word 'Bully' Within Self-Report Measures

As a result of the potential problems associated with socially desirable responding, researchers debate whether self-report measures assessing bullying behavior should include the word and/or definition of bullying. For example, Solberg and Olweus (2003) suggest that because students are responding anonymously to bullying questionnaires, they will not feel pressure to present themselves in a socially desirable light. However, other researchers argue that a definition might prime a student against responding honestly (e.g., Espelage & Holt, 2001). That is, providing definitional information may lead students to evaluate the impact or motivation of their behavior and as a result alter their answers (Espelage et al., 2001). An obvious solution, therefore, would be to eliminate the terms bully and bullying from self-report measures aimed at identifying the frequency of such behaviors. This would avoid priming effects, and in-turn minimize socially desirable responding (Espelage et al.).

Another argument against inclusion of the term bullying in self-report measures is that students who verbally victimize others often do not define these behaviors as bullying (Espelage et al., 2001). While teasing and social exclusion may constitute bullying, students do not necessarily define these behaviors as bullying (Espelage & Holt, 2001). Therefore, their preconceived ideas of what a bully is may lead students to report lower than actual rates of bullying behavior. For example, although relational aggression is a form of bullying, a recent study revealed that 38% of 14-year-old students believed

that excluding others, a type of relational aggression, is not a form of bullying (Smith, Cowie, Olafsson, & Liefooghe, 2002). Boulton et al. (2002) administered a self-report questionnaire to 600 students between the ages of 11 and 16. Participants indicated whether they thought each of eight types of behavior constituted bullying. Approximately 80% of students agreed that "hitting and pushing", "threatening people", and "forcing people to do things they don't want to do" were types of bullying behavior. However, only approximately 50% agreed that "name calling", "telling nasty stories about other people", and "taking people's belongings" constituted bullying behavior. More importantly, only 40% of the students agreed that "laughing at people" constitutes bullying behavior, and only 20% of the students agreed that "leaving people out" is a type of bullying behavior. Bosworth et al. (1999) suggested that, along with false assumptions of what constitutes bullying behavior, students might feel uncomfortable describing their behavior towards others as bullying. As a result, they suggest asking students about the frequency of behaviors such as teasing and hurting, instead of labeling the behaviors as bullying.

Research that references the word bully. Researchers continue to be divided on whether or not to include the word bully in self-report measures. A number of researchers postulated that referencing the word bully would not affect the self-reported rate of bullying behavior. Solberg and Olweus (2003) and Cole et al. (2006) each examined the prevalence of bullying behavior after exposing participants to the definition of bullying. Salmivalli et al. (1996) also provided the definition of the word bully prior to asking students to respond to questions about bullying behavior; however, rather than estimating the prevalence of bullying behavior, Salmivalli et al. compared peer- and self-reported

rates of victimization without labeling bullies and non-bullies. The researchers designed each of the studies reviewed below to examine bullying behavior utilizing measures that provide the definition of bullying to the participants.

Solberg and Olweus (2003) used the Bully/Victim Questionnaire, which is completed anonymously by the students, and contains a detailed definition of bullying that is read aloud to the students by the examiner. The definition presented to the students read as:

> We say a student is being bullied when another student or several other students say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names, completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose, hit, kick, push, shove around, or threaten him or her, tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her, and do other hurtful things like that. These things may take place frequently, and it is difficult for the person being bullied to defend himself or herself. It is also bullying when a student is teased repeatedly in a mean and hurtful way. But we don't call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about the same strength or power argue or fight (p. 246).

The goal of this study was to examine the appropriateness of different cutoff points on the self-report measure used to classify bullies and estimate prevalence. For example, Solberg and Olweus (2003) believed that "2 or 3 times a month" is a reasonable and appropriate lower-bound cutoff point. They stressed that establishing an appropriate

cutoff point for classifying bullies and victims is desirable when conducting school-based bullying prevention and intervention programs.

Participants in the study included 5,171 students from 37 schools in fifth through ninth grade in Norway. The data were collected via a questionnaire in 2-hour sessions and the researchers read the definition of bullying before students responded to questionnaire items. After hearing the definition of bullying, students answered questions such as: "How often have you taken part in bullying another student(s) at school in the past couple of months?" According to the students' responses, 6.5% of the participants were identified as bullies, which represents the low end of the spectrum of reported prevalence. These findings might suggest that providing a definition of bullying may dissuade children from responding accurately or honestly. However, Solberg and Olweus (2003) argued that a clear definition of bullying behavior is necessary to ensure that interpretation of what is meant by bullying is consistent among responders. Moreover, the authors suggested that socially desirable responding was likely limited because students were responding anonymously to the questionnaire. The authors concluded that more research needs to be done before definitive statements concerning the effect of providing a definition can be made.

Cole et al. (2006) sought to determine the most effective means of identifying bullies in middle schools by comparing a peer nomination survey with a student self-report. Researchers presented students ($N = 416$) in a middle school in central Virginia, with a definition of bullying adapted from the Olweus Bully/Victim Questionnaire. They classified students as self-reported bullies if they admitted to bullying their peers "about once per week" or more. Cole et al. collected peer nomination data 2 weeks following the

administration of the self-report survey. The authors provided the students with the same definition of bullying as was presented during the self-report questionnaire, and asked the students to nominate up to three students in their class as bullies. Receiving at least two nominations categorized a student as engaging in bullying behavior.

Results indicated that students classified 79 students into one of the two bully groups: 9 self-reported bullies (bullied more than once per week) and 70 peer nominated bullies (two or more peer nominations). The correlation between self-reported bullying and peer nominated bullying was nearly zero (r = .003). While only 2.3% of the students identified themselves as bullies, their peers nominated 18.1% as bullies. These findings indicate that when researchers assess students' self-reported rate of bullying behavior using measures that include the word bully, they may greatly underestimate the prevalence of bullying (Cole et al., 2006).

Much like Cole et al.'s (2006) study, Salmivalli et al., (1996) compared peer- and self-reports, and also provided the definition of the word bully prior to asking students to respond to questions about bullying behavior. The authors were interested in reactions to harassment and types of victim behavior likely to encourage or discourage bullying. The participants were 573 sixth grade children from Finnish schools. The definition provided to the students consisted of:

> One child being exposed repeatedly to harassment and attacks from one or several other children; harassment and attacks may be, for example, shoving or hitting the other one, calling names or making jokes of him/her, leaving him/her outside the group, taking his/her things, or any other behavior meant to hurt the other one (p. 101).

The students then nominated the victims bullied by others, evaluated each victim's behavior in bullying situations, and nominated the victim(s) who behave in a way they thought (a) made others start/continue the bullying, or (b) diminished the bullying or put an end to the bullying. The students wrote the names of the children in their class whom they thought were victims of others' bullying, and then evaluated how well each student they nominated fit 29 bullying-situation-behavioral descriptions. Along with peer nominations, each student completed similar self-evaluations, which were compared with the corresponding peer evaluation scores. The authors established three subscales, describing counteraggressive (i.e., speaks up to the bully, calls others for help), helpless (i.e., runs away, starts to cry), and nonchalant (i.e., stays calm, acts as if he/she didn't care) behavioral responses to bullying on the basis of responses to these 29 items. For example, Salmivalli et al. considered a student to be a nonchalant victim if he/she scored above the mean on the nonchalant victim scale and higher on that scale than any other scale.

Salmivalli et al. (1996) identified 67 children as victims via peer- and self-reports. Correlations between the means of the victims' peer- and self-report scores were strongest on the counteraggression response to bullying (r = .59). However, the correlations were weak between peer- and self-reported helpless responses to bullying. The authors attribute this difference to the fact that counteraggressive behavior in response to bullying is easy to admit because this suggests that the victim is capable of defending oneself. The helpless victims of bullying, however, were not willing to admit their own helplessness because this is a less socially approved response to bullying.

Salmivalli et al. found that using the word bully when asking students to respond to questions addressing their behavior often produced unreliable self-reports.

Taken together, this available research suggests that use of the word bullying may affect the accuracy of prevalence rates. For example, results from Solberg and Olweus' (2003) study are consistent with Cole et al.'s (2006) study. When presented with a definition of bullying, Solberg and Olweus found that only 6.5% of participants identified themselves as bullies, and Cole et al. found that only 2.3% identified themselves as bullies. Although Salmivalli et al. (1996) compared peer- and self-reports of victimization without determining a prevalence rate of bullying behavior, they concluded that correlations were weak because victims may have been reluctant to admit they had been bullied. Additionally, in each of these studies that referenced the word bully while assessing bullying behavior, self-reported prevalence rates were inconsistent with the results of available research that does not reference the word bully.

Research that does not reference the word bully. A number of researchers postulated that including the word bully may increase the likelihood that responses would be affected by factors such as social desirability, priming, and preconceived ideas of what bullying is. Therefore, Espelage and Holt (2001), Kilpatrick and Kerres (2003), Bosworth et al. (1999), and Houbre, Tarquinio, Thuillier, and Hergott (2006) each studied bullying behavior without referencing the word bully or providing a definition. While Espelage and Holt (2001), Kilpatrick and Kerres (2003), and Houbre et al. (2006) each estimated prevalence of bullying by labeling students as bullies, Bosworth et al. (1999) examined bullying on a continuum, therefore generating reports of frequency of bullying behavior.

Espelage and Holt (2001) utilized the Illinois Bully Scale, a measure that does not reference the word bully, as well as peer nominations to examine peer influences and psychosocial correlates of bullying and victimization during early adolescence. Specifically, the authors' primary objectives were to: (a) examine the amount of bullying and victimization; (2) explore the relation between popularity and bullying; (3) determine the extent to which students who bully associate with one another; and (4) identify groups of students who bully others and/or are victimized and determine the extent to which these groups differ in psychosocial measures (e.g., belonging to school, depression, anxiety). Participants included 422 students in sixth, seventh, and eighth grade living in a small midwestern town. The authors analyzed differences in bullying across sex and grade, and conducted correlative, t-tests, cluster analyses, and ANOVAs to address their other hypotheses. Espelage and Holt identified students who scored more than 1 standard deviation above the mean as bullies. Results indicated that peers nominated males more as bullies and males also self-reported more bullying than females. Older students reported more bullying behavior than younger students. The authors reported that bullies and non-bullies had the same number of friends. Seventy-five percent of bullies nominated other bullies as friends, suggesting that bullies socialize with other bullies.

While they found no correlation for self-reported bullying and popularity among seventh and eighth graders, Espelage and Holt (2001) found that greater self-reported bullying was associated with more friend nominations ($r = .31$, $p < .01$) for sixth graders. The authors found a significant difference between bullies and non-bullies when they assessed the association between peer- and self-reported bullying. Students in the self-reported bully group received an average of 3.50 bully nominations by their peers,

whereas students in the self-reported non-bully group received an average of .98 nominations (t = -5.27, $p < .001$). This association is stronger than peer- and self-report correlations from studies that referenced the word bully (Cole et al., 2006; Salmivalli et al., 1996). Finally, 14.5% of the sample identified themselves as bullies, which represents the high end of the reported prevalence spectrum when considering available research that references the word bully.

Kilpatrick and Kerres (2003) examined the perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims. Four hundred and ninety nine students attending an urban middle school in Illinois filled out the Child and Adolescent Social Support Scale-Revised (CASSS-R) and a bully questionnaire that assessed the prevalence of bullying without referencing the word bully. The CASSS-R is a self-report measure that assesses students' perceptions of social support. The bully questionnaire consisted of a 5-point likert scale and assessed bullying by asking students how often they have engaged in behaviors such as calling names, teasing, or attacking someone. While Espelage and Holt (2001) identified bullies as those students who scored 1 standard deviation above the mean, Kilpatrick and Kerres identified bullies as those students who scored in the top 25th percentile. Based on this cutoff, they identified 12% of participants as bullies. This percentage is comparable to the 14.5% of participants identified as bullies by Espelage and Holt. Kilpatrick and Kerres conducted an ANOVA to investigate whether victims, bullies, bully/victims, and the comparison group differed on their levels of perceived social support. Results suggested that the comparison group perceived significantly more social support than bullies, victims, and bully/victims.

Houbre et al. (2006) also assessed the prevalence of bullying behavior without referencing the word bully. The authors examined the self-concepts of bullies, victims, bully-victims, and controls by administering two self-report questionnaires to 116 students in the fourth and fifth grade. They measured students' self-concepts using the Self-Perception Profile for Children (SPPC), which assesses self-concept in areas of academic competence, social competence, athletic competence, appearance, conduct, and global self-worth. The second questionnaire included the Peer Victimization Scale and the Bullying Behavior Scale. Six items scored on a scale ranging from one to four points comprise each of these scales. The authors did not mention the word bully verbally or on any questionnaire during the assessment. Houbre et al. used a cutoff point of 2.50 to identify students as a bully, a victim, a bully/victim, or not involved (control group). Results indicated that 13% of the students identified themselves as a bully, which is comparable to findings from studies conducted by Espelage and Holt (2001) and Kilpatrick and Kerres (2003). The authors also found that pupils who were both victims and bullies had the poorest self-concepts in nearly all of the areas assessed. Although the overall self-concept scores of bullies were lower than the scores of control participants, their mean self-concept was healthier than that of victims or bully/victims.

Another investigation by Bosworth et al. (1999) examined bullying behavior on a continuum rather than classifying students as bullies or non-bullies. Bosworth et al. were interested in whether factors like gender, anger, depression, access to guns, misconduct, confidence, and school sense of belonging were associated with bullying behavior in middle school students. Students rated bullying on a continuum of mild-to-extreme behaviors based on the number of self-reported bullying behaviors committed. The

authors generated self-report questionnaires using a 6-point likert scale that they administered to 558 sixth, seventh, and eighth graders living within 10 miles of a major midwestern city. In order to test the association between bullying behavior and demographic and psychosocial variables, Bosworth et al. analyzed bullying as a continuous variable and performed multiple regression analyses. The results of these analyses showed no significant relations between bullying and grade, ethnicity, family type, or receipt of free or reduced lunch. Students who reported access to guns, recent acts of misconduct, high levels of anger, impulsivity, and feelings of depression reported significantly more acts of bullying than their peers. Those who were confident in using nonviolent strategies and who intended to use those strategies in tense situations were significantly less likely to bully their classmates. Results indicated that 81% of the students engaged in at least one act of bullying in the 30 days prior to the survey, and 7.7% of the students reported frequently bullying other students.

Based on the findings from these studies and compared to those studies that examined bullying rates and incorporated the definition and word bully into measurement tools, this available research suggests that use of the word bully, and exposure to the definition of bullying, may result in lower self-reported rate of bullying behavior. That is, all four of these studies found higher prevalence rates or higher percentages of acts of bullying than studies that included the word and definition of bully, regardless of how the authors defined bully. Thus, the review of the bully literature suggests that accurate measurement of bullying behavior may depend on how researchers construct assessment tools, specifically whether they refer to acts as bullying or provide examples of bully behavior.

Demographics and Bullying

Research suggests that although bullying may occur throughout the school years, prevalence rates may vary by grade level, gender, and SES (Bosworth et al., 1999; Ma, 2002; Nansel et al., 2001; Olweus, 2003; Wolke, Woods, Stanford, & Shulz, 2001).

Grade level. Research suggests that the typical curve of bullying behavior peaks during the middle school years, particularly in grade eight, and decreases during high school (Nansel et al., 2001; Smith et al., 1999). Espelage and colleagues conducted several studies that seem to support this finding. In 2001, Espelage and Holt found that among middle school students, seventh graders reported more bullying than sixth graders, and eighth graders reported more bullying than sixth and seventh graders. In a similar study, Espelage et al. (2003) found that sixth graders reported significantly less bullying behavior than seventh and eighth graders. As a result of these findings, many researchers suggest that prevention and intervention efforts be aimed at late elementary and middle school grades in attempt to suppress these anticipated increases in bullying behavior (Espelage et al.).

Despite this evidence of an increase of bullying behavior in middle school, other researchers have found either weak trends or patterns that conflict with these reports. Olweus' (1991) findings indicated that bullying is more common in elementary school than it is in middle school and high school. For example, he found that while 11.6% of students in second through sixth grade reported being bullied, only 5.5% of students in seventh through ninth grade reported being bullied. However, Reynolds (2003) found that as students moved through the grades from 3rd through 12th, there was a gradual increase in reported rates of bullying behavior. Further inspection of these findings suggested

several relative peaks in the data; one at grade six, one at grade eight, and one at grade twelve. Reynolds postulated that these spikes may correlate with transition points (e.g., elementary schools that end at grade six, and middle schools that end at grade eight). This finding may suggest that the rate of bullying behavior is also affected by the grade level of the student as it relates to the other grades in the school (Batsche, 1997). For example, if a middle school is comprised of sixth, seventh, and eighth graders, the sixth graders are more at risk for being bullied since they are the youngest in the school. Logically speaking, the youngest students in the school are typically physically weaker and more vulnerable than the older students. Boulton et al. (2002) conducted another study that appears to contradict the evidence that bulling behavior escalates in eighth grade. The authors assessed the reported rates of bullying behavior among students in grades 7 through 10 and found that students in grade 9 reported less bullying behavior than students in the other three grades, suggesting that there is not necessarily a gradual decline in reported rates of bullying behavior as students age.

Gender. Research indicates that boys bully more than girls (Baldry & Farrington, 2000; Bosworth et al., 1999; Ma, 2002; Olweus, 2003; Sharp & Smith, 1991). Espelage and Holt (2001) examined the association between peer dynamics and bullying behavior via both peer- and self-report measures. The authors found that males both self-reported more bullying and received more nominations as bullies than their female counterparts. Using peer nominations, Veenstra et al. (2005) found that boys were 2.5 times more likely to bully than girls. While girls often only bully other girls, boys more often bully both boys and girls (Ma, 2002). However, research also seems to suggest that the type of bullying that boys and girls engage in differs. For example, several studies found that

boys engage in more physical bullying, while girls engage in more relational aggression by spreading rumors and excluding peers from desired groups (Olweus, 2003; Sharp & Smith, 1991; Smith, 2004; Veenstra et al.). Generally the research seems to support that verbal bullying is common among both boys and girls, although more frequently practiced among boys (Smith; Veenstra et al.). In summary, it seems that although males engage in significantly more physical bullying, the gender gap is lessened for verbal bullying, and is often reversed for relational aggression (Smith).

Socioeconomic status. While most research examining the relationship between bullying and SES has indicated little or no correlation, the research of Wolke et al. (2001) suggests otherwise. They detected a relationship between bullying and SES and, therefore, suggest that it is important to continue investigating these correlations, as it can help direct policies and interventions. Wolke et al. examined bullying behavior of elementary school students and found that students of low/middle SES backgrounds bullied more than students of high SES backgrounds. Despite these findings, most studies suggest that the SES of the families of children does not affect the rate at which children bully (Borg, 1999; Olweus, 1994). Three studies have examined this topic using self- and teacher-report measures. Results from these studies failed to find a significant correlation between bullying and SES (Borg; Bosworth, et al., 1999), and SES was not a significant predictor of frequency of bullying behavior (Ma, 2002). Despite these findings, SES is still an important variable to consider since it often varies by school, and any relationship that is detected could be considered in developing individually tailored anti-bullying programs as opposed to universal approaches (Wolke et al.).

Summary of Research and Impact on Prevalence Rates

A comparison of the available research that did and did not reference the word bully when obtaining information regarding the prevalence of bullying behavior suggests that the self-reported rate of bullying behavior is lower when researchers present students with the word bully. For example, in studies that referenced the word bully, prevalence rates ranged from 2.3% to 6.5%, while in studies that did not reference the word bully, prevalence rates ranged from 7.7% to14.5%. Additionally, in studies that referenced the word bully (Cole et al., 2006; Salmivalli et al., 1996), correlations between peer- and self-report measures were weaker than in a study that did not reference the word bully (Espelage & Holt, 2001). More research needs to be done to determine whether this discrepancy is a function of the use of the word bully, or other factors such as the demographic variables of the participants.

Dissertation Pilot

In an effort to directly examine whether use of the word and definition of bully affected self-reporting of bully behavior, Kert et al. (2006) conducted a pilot study that included administering the Illinois Bully Scale (Espelage & Holt, 2001) to 37 middle school students in a New York City public school. The Illinois Bully Scale has been used in numerous studies as a measure of bullying behavior (e.g. Espelage & Holt; Espelage, Holt, & Henkel, 2003). Participants in the study were sixth (n = 10; 27%), seventh (n = 16; 43.2%), and eighth (n = 11; 29.7%) grade students. The authors obtained parental consent and student assent prior to commencement of data collection. Ages ranged from 11 to 14 years (M = 12.2, SD = .89). Gender was distributed approximately equally in the sample with 16 boys (43.2%) and 21 girls (56.8%). The ethnic backgrounds of the

students were Asian and Pacific Islander (*n* = 26; 70.3%), White (*n* = 6; 16.2%), Latino (*n* = 2; 5.4%), African American (*n* = 1; 2.7%), Multiracial (*n* = 1; 2.7%), and Unspecified (*n* = 1; 2.7%). Of the participating students, 8 (21.6%) received reduced price lunch, and 8 (21.6%) received free lunch. Seven (18.9%) students participated in the Title I program. Two students had a learning disability, one student had repeated a grade, and one student had served detention in the past year. Kert et al. divided participants randomly into two groups: experimental (*n* = 19) and control (*n* = 18).

The authors examined the impact of providing the word bully and its definition prior to asking students to respond to questions assessing bullying behavior. They presented half of the students with a definition of bullying (experimental group) and half with no definition of bullying (control group) prior to answering questions. We developed the definition of bullying from related literature (Batsche & Knoff, 1994; Espelage & Swearer, 2003; Solberg & Olweus, 2003). The definition presented to the students in the experimental group read as follows:

> Bullying is aggressive behavior that has the potential to cause physical or psychological harm to another person who is not able to defend himself in the situation.

The bully scale asked students to report the extent to which they engaged in certain behaviors in the past 30 days. The items presented to the experimental group mirrored the items presented to the control group, however, each of the nine items comprising the bullying scale were preceded with "I bullied by…" For example, "I spread rumors about other students", was changed to "I bullied by spreading rumors about other students". Parents of participants completed a 13-item demographic survey in

order to provide information such as gender, grade, ethnicity, academic and behavioral school history, and parent education. Prior to data collection, Kert et al. computed chi-square and independent sample t-tests to ensure equality of experimental and control groups on major demographic variables such as gender, age, grade, ethnicity, lunch status, parental education, and grade retention. There were no significant differences between groups for gender, age, grade, ethnicity, parent education, meal plan, receipt of Title 1 services, expulsion, and suspension. The two students identified as having a disability were both in the control group. The student who had repeated a grade and the student who had served detention in the past year were both in the experimental group.

A comparison of the mean total bullying scores for the control and the experimental groups indicated that students in the experimental group reported less bullying behavior than children in the control group. A comparison of the mean total bullying scores by grade also suggested that eighth graders reported more bullying behavior than did students in the other grades. As a result of mean differences found for grade as well as group, the authors conducted a 2 (experimental, control) x 3 (sixth, seventh, and eighth grade) analysis of variance (ANOVA) to determine whether these differences were significant. There was a significant interaction effect between group and grade ($p < .05$). Although students in the experimental group tended to report less bullying behavior than children in the control group across all three grade levels, the difference was more pronounced in eighth graders. While the total bullying score for sixth graders in the experimental and control groups differed by .3 points and by .7 points for seventh graders, the difference reached 4.4 for eighth grade students. Clearly, the effect of exposure to the word and definition of bullying was stronger for older students.

The main effect for group was significant ($p < .01$) with the students in the control group having an overall higher score than the students in the experimental group. There was also a significant main effect for grade ($p < .001$). Post hoc analyses (Tukey) revealed eighth graders to have significantly higher total bullying scores than sixth graders ($p < .01$). There was a trend for eighth graders to score higher than seventh graders ($p < .10$). There was no significant difference between the total bullying scores of sixth graders and seventh graders.

Although this study extends the literature on the assessment of bullying behaviors, there are several limitations that should be noted. First, this study should be considered preliminary given the small sample of students. It is possible that the trend between seventh and eighth grade students would be significant in a larger sample. Second, the bullying behavior scale was only nine items long. While the authors reported that construct validity of the Illinois Bully Scale has exploratory and confirmatory factor analyses support, and a Cronbach alpha coefficient of .87 was found (Espelage & Holt, 2001), there was no other evidence of reliability or validity available. It is possible that the effects may have been more or less substantial had a different self-report measure been used. This study could be expanded to compare groups at different grade levels to directly examine the impact of grade level. For example, perhaps the difference in total bullying score between the control and experimental groups may become even larger when the grade level is expanded to include a comparison of fifth graders to the eighth graders.

Rationale and Hypotheses

Considering the fact that educators and researchers prefer to utilize self-report measures of bullying to identify the extent of this problem within their respective schools, more research needs to directly examine the extent to which the definition and term bullying affect student responding. This issue underlies the accurate assessment of bullying, the programs implemented to address bullying, and the conclusions researchers make about bullying (Solberg & Olweus, 2003). This call for research is in response to issues such as socially desirable responding, priming, and preconceived ideas about what bullying is. It is important to investigate whether issues such as these may have an impact on results of self-report measures of bullying behavior, and therefore may jeopardize the validity of these results and in turn future bullying prevention programs.

While many studies have examined bullying behavior and its prevalence, it is difficult to draw conclusions about the effect of the use of the word bully for various reasons. Preliminary review of studies examining bullying behavior in schools suggests the association of lower self-report prevalence rates with specific use and definition of the word bully. It is presumptuous to draw conclusions about the reasons for these differences when there are so many variables that studies have not controlled. For example, while Solberg and Olweus (2003) identified bullies as students who had reported bullying others more than twice a month, Espelage and Holt (2001) identified bullies as those students who scored 1 standard deviation above the mean. Additionally, Solberg and Olweus conducted their study with fifth through ninth grade students in Norway, while Espelage and Holt conducted their study with sixth through eighth grade students in a small town in Midwestern U.S.

After controlling for variables such as gender, age, SES, and special education, the present study examined whether the definition and explicit use of the word bully was associated with a lower self-reported rate of bullying behavior. Second, this study examined whether the use of the word bully had a greater effect on the self-reported rate of bullying behavior of eighth graders than on fifth graders. Based on this literature reviewed above, this dissertation investigated the following research hypotheses: Readers should note that I tested hypotheses one through three using a 3 x 2 ANOVA.

HO1: Self-reported bullying rates from scales that both define and repeat the word bully throughout will be significantly lower than bullying rates based on scales that provide a bullying definition only and scales that do not mention the word bully. Self-reported bullying rates from scales that define the word bully only will be significantly lower than bullying rates from scales that do not mention the word bullying.

HO2: The self-reported rate of bullying behavior will be significantly higher for eighth graders than for fifth graders.

HO3: Eighth graders who complete scales that define bullying and define and use the term bullying in the items will report significantly lower rates of bullying than fifth graders who complete the same scales.

HO4: Scores on the scale that does not reference the word bully will have a significantly higher correlation with teacher report of bullying behavior than will scores on the other bully scales.

HO5: Females who complete scales that define bullying and define and use the term bullying in the items will report significantly lower rates of bullying than males who complete the same scales.

HO6: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher among males than females.

HO7: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher for males than for females on items that measure physical bully behavior.

HO8: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher for males than for females on items that measure verbal bully behavior.

HO9: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will not be significantly related to SES.

Chapter III

Method

Participants and Setting

Participants in the study were 114 fifth and eighth grade students attending public and/or private schools in New York City. The three schools recruited to participate in this study were selected because of the school type (e.g., elementary, middle school), heterogeneous populations, and willingness of principals and teachers to participate. One of the three schools was a public middle school with an enrollment of approximately 1020 students (57% Asian, 22% White, 12% African American, and 9% Latino). Twenty five percent of students receive free or reduced price lunch. The second public school was at the elementary level with an enrollment of approximately 560 students (54% Asian, 24% Latino, 20% White, 2% African American). Twenty six percent of students receive free or reduced price lunch. The third school was a private school consisting of preschool through eighth grade (broken down into a preschool, an elementary school, and a middle school). Five percent of students receive free or reduced price lunch. The elementary school has an enrollment of approximately 240 students, and the middle school has an enrollment of approximately 120 students (97% White, 2% Asian, 1% African American). The study used fifth (n = 60; 53%) and eighth (n = 54; 47%) grade students in order to determine if (a) the differences found in Kert et al.'s (2006) study could be replicated with a larger sample of students, (b) self-reported bullying rates are higher for students in higher grades, and (c) older students are more sensitive to the word bully than younger students (evidenced by lower self-reported rates of bullying behavior

for eighth graders exposed to the word bully and its definition than for fifth graders exposed to the word bully and its definition).

I obtained parental consent and student assent prior to data collection. I distributed parent consent and Demographic Questionnaire forms to approximately 274 students (100 to students in the public middle school, 90 to students in the public elementary school, 44 to students in the elementary school of the private school, and 40 to students in the middle school of the private school), and had a return rate of approximately 42% (25% in the public middle school, 44% in the public elementary school, 43% in the elementary school of the private school, and 73% in the middle school of the private school). Students' ages ranged from 10 to 15 years (M = 11.8, SD = 1.6). Gender was distributed approximately equally in the sample: 47% boys (n = 53) and 53% girls (n = 61). The ethnic backgrounds of the students were White (n = 72; 63.2%), Asian and Pacific Islander (n = 34; 29.8%), Multiracial (n = 5; 4.4%), African American (n = 2; 1.8%), and Latino (n = 1; .9%). English language learners accounted for 23.7% (n = 27) of the students. Of the participating students, 74.6% (n = 85) did not qualify for free or reduced price lunch, 12.3% (n = 14) received reduced price lunch, and 13.2% (n = 15) received free lunch. To control for the possibility that students in special education classes may not be capable of accurately responding to a likert scale, the study did not include these children.

Participating teachers completed a teacher-reported bully scale evaluating the participating students' bullying behavior. Six teachers participated in the study (1 from the public middle school, 3 from the public elementary school, 1 from the elementary school of the private school, and 1 from the middle school of the private school), and

each one evaluated anywhere between 6 and 30 students, depending on the number of participants in their classes. While a limitation of teacher reports by middle school teachers is inadequate time spent with students, this was not as much a concern for the present study because many of the students had been enrolled in class with these teachers during the previous school year. Specifically, both teachers who completed teacher report forms for the eighth grade participants had taught seventh grade as well during the previous year.

Participants were divided into 6 groups: (a) control group at the fifth grade level (n = 20), (b) experimental group definition + word use at the fifth grade level (n = 20) (c) experimental group definition at the fifth grade level (n = 20), (d) control group at the eighth grade level (n = 18), (e) experimental group definition + word use at the eighth grade level (n = 18), and (f) experimental group definition at the eighth grade level (n = 18). The examiner coded signed forms and demographic questionnaires to allow for matching the participants' survey responses with the demographic information. The examiner randomly assigned each participating student to either the control or experimental groups. According to Cohen's (1992) power analysis, assuming a large effect size, a minimum of 84 participants (14 per group) would be required to achieve significance at the $p < .05$ level. This suggests that the 114 participants in the study provided an adequate number of participants for detecting a large effect.

Measures

Reynolds Bully-Victimization Scale. (RBVS; Reynolds, 2003). The RBVS is a four-point likert scale that is designed to measure bullying behavior among students in grades 3 - 12. Reynolds administered the final development version of the RBVS to a

national sample of 2,405 students for the development of norms. Item analysis included the examination of item characteristics from an exploratory factor analysis, and corrected item-with-total scale correlations. The RBVS provides scores on two scales: RBVS Bully Scale and RBVS Victimization Scale. The RBVS Bully Scale consists of 23 items and is the scale used in this study. Item response choices range from 0 (never) to 3 (five or more times). To calculate the raw score, circled numbers are simply added. Total raw scores on the RBVS Bully Scale range from 0 to 69. Raw scores can then be converted to percentile ranks and standard scores in the form of *T* scores with a mean of 50 and a standard deviation of 10. Cutoff scores assist in identifying students demonstrating meaningful levels of bullying behavior (e.g., normal, clinically significant, moderately severe, severe). For example, a student with a *T* score of 58 or higher on the RBVS Bully Scale would be classified as a bully.

The RBVS Bully Scale measures a range of bullying behaviors, including both verbal aggression (e.g., name-calling, verbal threats) and physical aggression (e.g., hitting other students, stealing things from other students). Participants are presented with a series of behaviors and asked to mark with a circle the number of times that they engaged in a behavior during the last month. Reynolds (2003) is among the majority of test developers and researchers in the area of bullying who chose to obtain self-reports of bullying behavior covering the month-long period prior to the administration of the survey (Brockenbrough et al., 2002; Espelage et al., 2001; Espelage & Holt, 2001; Espelage et al., 2003, Solberg & Olweus, 2003). This period of time is brief enough that it is likely respondents will be able to recall approximate number of times events occurred, but lengthy enough to obtain data indicating patterns of behavior. The scale has

an average reading level of 2.1 and students in the third grade or higher should have no difficulty reading and understanding the measure (Reynolds).

In terms of reliability, the authors report a Cronbach alpha coefficient of .93 and test-retest reliability of .80 (Reynolds, 2003). Evidence of criterion-related validity was provided by comparing the RBVS with the Teacher Bully-Victim Rating Scale (TBVRS). While the RBVS demonstrated a moderate correlation of .46 with the TBVRS, Reynolds points out that one would not expect high correlations between teacher ratings and student reports of bullying because much of the bullying that occurs at school is done when teachers are not present. Evidence for convergent and discriminant validity was found between the RBVS and the Beck Youth Inventories (BYI) Scales (Reynolds). The bully portion of the RBVS demonstrated a moderately strong correlation (r = .54) with the BYI Disruptive Scale, therefore providing evidence of convergent validity. Correlation coefficients of .11 and .12 were found between the bully portion of the RBVS and the BYS Scales of Anxiety and Depression, internalizing characteristics that are unrelated to bullying. These weak correlations provide evidence of discriminant validity.

The dissertation uses the RBVS for multiple reasons. First, the RBVS has evidence of reliability and validity provided by the author, and reviewed by the Buros Institute's Sixteenth Mental Measurements Yearbook (Reynolds, 2003; Sink & Edwards, 2005). Second, the scale is designed for use by students in grades 3 - 12. Third, the survey is designed to assess bullying behavior without using the word bully. Fourth, the scale can be administered individually or in a group setting. Fifth, the RBVS measures a range of behaviors that encompass physical and verbal bullying. Sixth, the survey is usually completed in less than 15 minutes, which is practical for administration in a

school setting (Reynolds). Harcourt Assessment, Inc. granted me permission to modify and reproduce the RBVS (see Appendix A).

Demographic questionnaire. I created the Demographic Questionnaire (see Appendix B) for the purpose of this study. It is a 13-item instrument designed to measure background characteristics of the participants in the study. It was sent home to parents of potential participants for completion. It includes questions pertaining to variables such as gender, behavioral referrals, special education, and meal plan qualification as a means of examining equality among the groups and identifying factors that may contribute to varying rates of bullying behavior.

Teacher-Reported Bully Scale. I created the Teacher-Reported Bully Scale (TRBS; see Appendix C) for the purposes of this study. Teachers filled out anonymous surveys in order to provide external evidence suggesting that any differences in the reported rate of bullying behavior between the three groups indicate a more valid test (i.e., more predictive of actual bullying behavior). Teachers returned the surveys to me in person or via self addressed stamped envelopes. The TRBS provides the teachers with the same definition of bullying as that provided to the experimental groups. The teachers estimated the number of times that each student bullied over the past month. Mirroring the student surveys, response choices range from "Never" (scored 0 points) to "Five or More Times" (scored 3 points). The study used the TRBS for numerous reasons. First, I chose a teacher-report over a peer-report because asking students to nominate other students as bullies raises ethical issues (e.g., nominating students who have not consented to participation). Additionally, peer-reports would not provide information on all participants, as their peers would likely nominate only a portion of participants.

Secondly, I selected the TRBS over the Teacher Reynolds Bully Victimization Scale (TRBVS) because the TRBVS requires teachers to respond to 22 items per student. The amount of time this would have required for teachers to complete as many as 30 TRBVS surveys each, would likely have rushed responses or discouraged participation altogether. I designed the TRBS, on the other hand, to be straightforward, brief (i.e., one item), and easy to complete in order to encourage teachers' willingness to participate. The TRBS was not validated prior to its administration.

Independent and Dependent Variables

There were three independent variables in this study. One independent variable was the definition of the word *bully.* A second independent variable was the definition of the word *bully* combined with the repeated use of the word *bully* within items presented to participants that assess bullying behavior. The third independent variable was the grade level (fifth or eighth) of the student. The dependent variable was the rate of bullying behavior self-reported via the RBVS.

The RBVS items presented to the experimental groups mirrored the items presented to the control groups; however, for the first experimental group (definition + word use), each of the items assessing bullying behavior began, "I bullied when…" For example, for these experimental groups, I changed the item, "I picked on younger kids", to, "I bullied when I picked on younger kids". The students in both fifth and eighth grade experimental groups (definition + word use, and definition alone) received the following definition of bullying:

> Bullying is when someone hits, kicks, grabs, or shoves someone else on purpose. It is also bullying when someone threatens or teases someone else in a hurtful

> way. It is also bullying when someone tries to keep others from being their friend or from letting them join in what they are doing. The person being bullied has difficulty defending himself in the situation (Cole et al., 2006).

I selected this definition for multiple reasons. First, while there are many definitions of bullying, there are two main elements that appear in bully-based research (Raskauskas & Stoltz, 2004). One element is that bullying is negative behavior. The other element is that bullying requires an imbalance of power (Olweus, 1993). This definition addresses both of these elements. Second, there are three main categories of bullying behavior (i.e., physical, verbal, relational aggression). This definition addresses each of these categories. It should be noted that while the definition addresses each of the three categories of bullying behavior, the survey items only address physical and verbal aggression. Third, this is a standard definition used by Cole et al. and adapted from the Olweus Bully/Victim Questionnaire. Appendices H, I, and J present the RBVS that the experimental and control groups respectively completed.

Procedure

I received Institutional Review Board approval from the City University of New York Graduate School and University Center and the New York City Department of Education. I selected potential participating elementary and middle schools based on demographics, geography, and willingness to participate. I contacted school principals via telephone to propose conducting the study in their school. I provided interested principals with proof of IRB approval as well as a written summary of the study. See Appendix D for the written summary presented to school principals. Once the principal agreed to participate, I contacted the fifth and/or eighth grade teachers via email and/or

phone to agree upon a time that I could greet the potential participants and give them a packet to take home for their parents to read, sign, and mail back to me. I described the nature of the study to the students when I visited participating classes for the first time by saying:

> I am a student at the Graduate Center at the City University of New York. I am conducting a study to help understand how students get along with one another. I would like you to help by filling out a short questionnaire. You don't have to participate, but if you do decide to, your name will not be on the questionnaire. Before you can participate, your parents will have to review the materials in this packet and sign a consent form allowing you to participate. I will return to your school in about a month to administer the survey to those students whose parents have granted permission. As I mentioned, participation is up to you. Therefore, even if your parents have given their consent, you may choose not to participate, and that is completely fine.

Each packet included two copies of the consent form, one to mail back and one to keep for their records, a demographic questionnaire, and a self addressed stamped envelope to use when returning the forms. See Appendix E for the parent consent form. Prior to data collection, I computed chi-square analyses to ensure equality of experimental and control groups on major demographic variables such as gender, ethnicity, lunch status, and grade retention.

When I returned to each class to administer the survey to participating students, I initially pulled out a third of the participants in each class to sign student assent forms and take the survey in a separate classroom. See Appendix F for student assent form.

These students were control group members. After they completed the survey, they returned to the class, and participants assigned to experimental group 1 (definition + word use) joined me in the other room to complete the survey. When these students returned to class, I followed the same procedure for students in experimental group 2 (definition only). Students whose parents did not return signed consent forms, did not be participate in the study, and were therefore not called out of the room during the administrations. For all administrations, students were seated at desks and I was at the front of the room. I orally administered the survey while the students read along silently. The survey took approximately 15 minutes to complete.

Experimental groups. I provided fifth and eighth grade students in both experimental groups with the written definition of bully (as described above) and I read this definition to them aloud. Then, I read the following instructions, which are written on each questionnaire, aloud to the first experimental group (definition + word use):

> Directions: The following sentences concerning bullying behavior tell about things that have happened in and out of school. Please read each sentence and CIRCLE the number that tells how often this has happened to you over the PAST MONTH. There are no right or wrong answers. Please work carefully and do not skip any sentences. If you need to change your answer, mark an X through the incorrect answer and CIRCLE the correct answer."

I read the same directions to the second experimental group (definition only), however I omitted the words "concerning bullying behavior". See Appendix G and H.

Control group. Instructions to the control group mirrored the instructions to the experimental groups, however, the instructions did not include the definition and use of

the word bully. See Appendix I. Instructions to the control group were written on each questionnaire and read aloud as follows:

> The following sentences tell about things that have happened in and out of school. Please read each sentence and CIRCLE the number that tells how often this has happened to you over the PAST MONTH. There are no right or wrong answers. Please work carefully and do not skip any sentences. If you need to change your answer, mark an X through the incorrect answer and CIRCLE the correct answer.

Experimental Design and Analyses

The experiment was a post-test control group design with students randomly assigned to the control group or one of the experimental groups. Randomization helps to ensure that the groups are comparable in terms of variables that could affect any observed differences in posttest scores. I analyzed data in a number of ways. As described above, in order to ensure equivalency among the groups, I conducted chi-square tests to examine whether the groups were equally distributed in terms of SES (as indicated by school meal plan qualification), gender, ethnicity, grade repetition, history of suspension, expulsion, and detention (as reported by parents). If these analyses had indicated that significant differences existed among the groups, I would have used the significant variables as covariates when analyzing scores.

In order to collectively address HO1, HO2, and HO3, I used a 3 (control, experimental group definition + word use, experimental group definition) x 2 (fifth grade, eighth grade) analysis of variance (ANOVA) to investigate the relationship that mean bullying score has to the conditions (definition of “bullying” and whether or not the word “bully” appeared in the items), the relationship of mean bullying score to grade, and the

possible interaction between these two factors. I correlated the total scores of each of the three groups with the teacher report data to address HO4 and to help obtain external evidence to determine whether or not one of the scales is more predictive of actual bullying than the other(s).

In order to address HO5, I used another 3 (control, experimental group definition + word use, experimental group definition) x 2 (male, female) ANOVA to investigate the relationship that mean bully score had to gender, and the possible interaction between gender and group. Because it is not possible to test the relationship of gender with total bully score without considering previously detected effects (HO6), I ran a step-wise regression analysis in order to test whether there was an effect of gender beyond the effects of group and grade.

In order to address HO7 and HO8, and examine whether gender correlates with the different types of bullying behavior, I categorized survey items as either physical or verbal bullying and analyzed accordingly. While there are three main types of bullying behavior (i.e., physical, verbal, relational aggression), the RBVS Bully Scale does not assess relational aggression as it is most commonly defined in research (Crothers & Levinson, 2004; Espelage & Swearer, 2003; Olweus, 2003; Whitted & Dupper, 2005). I therefore assigned items to either the physical or verbal bullying category. To ensure interrater reliability, a second person that is familiar with the bullying literature, assigned the items to categories as well. After calculating percentage of agreement by dividing the number of items in disagreement (2) by the number of items in agreement (21) plus the number of items in disagreement (2), we resolved the minor discrepancies through discussion. The interrater reliability is .91. See Appendix J for breakdown of physical and

verbal bullying items. Once categorization was complete, I conducted independent sample t-tests to determine whether there were statistically significant differences in both physical and verbal bullying scores for males and females. Results indicated whether or not boys were more likely to participate in both physical and verbal bullying behavior. In order to address HO9, I investigated the relationship between self-reported bullying score and SES using Pearson product-moment correlation coefficient.

Chapter IV

Results

This chapter will review the data analyses performed and the results acquired from these analyses. It will first describe the demographics of the participants, followed by tests of group differences and correlations.

Demographic Variables

Prior to data collection, I computed chi-square analyses to ensure equality of experimental and control groups on demographic variables such as gender, ethnicity, lunch status, and English language learners. Table 1 lists the frequencies of some of these variables by group. There were no significant differences between groups for gender, χ^2 (2, N = 114) = .071, p = .97, ethnicity, χ^2 (2, N = 114) = .00, p = 1.0, meal plan χ^2 (2, N = 114) = 1.42, p = .84, and English language learners, χ^2 (2, N = 114) = .874, p = .65. In addition to these demographic variables, one student had served detention in the past year, and had repeated a grade. This student was in experimental group definition + word use. Two other students had repeated a grade; one was in experimental group definition + word use and the other was in the control group.

Table 1

Frequency of Gender, Grade, and SES by Treatment Group

Treatment Group	Control	Definition + Word Use	Definition
*G*ender			
Male	17	18	18
Female	21	20	20
Grade			
5th	20	20	20
8th	18	18	18
Lunch Status			
Not Qualify	28	29	28
Reduced Price	6	3	5
Free	4	6	5

Group Differences

Table 2 presents the means and standard deviations for students in the different experimental groups and grades. Table 3 presents the means and standard deviations for students in the different groups as they were separated by grade. It should be noted that while the mean raw scores for both fifth and eighth graders appear low as compared to

the highest possible total raw score (i.e., 69), they are comparable to mean scores of the standardization sample used during the development of the RBVS. Specifically, the standardization sample of fifth graders had average raw scores of 4, and the eighth grader standardization sample had an average raw score of 7. Only six of the current participant students fell into the clinically significant category of bullying according to the RBVS manual (Reynolds, 2003). Table 4 displays by group and grade the number of students that fell into the normal, clinically significant, and moderately severe categories on the RBVS.

Table 2

Means (M), Standard Deviations (SD), and Sample Size (n) of Total Bullying Score by Group and Grade Examined Separately

	n	*M*	*SD*
Group			
Control	38	5.13	4.91
Experimental group definition + word use	38	2.71	3.70
Experimental group definition	38	3.13	3.35
Grade			
Grade 5	60	3.22	4.21
Grade 8	54	4.15	4.05

Table 3

Means (M), Standard Deviations (SD), and Sample Size (n) of Total Bullying Score by Group and Grade Combined

	n	*M*	*SD*
Group			
Control at 5th grade level	20	4.30	5.33
Experimental group definition + word use at 5th grade level	20	2.60	3.95
Experimental group definition at 5th grade level 20	20	2.75	3.02
Control at 8th grade level	18	6.06	4.35
Experimental group definition + word use at 8th grade level	18	2.83	3.52
Experimental group definition at 8th grade level	18	3.56	3.73

Table 4

Clinical Severity Levels of Bullying by Group and Grade

	Normal	Clinically Sig.	Moderately Sev.
Group			
Control	34	3	1
Experimental group definition + word use	37	1	0
Experimental group definition	37	1	0
Grade			
Grade 5	58	1	1
Grade 8	50	4	0

Note. Clinically Sig. = clinically significant; Moderately Sev = moderately severe.

Before running the ANOVA, I conducted tests of the assumptions for ANOVA by evaluating skewness and kurtosis as well as homogeneity of variance with respect to total score on the RBVS. The skeweness and kurtosis (1 and .4 respectively) were both within the normal range. Further, Levene's test for homogeneity showed that the assumption of equality of variance among the groups was not violated, F (5, 108) = 1.30, p = .249. The nature of my study is such that each test response score is not influenced by any other test response score, and therefore independence of observations is not violated. Results, therefore, indicated that each of the assumptions was satisfied.

To test the first three hypotheses, I conducted a 3 (control, experimental group definition + word use, experimental group definition only) x 2 (fifth grade, eighth grade)

analysis of variance (ANOVA) to determine whether the means of the groups differed significantly. Table 5 presents the results of this analysis.

Table 5

Results of the ANOVA for the Effects of Group, Grade, and Group by Grade Interaction on the Total Bullying Score

	df	*F*	*p*
Group	2	3.97	.02*
Grade	1	1.50	.22
Interaction of group and grade	2	.34	.71
error	1778.64	108	

* $p < .05$.

Table 5 shows that the overall group effect was significant. Post hoc analyses (Tukey) revealed that students in the control group had significantly higher total bullying scores than students in definition + word use group ($p = .05$; see means in Table 2), and the difference between the means of control group and definition only group ($p < .10$) approached significance. The two experimental groups did not differ significantly. I calculated the effect size difference between the control group and each experimental group by subtracting the means and dividing by the pooled standard deviation (Cohen, 1992). The observed effect size for the control and experimental group definition + word use comparison was $d = .56$. The observed effect size for the control group and the experimental group definition only comparison was $d = .48$. Therefore, the differences in scores for both experimental groups from the scores of control participants represented

moderate effect sizes. Converting effect size to area under the unit normal curve reveals that the mean of the experimental group definition + word corresponds to the 29th percentile of the control group scores. The mean of the experimental group definition alone lies at the 32nd percentile of the control group. Thus, these effects, while not large, are "likely to be visible to the naked eye of a careful observer" (Cohen, p. 156). The observed effect size (*d*) for the experimental group definition + word use and experimental group definition comparison was .12 (a very small effect size). Thus, the self reports of bullying behavior for the experimental groups were quite similar.

Table 5 shows that neither the effect for grade nor the grade by group interaction was statistically significant. The effect size for the grade by group interaction was .006 based on the partial eta squared (η_p^2) calculation, a measure of the effect size in ANOVA (Tabachnick & Fidell, 1989). The effect size for the difference in reported bullying between fifth and eighth graders was $d = .22$, a small effect.

Table 6 presents the means and standard deviations of males and females in each of the groups. In order to detect whether there was an interaction between group and gender (a test of Hypothesis 6), I conducted a 3 (control, experimental group definition + word use, experimental group definition) x 2 (male, female) analysis of variance (ANOVA). The interaction between group and gender was not significant ($p = .80$). The effect size for the gender by group interaction was .004 based on η_p^2. Table 6 shows that the overall group effect, as was the case with the previous analysis, was significant, indicating that the experimental groups produced lower self-reported rates of bullying. Table 7 shows that the effect of gender was statistically significant with females reporting

less bullying than males, $d = .59$. I discuss the effect of gender on total score in greater detail further along in the chapter.

Table 6

Means (M), Standard Deviations (SD), and Sample Size (n) of Males and Females by Group

	n	*M*	*SD*
Group			
Control			
Males	17	6.47	4.53
Females	21	4.05	5.03
Experimental group definition + word use			
Males	18	3.67	4.10
Females	20	1.85	3.17
Experimental group definition			
Males	18	4.72	3.37
Females	20	1.70	2.68

Table 7

Results of the ANOVA for the Effect of Group, Gender, and Group by Gender Interaction on the Total Bullying Score

	df	*F*	*p*
Group	2	4.40	.02*
Gender	1	10.93	.00*
Interaction of group and gender	2	.23	.80
error	1641.55	108	

* $p < .05$.

Relationship between Gender and Bullying Type

Table 8 presents the means and standard deviations of males and females by bullying type (i.e., physical and verbal bullying). In order to explore the impact of gender on physical bullying as measured by the RBVS, I conducted an independent sample t-test. I explored the dispersion of self-reported physical bully scores for both genders with Levene's test and found different variances, $F = 8.50$, $p = .004$. Therefore, I used an independent sample t-test that does not assume homogeneity of variances. There was a statistically significant difference in physical bullying scores, t (1, 112) = 7.90, $p = .007$, with boys reporting significantly more physical bullying behavior than girls ($d = .50$).

In order to explore the impact of gender on verbal bullying as measured by the RBVS, I conducted an independent sample t-test. I examined the dispersion of self-report verbal bully scores for both genders and found them to be similar for both males and females. I therefore found no violation of the assumption of homoscedasticity. There was

a statistically significant difference in verbal bullying scores t (1,112) = 7.30, p = .008, with boys reporting significantly more verbal bullying than girls (d = .50).

Table 8

Means (M), Standard Deviations, and Sample Size (n) of Males and Females by Bullying Type

	n	*M*	*SD*
Physical Bullying			
Males	53	1.25	1.69
Females	61	0.48	1.23
Verbal Bullying			
Males	53	3.68	3.18
Females	61	2.10	3.08

While boys received overall higher scores on both the physical and verbal bullying portions of the scale, I conducted bivariate correlations to determine the percentage of variance in each of these outcome variables that was predicted by gender. An R^2 of 6.5% was found for physical bullying, while an R^2 of 6.1% was found for verbal bullying. In other words, gender explained approximately 6.5% of the variance in the physical bullying score, and 6.1% of the variance in the verbal bullying score.

Relationship between Student- and Teacher - Reported Bullying Behavior

Table 9 presents the means and standard deviations for teacher reports of bullying behavior for students in the different experimental groups. While there were significant differences between the self-reported rates of bullying behavior, it cannot be assumed that the control group results are more valid than the experimental groups' results. I correlated teacher reports with student reports in order to provide external evidence to verify the self-reported rates of bullying behavior. No outliers were identified. There was a large and significant correlation between the control group scores on the RBVS and the teacher reported scores ($r = .60$, $p < .01$). There were lower correlations between the RBVS scores of the experimental group definition + word use and the teacher reported bully scores ($r = .17$, $p < .05$, small effect size), and the experimental group definition and the teacher reported scores ($r = .28$, $p < .05$, medium effect size).

I converted the correlations to Fisher Z scores and tested the differences among correlations using Z tests. The correlation between teacher and control participants' bullying scores was significantly higher than the correlation between teacher and experimental group definition + word, $Z = 2.18$, $p < .05$. However, the correlation between teacher and control participants' bullying scores approached but did not differ significantly from the correlation between teacher and experimental group definition bullying scores, $Z = 1.69$, $p < .10$.

Table 9

Means (M), Standard Deviations (SD), and Sample Size (n) of Teacher-Reported Bullying Behavior

	n	*M*	*SD*
Control	38	1.18	.93
Experimental group definition + word use	38	1.11	.92
Experimental group definition	38	1.00	.96

Overall Reported Rates of Bullying Behavior

It is not possible to test the relationship of gender with total score without considering previously detected effects. Prior to determining the synergistic effect of predictors (i.e., group, grade, SES) on the outcome variable (total bullying score) with multiple regression analysis, I explored the strength of individual relationships by correlating each of the predictors with the outcome variable. While there was virtually no relationship between SES and total score (r = .03), there was a small relationship between grade and total score (r = .11), experimental group definition + word use (r = -.16), and experimental group definition (r = -.09). A step-wise regression analysis was run in order to test whether there was an effect of gender beyond the effects of group and grade (see Table 10). No outliers were identified. I entered the effects of grade and group (an interaction wasn't added since we previously learned that there is none) in the first step of the multiple regression. I added gender in the second step. Group and grade accounted for

8% of the variance in bullying score. Once gender was added, the explanatory power of the model doubled (R^2 = 17.6%) with boys scoring higher than girls. This increase was significant (p = .001).

Table 10

Regression Coefficients in Predicting Self-Reported Bully Score from Gender, Grade, and Experimental Conditions

		Unstandardized Coefficients		Standardized Coefficients		
Model		*B*	Std. Error	β *t*	Sig.	ΔR^2
1	(Constant)	4.69	0.75	6.29	0.00	0.078
	grade 8	0.93	0.76	0.11	1.23	0.22
	definition + word use	-2.42	0.93	-0.28	-2.62	0.01
	definition	-2.00	0.93	-0.23	-2.16	0.03
2	(Constant)	3.34	0.80	4.17	0.00	0.097
	grade 8	1.31	0.73	0.16	1.80	0.07
	definition + word use	-2.49	0.88	-0.28	-2.80	0.01
	definition	-2.07	0.88	-0.24	-2.35	0.02
	gender	2.61	0.73	0.33	3.59	0.00

I investigated the relationship between self-reported bullying score and SES using a Pearson product-moment correlation coefficient. There was no significant correlation between self-reported bully score and SES ($r = .03$, $p = .75$).

Hypothesis Testing

The following is a summary of the results of hypothesis testing for each hypothesis.

HO1: Self-reported bullying rates from scales that both define and repeat the word bully throughout will be significantly lower than bullying rates based on scales that provide a bullying definition only and scales that do not mention the word bully. Self-reported bullying rates from scales that define the word bully only will be significantly lower than bullying rates from scales that do not mention the word bullying.

Results of the study partially supported this hypothesis. Respondents who were exposed to the definition or the definition and the repeated exposure to the word bully reported less bullying behavior than those who were not exposed to the word. Although respondents who were presented with both the definition and repeated reference to the word bully reported less bullying behavior than the other two groups, the difference was only significant when compared to the control group – not experimental group definition. Although respondents who were exposed only to the definition of bully reported less bullying behavior than the control group, this difference was only marginal, but represented a medium effect size, and no differences were found between the definition only group and the group exposed to the definition and repeated exposure to the word.

HO2: The self-reported rate of bullying behavior will be significantly higher for eighth graders than for fifth graders.

Results did not support this hypothesis. Although eighth graders reported more bullying behavior than fifth graders, the difference was not significant and the effect size was small.

HO3: Eighth graders who completed scales that define bullying and define and use the term bullying in the items will report significantly lower rates of bullying than fifth graders who complete the same scales.

Results did not support this hypothesis. The grade of the respondents did not have an effect on the respondents' sensitivity to exposure to the definition or the word bully.

HO4: Scores on the scale that does not reference the word bully will have a significantly higher correlation with teacher report of bullying behavior than will scores on the other bully scales.

Results support this hypothesis. The bullying scores of those respondents' (i.e., control group participants) who were not exposed to the definition or repeated use of the word bully correlated highly and significantly with the teacher reports. While the bully scores of the two experimental groups also correlated significantly with the teacher reports of bullying, these effects were small to moderate. In fact, the difference between control-teacher bully correlation and the experimental group definition + word-teacher correlation was significant and the difference between the control-teacher and the experimental group definition approached significance.

HO5: Females who complete scales that define bullying and define and use the term bullying in the items will report significantly lower rates of bullying than males who complete the same scales.

Results did not support this hypothesis. The gender of the respondents did not have an effect on the respondents' sensitivity to exposure to the definition or the word bully.

HO6: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher among males than females.

Results supported this hypothesis. Males reported significantly more bullying behavior than females.

HO7: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher for males than for females on items that measure physical bully behavior.

Results supported this hypothesis. Males reported significantly more physical bullying than females.

HO8: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will be significantly higher for males than for females on items that measure verbal bully behavior.

Results supported this hypothesis. Males reported significantly more verbal bullying than females.

HO9: Regardless of the bully scale that participants complete, the self-reported rate of bullying behavior will not be significantly related to SES.

Results supported this hypothesis. There was no difference between the self-reported rate of bullying behavior among high and low SES students. These results should be interpreted with caution given that the majority of the sample was from a mid-high SES group.

Chapter V

Discussion

The premise for conducting this study was that researchers and school officials need accurate self-report assessment data on the prevalence of bullying behavior to be better prepared to successfully implement bullying prevention and intervention programs. Previous research suggested that the manner in which questionnaires present items pertaining to bullying may impact self-reported rates of bullying. Specifically, there are debates in the literature regarding whether presenting the definition of bully and including the word bully in response items biases students against accurately reporting bullying incidents. Although the literature discusses this topic, I am not aware of research that has specifically examined this issue. Therefore, the purpose of this study was to examine how the definition and explicit use of the word bully affect self-reported rates of bullying behavior. Given the research suggesting that prevalence of bullying differs by grade level, gender, and potentially SES, I also investigated whether these variables impacted rates of reported bullying.

Results confirmed some of the hypotheses, but not others. Specifically, I confirmed that the self-reported rate of bullying behavior was lower for the groups exposed to the definition and/or explicit use of the word bully throughout the survey than it was for the control group. However, this difference was only significant between the group exposed to the definition of bully and repeated exposure to the word in survey items. Interestingly, the difference between the experimental groups (i.e., definition versus definition and explicit use of the term bully) was not significant. It was also surprising that although eighth graders reported more bullying behavior than fifth

graders, the difference was not significant, and my hypothesis was therefore not supported. Another important finding that puts this study into context is that the control group's reported rate of bullying correlated more strongly with teacher reports of bullying behavior than either experimental groups, and therefore supported my hypothesis.

With respect to the impact of gender and SES, hypotheses were partially supported. For example, there was no gender difference on the respondents' sensitivity to exposure to the definition of the word bully, and my hypothesis was therefore not confirmed. That being said, males reported significantly more overall bullying and more physical and verbal bullying behavior than girls, therefore supporting my hypotheses. SES did not affect the self-reported rate of bullying behavior, also supporting my hypothesis.

Does the Definition and Explicit Use of the Word Bully Lead to Lower Rates of Self-Reported Bullying Behavior?

A comparison of the mean total bullying scores for each of the three groups indicated that students in the control group (not exposed to the word bully) reported more bullying behavior than both of the treatment groups. A post hoc analysis indicated that a significant difference existed between reported bullying behavior by the control group and the group who received the definition of bullying prior to completing a survey in which the word bully was also included in the items. More specifically, when students have to respond to items described as bullying, their reported rate of bullying behavior is significantly lower. Interestingly there was a marginal, although not significant difference, which represented a medium effect, between students in the control group and

students who were only provided with the definition prior to responding. Furthermore, no differences were found between the experimental groups.

These findings suggest first, simply exposing students to the definition of bullying prior to asking them to respond to questions that do not reference the word bully, leads to a lower, albeit insignificant in this study, reported rate of bullying behavior. Second, this effect becomes significant when the questionnaire both includes and repeatedly uses the word bully throughout. It should be noted that the findings from statistical testing are vulnerable to sample size and are therefore somewhat misleading relative to the effect sizes. Statistical testing can yield results that differ from effect sizes. For example, a medium effect size was yielded for both experimental groups' results compared with the control group, but only the scores of the experimental group definition + word use differed significantly from the control group's scores.

Bosworth et al. (1999) postulate that children who feel uncomfortable describing their behavior towards others as bullying, may respond inaccurately when completing self-report surveys. The findings from this study support this argument. That is, providing the definition and the repeated presentation of the word bully to students while they respond to questions about their behavior encourages the participants to identify behavior as bullying over and over again. Overall, these results are consistent with research that argues that providing a definition of bullying prior to asking students to respond to questions assessing these behaviors may prevent students from responding honestly (Bosworth et al.; Espelage et al.; Espelage & Holt, 2001; Houbre et al., 2006; Kert et al., 2006; Kilpatrick & Kerres, 2003). In fact, these results support the position of opponents (e.g., Espelage et al.; Espelage & Holt; Espelage et al., 2003) to the use of the word bully

and its definition in school-wide assessments. That is, including the use of the word and definition of bullying in the course of behavioral assessments may lead students to underestimate the actual occurrence of bullying behaviors. This finding may have important implications for the assessment of bullying in schools, as it is common for bullying behavior to be assessed using surveys that include both a definition of bullying and the word bully within item stems describing behavior (e.g., Cole et al., 2006; Salmivalli et al., 1996; Solberg & Olweus, 2003). Some of the issues addressed in the studies reviewed in this paper include establishing cutoff points for classifying bullies when conducting school-based bullying prevention and intervention programs (Solberg & Olweus, 2003), determining the most effective means of identifying bullies in schools (Cole et al., 2006), and determining the types of victims behavior likely to encourage or discourage bullying (Salmivallit et al., 1996). The findings from each of these studies have the potential to contribute to the reduction of bullying behavior in schools, however, based on my findings, referencing the word bully threatens the validity of the findings, and in turn, the assessment of the effectiveness of future programs.

The argument against using the definition or word bully when assessing this behavior was emphasized by the finding that the behaviors reported by the control group participants (who did not receive a bully definition) corresponded highly, and significantly, with teacher reported bullying behavior, while bullying behavior reported by the experimental groups was less highly related to teacher reports. The relationship between teacher-reported and self-reported data from the control group is important as it lends support to the accuracy with which the students in the control group reported bullying behavior, as compared to reported rates from participants in the experimental

groups. Although there is some evidence that teachers underreport bullying behavior (Crothers & Levinson, 2004), other research suggests that teachers can make reasonable reliable reports (Espelage & Swearer, 2003; Leff et al., 1999). Specifically, Leff et al. found that teachers correctly identified 47% of peer-reported elementary school bullies and 22% of peer-reported middle school bullies. Although middle school teachers identified fewer bullies, Leff et al. hypothesized that these results were due to the limited time middle school teachers spend with their students. In the current study, time spent with students may have not been a factor as each of the middle school teachers who provided reports of bullying behavior had not only taught the students during the year that they completed the survey, but had also taught the majority of the students sampled during the previous academic year.

Grade Level Differences in Reported Bullying Behavior

While analyses indicated that the overall group effect was significant, there was no significant effect of grade. This finding is inconsistent with research suggesting that older students may be more sensitive to the use of the word bully because they have been socialized to understand the negative connotation associated with bullying behavior (Smith et al., 1999). In other words, some researchers purport when they present students with the word or definition of the word bully, the students may respond in the way society expects of them, rather than providing accurate reports of bullying behavior. Unlike the present findings, the dissertation pilot study (Kert et al., 2006) found a significant difference between sixth and eighth graders when the self-reported rate of bullying behavior of students exposed to the word bully and its' definition was compared

by grade. However, the sample size of the pilot study was small and therefore results may not be representative of a larger population.

Although some researchers suggest that the prevalence of bullying peeks in middle school (Espelage & Swearer, 2003; Nansel et al., 2001; Smith et al., 1999), the literature examining how age affects the reported rate of bullying behavior when respondents are exposed to the word bully is mixed (e.g., Ma, 2002; Olweus, 1993). For example, Espelage et al. (2003), Espelage and Holt (2001), and Reynolds (2003) each assessed bullying behavior by using self-reports that did not reference the word bully, and in each of these studies the rate of bullying behavior was higher at higher grade levels. On the other hand, Ma and Olweus each assessed bullying behavior by using self-reports that referenced the word bully, and in both of these studies, the rate of bullying behavior was lower at higher grade levels.

The discrepancy in research findings may be explained by several factors that could affect the prevalence of bullying behavior at a given point in time, such as school transition points and grade level of student as it relates to other grades in school (Batsche, 1997; Boulton et al., 2002; Espelage et al., 2003; Ma, 2002; Reynolds, 2003). For example, Batsche points out that it is the oldest students in a school who are most likely to bully others. Similarly, Reynolds postulates that peaks in bullying behavior may correlate with transition points in school, suggesting that the rate of bullying behavior is affected by the grade level of the student as it relates to the other grades in the school (Batsche). By examining the bullying behavior of fifth and eighth graders, I eliminated the variable of school standing as it relates to grade, and focused only on students who are in the highest grade in each of their schools. It is therefore possible that both the fifth

and eighth graders reported higher rates of bullying behavior due to school standing. I may have found significant differences if I had compared fourth and eighth graders, thereby examining students who held different standings in their respective schools.

Furthermore, research suggests that as children enter mid-adolescence, their support and empathy for victims of bullies diminishes (Rigby & Slee, 1991), therefore, possibly leading to an increased rate of bullying behavior. This decrease in empathy may neutralize the impact of an increase in socially desirable responding as students mature, therefore stabilizing the reported rate of bullying behavior through the higher grades. In other words, the effects of decreased empathy on the reported rate of bullying behavior may moderate any effects of an increase in socially desirable responding among older children who have been socialized into understanding the weight of the negativity associated with bullying behavior (Smith et al., 1999). This could explain the absence of any significant difference in reported rates of bullying behavior between fifth and eighth graders in the present study. Clearly, this is a topic in need of further investigation with large sample sizes that are followed longitudinally.

Effects of Gender on Reported Bully Behavior

Results indicated that there was no interaction between the gender of the student and the group (i.e., either experimental group or control group) to which the student belonged. In other words, girls were no more sensitive to the use or non-use of the word bully than boys. This finding is somewhat surprising, as previous research suggests that girls perceive bullying as a more undesirable act than boys and may be inclined to portray themselves in a more socially desirable light than boys when presented with a definition or mention of the word bully (Boulton et al., 1999; Eisenberg & Lennon, 1083). Because

shame is more easily induced in females, I hypothesized that the experimental conditions might discourage them from acknowledging their bullying behavior (Brody, 1985; Espelage et al., 2001). It is possible, based on the findings of this study, that girls not only find bullying to be an undesirable and shameful act, but they also find the behaviors, whether defined as bullying or not, that fall under the umbrella of bullying as shameful and undesirable. Therefore, any reluctance on the part of the girls to acknowledge being a bully, would also be experienced when, for example, they are faced with the task of acknowledging that they are someone who makes fun of their classmates (Boulton et al.).

While my study supported previous findings indicating that boys reported bullying more than girls, it also examined whether boys bullied more than girls in terms of both physical and verbal bullying when each is examined separately. Results indicated that boys reported engaging in more physical and verbal bullying behavior than girls. The findings support some research that suggests that males engage in significantly more physical and verbal bullying behavior than girls. Sharp and Smith (1991) and Veenstra et al. (2005) found that boys engaged in more physical and verbal bullying, while girls were more likely to engage in relational aggression, such as gossiping about classmates and excluding peers from their clique of friends. Similarly, Olweus (2003) found that boys engage in significantly more physical bullying while girls are more relationally aggressive. It is important to note that I did not examine bullying behavior associated with relational aggression, and therefore, I was unable to determine whether girls who participated in this particular study would report more bullying within this category than boys. Had I examined relational aggressive behavior, and therefore included these

findings in the overall reported rate of bullying behavior, results as they relate to gender and bullying may have been vastly different.

Effects of Socio-Economic Status on Reported Bullying Behavior

The findings from this study support other research suggesting that the SES of the families of students does not have an affect on the self-reported rate of bullying behavior (Borg, 1999; Bosworth et al., 1999; Ma, 2002; Olweus, 1994). More specifically, the students whose families were entitled to free or reduced priced lunch were no more likely to bully than were students whose families did not qualify for free or reduced price lunch. While some research has indicated a weak inverse relationship between bullying and SES (e.g., Wolke et al., 2001), researchers such as Veenstra et al. (2005) have suggested this may be attributed to parenting characteristics or adverse family circumstances rather than SES, particularly as it was measured in this study. In this particular study, as mentioned above, I used a limited measure of SES.

Limitations

There are several limitations of this study that may have impacted the findings, and should therefore be noted. Future research in this area should note these limitations and work towards eliminating them. First, return rates of parent consent forms were approximately 42%. While 114 respondents were sufficient for adequate power to detect a large effect size, a larger sample would have allowed me to draw conclusions about hypotheses with greater certainty. Possible reasons for this low response may include parent concerns about their children's emotional responses to a questionnaire assessing school socialization, reluctance to reveal personal information via a demographic survey, and concerns about confidentiality. Previous research on bullying behavior has

experienced similar challenges. For example, Kert et al. (2006) experienced a 15% return rate of parent consents. Bosworth et al. (1999) had a 40% rate of return. Studies that only required parents to return consent forms if they did not want their child to participate, had participation rates greater than 90% (e.g., Espelage & Holt, 2001; Espelage et al., 2003). However, Institutional Review Boards often do not allow such passive consent, particularly on topics such as this, which many perceive to be sensitive in nature.

Second, although this study examined bullying across grade levels, the inclusion of additional grades might have shed more light on the rate of bullying behavior as students progress from elementary through high school. Although there is research that suggests that bullying behavior peaks during middle school (Nansel et al., 2001, Smith et al., 1999), there is further research that suggests otherwise (Olweus, 1991, Reynolds, 2003).

Third, although the RBVS (2003) has a number of advantages, it does not assess all types of bullying behavior. The scale thoroughly assesses both physical and verbal bullying behavior; however, it neglects to include any items related to relational aggression. Being that physical and verbal bullying are both more common among boys, and relational aggression is more common among girls (Olweus, 2003), it is possible that the design of this scale disproportionately identifies male bullies over female bullies. Consequently, failure to find interaction effects between gender and group may be a result of the items on this particular measure.

Fourth, although I addressed how reading level may affect student response by reading the survey aloud as students read the survey to themselves, I did not address the students' comprehension level. Failure to understand what was being said and/or read

would undoubtedly threaten the validity of the results. However, by excluding students in self-contained special education classes, I worked hard to ensure that students understood survey that has an average reading level of 2.1. According to Reynolds (2003), students in the third grade or higher should have no difficulty reading and understanding the measure.

Fifth, parents reported background information about the participants. Although there were no differences in rates of referrals or behavioral problems reported by parents between groups, I did not verify this information by school records. It is possible that the differences in self-reported rates of bullying behavior may have been a function of actual events, and could have been evidenced through school records. However, research suggests that parent reports are a reliable source of information, and mental health professionals often view parents as the best possible informants with regards to reporting behavioral problems (Loeber, Green, & Lahey, 1990; Wrobel & Lachar, 1998). Despite the literature providing evidence of the reliability of parent reports, a multisource approach often adds value to assessments and research (Wrobel & Lachar).

Sixth, additional report measures would have helped to verify student report data. Researchers and practitioners recommend that bullying be assessed through multiple sources (Leff, 2007). A multi-source approach follows an ecological model that focuses on the numerous aspects of a child's life and how these influences interact with one another (Power, 2007). In particular, direct observation may be the most reliable measure, albeit the most time sensitive.

Seventh, this study attributed much of the lower self-reported rate of bullying behavior when respondents were exposed to word bully, to socially desirable responding.

While researchers (e.g., Espelage & Holt, 2001) have theorized that inaccurate responses to questions regarding bullying stem from a desire to be viewed in a more attractive light, no one has directly tested this. Inclusion of a social desirability scale would have provided supporting evidence for this speculation.

Future Research

While these findings have implications for the identification of appropriate measures for assessing and monitoring bullying behavior, I recommend future research replicating these results with modifications to the design. First, I recommend using a larger sample size including additional grade levels. For example, future studies could compare third and fifth or sixth and eighth grade students' responses, which may parse out effects due to school hierarchy. That is, this may help to determine whether students within the highest grade level in a school participate in more bullying based on grade standing. Second, while the RBVS Bully Scale had numerous advantages (e.g., strong reliability and validity, no reference to the word bully, second grade reading level, individual or group administration, administration time under 15 minutes), it does not assess relational aggression as it is defined in bullying research. According to bullying literature, relational aggression is an indirect attack involving a third party (e.g., spreading rumors, encouraging others not to play with another student) (Whitted & Dupper, 2005). Reynolds (2003) suggests that relational aggression is assessed using items that described direct name-calling and ridiculing, which traditionally fall under the umbrella of verbal bullying. It is recommended that future research incorporate a measure of relational aggression.

Third, it is possible that students' preconceived ideas of what a *bully* is may have led those in the experimental group to report lower rates of bullying behavior. According to Smith et al. (1999), the provision of a definition to children does not ensure that they will consider and use it when responding to questions about bullying behavior. As a result, they may only report incidents that fit into their personal definition of bullying, and not the one provided. Future research should consider assessing whether or not participants use the definition provided by the examiner or a previously conceived definition. This can be accomplished by providing one group of students with the definition of bullying followed by the repeated use of the word bully within each questionnaire item, while exposing the other group of students to the repeated use of the word bully within each item, without exposing them to the definition. Differences in the reported rates of bullying behavior would suggest that participants used the provided definition when responding to items assessing bullying behavior.

Fourth, future research should include additional report measures (e.g., behavioral observations, peer nominations, social desirability scale) to provide greater validity information about self-reported bullying. Although studies of the relationship between self-report and peer nominations have been conducted, few studies have compared direct observation data with other report measures.

Implications

There are two primary perspectives that prevail throughout the literature that illustrate the current issues associated with self-reported assessment of bullying behavior in schools. The first suggests that a definition might prime a student against responding honestly, and using the word bully may lead students to evaluate the impact or motivation

of their behaviors (Espelage et al., 2001; Espelage & Holt, 2001). This in turn may result in underreported rates of bullying behavior. The second perspective postulates that anonymous responding reduces this aforementioned risk and therefore including the word and/or its definition will not impact accurate reports of bullying behavior (Solberg & Olweus, 2003). The findings of this study suggest that while providing the definition of bully does not have a substantial effect on the self-reported rate of bullying behavior, adding the word and repeatedly using it in each survey item has a significant effect on the self-reported rate of bullying behavior. As such, the data presented here support the use of self-report measures that assess bullying behavior without reference to the word bully. Moreover, reported rates of bullying behavior from the experimental groups were not highly correlated with teacher reports, yet responses from the control group correlated highly. These findings seem to suggest that use of the definition and word bully result in underreported rates of bullying behavior. Therefore, it is possible that use of the word bully in questionnaire items and the provision of its definition may jeopardize the validity of self-report measures (Espelage & Holt). For example, considering that self-reported rates of bullying behavior are lower when a survey references the word bully, it can be assumed that success rates of bullying intervention programs using self-report measures that reference the word bully for assessment will be artificially inflated. False indications of success may lead to repeated implementations of unsuccessful programs, and failure to develop programs that effectively reduce the rate of bullying behavior in school. Consequently, psychologists and researchers should carefully consider the means by which they assess bullying behavior. The results of these assessments have implications

on an individual, school-wide, and global level. Self-report measures are used to direct intervention implementation, and assess the success and/or failure of existing programs.

Appendix A

FEE PERMISSION AGREEMENT

This agreement is entered into as of December 21, 2006 (the "Agreement"), between Harcourt Assessment, Inc., 19500 Bulverde Road, San Antonio, Texas 78259 (herein the "Publisher") and

NAME: Allison Kert
ADDRESS: 200 E. 74th St., Apt. 7c
New York, NY 10021

(herein the "Licensee"), WITNESSETH:

WHEREAS the Publisher is the copyright owner of the Reynolds Bully Victimization Scales for Schools (herein the "Work(s)"); and

WHEREAS the Licensee wishes to retype the questions from the Work(s) for a research study involving a control group and an experimental group where Licensee will modify the version that the experimental group sees by beginning each item with, "I bullied when I…" for a maximum of 90 total administrations (herein the "Licensed Use").

NOW, THEREFORE, the Publisher and the Licensee agree as follows:

1. The Licensee may either produce, have produced, and/or distribute such reproductions of the Work specified above, solely for the Licensed Use and subject to the terms and conditions of this Agreement.

2. The Work(s) shall be identified by title on any reproduction unless otherwise expressly provided in this Agreement.

3. The Licensed Use specifically excludes the right to print, copy or distribute in any form, or to translate, adapt or revise, or to exhibit, represent, record or reproduce any portion of the Work(s), either separately or as part of any other larger publication, except as otherwise expressly provided herein. Licensee agrees to abide by federal copyright, patent, and trademark laws or such other laws as governed by the Berne Convention, whichever is relevant to Licensee's country.

   The Licensee will take all necessary precautions to safeguard all materials by limiting access to only those individuals or agencies with a responsible, professional interest in the security of the materials.

4. It is understood and agreed that no commercial use, other than as described herein, may be made of the Work(s) or the reproduction authorized herein.

a. In order to assure that the Licensee's procedures and materials used in connection with the Works are in accordance with applicable professional standards and with the high quality of the Works, the Licensee agrees to institute appropriate procedures in its administration, processing, scoring and reporting, including without limitation the following:

(i) establishing procedures, substantially similar to those required under APA-AERA-NCME Standards for Educational and Psychological Tests;

(ii) ensuring that all written materials, will: (A) be consistent with accepted professional standards including, without limitation, the APA-AERA-NCME Standards for Educational and Psychological Tests; and (B) contain complete identification information including the Test name, the date on which it was given, its edition, its level and form, and appropriate labeling of subtest and total scores.

(iii) ensuring availability of qualified personnel to assist users in the proper interpretation and use of the Works and if necessary, the appropriate level of action will be taken with regard to test results.

5. All rights in the Work(s) not granted to the Licensee by this Agreement are expressly reserved to the Publisher.

6. a. The rights granted herein shall be for a period commencing with the date first stated above and terminating December 21, 2007, whereupon the Licensed Use shall cease. Licensee must obtain written permission for any extension of this Agreement.

b. The Publisher may terminate this Agreement with thirty (30) days' written notice to Licensee, or may terminate this Agreement if the Licensee shall fail to cure any material breach hereof, including without limitation a failure to perform its obligations under paragraphs 3 and 4, within thirty (30) days after written notice of such breach is given to the Licensee.

7. Published reports of the Licensed Use shall not include reproduction of actual test items or answers unless separate permission is granted in an addendum to this Agreement.

8. Any reproduction of any portion of the Work(s) or subsequent reference to the Work(s) in reports/articles resulting from the Licensed Use herein shall bear the following notices:

Reynolds Bully Victimization Scales for Schools. Copyright © 2003 by Harcourt Assessment, Inc. Reproduced with permission. All rights reserved.

9. Notices shall appear on the title page (or reverse side of the title page), of each copy of any reproduction of the Work(s), or, if the Work(s) are reproduced as part of a larger publication, at the foot of the first page on which the Work(s) are reproduced.

Minor rearrangements of the above format may be made in publications for purposes of editorial uniformity, but all the components must be included.

10. If this Agreement covers more than one Work, the above model of notice of permission shall be used separately for each separate Work being reproduced, unless a combined form of notice is specifically approved in writing by Publisher.

11. In any published or unpublished reports of the Licensed Use authorized under this Agreement, a specific acknowledgement of the permission shall be made, including reference to the full title of the Work(s), the copyright notice, the author, and the Publisher.

12. Licensee agrees to pay a non-refundable up-front license fee of thirty-four U.S. Dollars ($34.00) (maximum of 90 administrations less the price of 30 that Licensee has already purchased and less the 50% student discount), such fee due and payable upon the execution of this agreement. Publisher shall bill Licensee and Licensee shall pay the fees within thirty (30) days of receipt of an invoice from Publisher. If additional reproductions above those authorized in this Agreement become necessary, Publisher must be contacted in advance.

13. The Licensee shall send the Publisher one (1) copy of the Licensed Use of the Work(s) authorized under this Agreement. Upon reasonable written notice to the Licensee, the Publisher will have the right, not more than once each year, to examine the books and records of the Licensee concerning the Licensed Use of the Work(s), such examination to be during normal business hours and at the place where the Licensee ordinarily maintains its books and records.

14. The rights granted herein are non-exclusive and non-transferable to any third party without written permission from the Publisher.

15. The representative of the Licensee whose signature appears in this Agreement represents and warrants that he has full power to enter into this Agreement.

16. The Licensee acknowledges and agrees that the rights granted under this Agreement by the Publisher do not extend to any material included in the Work(s) which is permissioned from a third party. The Licensee is fully responsible for obtaining any necessary permissions from the copyright holder for any third-party material.

17. The Publisher makes no warranty or representation to the Licensee other than that the Work(s) does/do not infringe upon any third party's intellectual property rights and are suitable as of the date hereof, in accordance with applicable professional educational and psychological standards, for use for the purposes described in the Publisher's catalogs. Return or refund of all or a portion of the license fees paid during the term of the License CONSTITUTES THE SOLE AND EXCLUSIVE REMEDY OF THE LICENSEE, IN LIEU OF ALL REMEDIES AND DAMAGES,

ACTUAL, CONSEQUENTIAL, SPECIAL, INCIDENTAL, OR OTHER in conjunction with a breach of the above warranties and representations.

Except as stated in the previous paragraph, the Publisher assumes no liability under this Agreement for use of the Licensee's or Licensee's customers' use of Publisher's Work(s) or the Licensed Use authorized hereunder. To the extent permitted by law, the Licensee shall hold harmless and indemnify the Publisher against any claim, costs, liability, damage, or expense of the Publisher in connection with any act or failure to act of the Licensee.

18. This Agreement shall become effective only if it is executed by the Licensee within thirty (30) days of the effective date shown above.

19. This instrument contains the entire agreement between the parties and there are merged herein all prior and collateral understandings and agreements. No amendment or modification of this Agreement shall be valid unless in writing and signed by both parties.

20. Regardless of the place of its physical execution or performance, this Agreement shall be governed by and interpreted under the laws of the State of Texas, U.S.A.

ALLISON KERT **HARCOURT ASSESSMENT, INC.**

_____ _____

Allison Kert Date Aurelio Prifitera, Ph.D. Date
Publisher

Appendix B

Dear Parent(s)/Guardian(s):

Please answer the following demographic questions to help with this study.

What gender is your child?

(a) Male
(b) Female

How old is your child?

(a) 8 years old
(b) 9 years old
(c) 10 years old
(d) 11 years old
(e) 12 years old
(f) 13 years old
(g) 14 years old
(h) 15 years old
(i) 16 years old

What grade is your child in?

(a) 5^{th}
(b) 8^{th}

How would you describe your child's ethnicity?

(a) African American
(b) Asian / Pacific Islander
(c) Caucasian
(d) Latino
(e) Multiracial
(f) Other _____

Is your child an English Language Learner (i.e., English is not their first language)?

(a) Yes
(b) No

Is your child in a special education class?

(a) Yes
(b) No

Has your child ever repeated a grade?

(a) Yes
(b) No

Which of the following meal plans does your child qualify for?

(a) Free
(b) Reduced price
(c) Does not qualify

Has your child been expelled during the 2006/2007 school year?

(a) Yes
(b) No

Has your child been suspended during the 2006/2007 school year?

(a) Yes
(b) No

Has your child been placed in detention during the 2006/2007 school year?

(a) Yes
(b) No

Appendix C

Bullying is when someone hits, kicks, grabs, or shoves someone else on purpose. It is also bullying when someone threatens or teases someone else in a hurtful way. It is also bullying when someone tries to keep others from being their friend or from letting them join in what they are doing. The person being bullied has difficulty defending himself in the situation.

Directions: Please read each name and mark the box corresponding to the number that tells how often you estimate this student has bullied other students over the PAST MONTH.

Student Name	**Estimated Number of Times the Student Bullied in the Past Month**			
	Never	**Once or Twice**	**Three or Four Times**	**Five or More Times**

Appendix D

Objectives of the Research

I am examining whether use of the word *bullying* and providing students a definition of *bullying* prior to asking them to respond to questions about bullying has an effect on the reported rate of bullying behavior. This issue is related to the accurate assessment of bullying, the programs implemented to address bullying, and to conclusions researchers make about bullying (Solberg & Olweus, 2003).

Methodology

The principal investigator has received Institutional Review Board approval from the City University of New York Graduate School and University Center and the New York City Department of Education to conduct this research. Participants will be fifth and eighth grade students. The Reynolds Bully Victimization Scale (Reynolds, 2003) will be administered to as many as 180 students. Participants will complete the survey during an agreed upon course period, and it will take no longer than 15 minutes to complete. Teachers of participating students will be asked to complete a short form pertaining to each student's frequency of bullying behavior.

A letter of consent will be provided to parents or guardians of student. Parents will be asked to complete a brief survey that provides demographic information. Consent forms will be distributed during the designated class period by the examiner, and returned to the examiner via a self-addressed stamped envelope. No school or individual identifying information will be included in any publications or presentations that may result from this study.

The administrator will return to the school approximately 1 month after the initial visit. Students will be randomly assigned to one of three groups. Participants will anonymously fill out the surveys and will therefore be assured of confidentiality. The administrator will leave the classroom with the first group and these students will be asked to sign assent forms and complete the survey. When the first group has completed the survey, the administrator will return to the classroom with them and leave with one of the two experimental groups. This process will be repeated again with the other experimental group. Students will be seated at their desks and the experimenter will be at the front of the room. The experimenter will orally administer the survey while the students read along silently.

The experiment is a post-test control group design where students are randomly allocated to control and experimental groups. The experimental groups are exposed to the treatments and all three groups are measured afterwards. The independent variables are the definition of the word *bully* and use of the word *bully* when referring to the questions that the participants are about to answer. The dependent variable is the rate of bullying behavior reported via the Reynolds Bully Victimization Scale. The scale presents respondents with a series of behaviors and asks them to mark with a circle the number of times that they performed or experienced that behavior during the last month. The items presented to the experimental groups will mirror the items presented to the control group, however each of the items assessing bullying behavior for one of the experimental groups will be preceded with “I bullied when I…” For example, “I picked on younger kids”, will be changed to “I bullied when I picked on younger kids”. Both experimental groups will be exposed to the word bully.

Appendix E

Dear Parent(s)/Guardian(s):

My name is Allison Schaffer Kert and I am a student in the Educational Psychology Ph.D. program at the Graduate Center of the City University of New York (CUNY) and Principal Investigator of this project. I would like permission for your child to take part in a research study about behavior among students.

Purpose:
The study will help us understand how students are relating to one another and how to most effectively evaluate these behaviors. The findings will hopefully provide information that will make it easier to maintain safe and welcoming schools for your children to attend. I also ask that you answer the multiple choice demographic questionnaire that is attached to this letter.

Procedures:
Students who choose to participate in the study will answer a multiple-choice questionnaire during the upcoming school year. The questionnaire will take no longer than 15 minutes to complete. Teachers will also be asked to answer a multiple-choice questionnaire reporting on behavior among students.

Participation in the study is on a voluntary basis. Your child does not have to participate. He or she can quit at any time and this will in no way affect your child's school grades. If you approve of your child participating in this study, he or she will also be provided with a form to sign if he or she decides to participate.

Confidentiality:
All identifying information will be kept strictly confidential, and your child's name will not appear on any materials or publications related to this study. All identifying information will be kept in a locked filed cabinet to which only I and my advisor will have access. As a thank you for participating, each child will receive a $5 gift certificate to a school supply store.

Risks and Benefits:
There are very few risks to your child because while I may publish results of this study, names of people, or any identifying characteristics, will not be used in any of the publications. It is possible that students may experience unpleasant thoughts while answering questions concerning socialization at school. The benefits of your child's participation is that this information could provide the school with an estimate of the types of issues that may be occurring within the school and could be used to develop a plan to address these issues. There will be approximately 100 students taking part in the study.

If you would like a copy of the study, please provide me with your address and I will send you a copy in the future.

Contact Information:
If you have any questions about this research, you can contact me at 212-817-8285 or aschaffer@gc.cuny.edu or reach my advisor Dr. Tryon at 212-817-8285 or
gtryon@gc.cuny.edu. If you have any questions about your child's rights as a participant in this study, you can contact Kay Powell, IRB Administrator, The Graduate Center/City University of New York, 212-817-7525, kpowell@gc.cuny.edu.

Thank you for considering permitting your child to participate in this study. Please return this form as well as the attached questionnaire and keep the copy I have provided for your records.

[ ] I **agree** to let my child _____ participate in this study.

[ ] I **do not agree** to let my child _____ participate in this study.

_____ _____ _____ _____
Parent/Guardian's Signature Date Investigator's Signature Date

Appendix F

Dear Student:

My name is Allison Schaffer Kert and I am a student in the Educational Psychology Ph.D. program at the Graduate Center of the City University of New York (CUNY). I'm doing a study on how students get along with each other. I hope the study will provide information that will help students feel safer in school.

Your parent(s) have given permission for you to be part of the study. But you do not have to be in the study unless you want to. Please tell me if you want to participate. I will ask you to answer a brief multiple-choice questionnaire asking how you think you and your schoolmates get along with each other. The questionnaire will take no longer than 15 minutes to complete. At any time you can say you don't want to be in the study any longer, and if you don't feel like answering all the questions you don't need to. Teachers will also be asked to answer a multiple-choice questionnaire about behavior among students in school.

Your name will not appear on any materials related to this study. Your participation will in no way affect your grades at school. All the questionnaires will be kept in a locked filed cabinet to which only I and my advisor will have access. No one else will see the questionnaires. As a thank you for participating, you will receive a $5 gift certificate to a school supply store.

There is a possibility that you may have some unpleasant thoughts while answering questions about your behavior and your classmates' behavior at school. Please let me know if this occurs and we can talk about it. There will be approximately 100 students taking part in the study.

You can contact me if you have any questions about this research at 212-817-8285 or email me at aschaffer@gc.cuny.edu. You can also contact my advisor Dr. Tryon at 212-817-8285 or gtryon@gc.cuny.edu, and/or Kay Powell, IRB Administrator, The Graduate Center/City University of New York, 212-817-7525, kpowell@gc.cuny.edu.

Thank you for considering participating in this study. Please return this form and keep one copy for yourself.

[ ] I, _____, **agree** to participate in this study.

[ ] I, _____, **do not** agree to participate in this study.

_____ _____ _____ _____

Participant's Signature Date Investigator's Signature Date

Appendix G

Reynolds Bully Victimization Scale – Modified for Experimental Group Definition + Word Use
asterisk (*) indicates item that is part of the RBVS Bully Scale

Modified from the BVS Reynolds Scale for Schools
William M. Reynolds

Bullying is when someone hits, kicks, grabs, or shoves someone else on purpose. It is also bullying when someone threatens or teases someone else in a hurtful way. It is also bullying when someone tries to keep others from being their friend or from letting them join in what they are doing. The person being bullied has difficulty defending himself in the situation.

Directions: The following sentences concerning bullying behavior tell about things that have happened in and out of school. Please read each sentence and CIRCLE the number that tells how often this has happened to you over the PAST MONTH. There are no right or wrong answers. Please work carefully and do not skip any sentences. If you need to change your answer, mark an X through the incorrect answer and CIRCLE the correct answer.

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
1. I was bullied when other kids pushed me.	0	1	2	3
2. I was bullied when other kids teased me or called me names in school.	0	1	2	3
3. I bullied when I picked on younger kids.*	0	1	2	3
4. I was bullied when one or more kids hit me for no reason.	0	1	2	3
5. I was bullied when some kids broke something of mine.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
6. I bullied when I pushed around other kids in school.*	0	1	2	3
7. I was bullied when some kids said they would hurt me.	0	1	2	3
8. I was bullied when I was afraid that other kids would hurt me.	0	1	2	3
9. I was bullied when some kids said they would hurt my family.	0	1	2	3
10. I was bullied when other kids tried to pick a fight with me.	0	1	2	3
11. I was bullied when other kids did things to make me feel bad or get mad.	0	1	2	3
12. I was bullied when a kid threw something at me to hurt me.	0	1	2	3
13. I bullied when I teased or called other kids names.*	0	1	2	3
14. I bullied when I hit other kids because I felt like it.*	0	1	2	3
15. I bullied when I picked on kids my own age.*	0	1	2	3
16. I bullied when I threw something at other kids to hurt them.*	0	1	2	3
17. I bullied when I made other kids do things for me.*	0	1	2	3
18. I was bullied when I told my parents other kids were picking on me.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
19. I bullied when I was with a group of kids who picked on other kids.*	0	1	2	3
20. I was bullied when some kids took my books or papers.	0	1	2	3
21. I was bullied when some kids chased me and tried to hurt me.	0	1	2	3
22. I was bullied when a group of kids tried to beat me up.	0	1	2	3
23. I bullied when I took things away from other kids.*	0	1	2	3
24. I bullied when I started fights with other kids.*	0	1	2	3
25. I bullied when I called other kids names to hurt them or make them mad.*	0	1	2	3
26. I bullied when I broke things belonging to other kids.*	0	1	2	3
27. I bullied when I was with a group of kids who threw things at other kids.*	0	1	2	3
28. I bullied when I beat up someone.*	0	1	2	3
29. I bullied when I chased kids to scare them.*	0	1	2	3
30. I was bullied when some kids made me do something that got me in trouble.	0	1	2	3
31. I bullied when I got away with hitting kids in school.*	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
32. I was bullied when some kids were mean to me at school.	0	1	2	3
33. I was bullied when other kids did things to me that made me feel bad.	0	1	2	3
34. I was bullied when I ran away from a kid or kids who tried to pick a fight with me.	0	1	2	3
35. I bullied when I made kids do things they did not want to do.*	0	1	2	3
36. I was bullied when some kids told me that they would hurt me.	0	1	2	3
37. I bullied when I made fun of other kids to be mean to them.*	0	1	2	3
38. I bullied when I started a fight with a kid I knew I could beat up.*	0	1	2	3
39. I was bullied when some kids hit or kicked me.	0	1	2	3
40. I was bullied when some kids spit on me.	0	1	2	3
41. I bullied when I took money away from other kids.*	0	1	2	3
42. I was bullied when I told a teacher that other kids were picking on me.	0	1	2	3
43. I bullied when I was with a group of kids who picked fights with other kids.*	0	1	2	3
44. I bullied when I told someone that I or my friends would beat them up.*	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
45. I was bullied when a kid made me do something that I did not want to do.	0	1	2	3
46. I bullied when I did things to bother other kids and make them feel bad.*	0	1	2	3

Reynolds, W. (2003). *Reynolds Bully Victimization Scales*. San Antonio, TX: The Psychological Corporation, Harcourt Assessment.

Appendix H

Reynolds Bully Victimization Scale – Modified for Experimental Group Definition Only
asterisk (*) indicates item that is part of the RBVS Bully Scale

Modified from the BVS Reynolds Scale for Schools
William M. Reynolds

Bullying is when someone hits, kicks, grabs, or shoves someone else on purpose. It is also bullying when someone threatens or teases someone else in a hurtful way. It is also bullying when someone tries to keep others from being their friend or from letting them join in what they are doing. The person being bullied has difficulty defending himself in the situation.

Directions: The following sentences tell about things that have happened in and out of school. Please read each sentence and CIRCLE the number that tells how often this has happened to you over the PAST MONTH. There are no right or wrong answers. Please work carefully and do not skip any sentences. If you need to change your answer, mark an X through the incorrect answer and CIRCLE the correct answer.

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
1. Other kids pushed me around.	0	1	2	3
2. Other kids teased me or called me names in school.	0	1	2	3
3. I picked on younger kids.*	0	1	2	3
4. One or more kids hit me for no reason.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
5. Some kids broke something of mine.	0	1	2	3
6. I pushed around other kids in school.*	0	1	2	3
7. Some kids said they would hurt me.	0	1	2	3
8. I was afraid that other kids would hurt me.	0	1	2	3
9. Some kids said they would hurt my family.	0	1	2	3
10. Other kids tried to pick a fight with me.	0	1	2	3
11. Other kids did things to make me feel bad or get mad.	0	1	2	3
12. A kid threw something at me to hurt me.	0	1	2	3
13. I teased or called other kids names.*	0	1	2	3
14. I hit other kids because I felt like it.*	0	1	2	3
15. I picked on kids my own age.*	0	1	2	3
16. I threw something at other kids to hurt them.*	0	1	2	3
17. I made other kids do things for me.*	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
18. I told my parents other kids were picking on me.	0	1	2	3
19. I was with a group of kids who picked on other kids.*	0	1	2	3
20. Some kids took my books or papers.	0	1	2	3
21. Some kids chased me and tried to hurt me.	0	1	2	3
22. A group of kids tried to beat me up.	0	1	2	3
23. I took things away from other kids.*	0	1	2	3
24. I started fights with other kids.*	0	1	2	3
25. I called other kids names to hurt them or make them mad.*	0	1	2	3
26. I broke things belonging to other kids.*	0	1	2	3
27. I was with a group of kids who threw things at other kids.*	0	1	2	3
28. I beat up someone.*	0	1	2	3
29. I chased kids to scare them.*	0	1	2	3
30. Some kids made me do something that got me in trouble.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
31. I got away with hitting kids in school.*	0	1	2	3
32. Some kids were mean to me at school.	0	1	2	3
33. Other kids did things to me that made me feel bad.	0	1	2	3
34. I ran away from a kid or kids who tried to pick a fight with me.	0	1	2	3
35. I made kids do things they did not want to do.*	0	1	2	3
36. Some kids told me that they would hurt me.	0	1	2	3
37. I made fun of other kids to be mean to them.*	0	1	2	3
38. I started a fight with a kid I knew I could beat up.*	0	1	2	3
39. Some kids hit or kicked me.	0	1	2	3
40. Some kids spit on me.	0	1	2	3
41. I took money away from other kids.*	0	1	2	3
42. I told a teacher that other kids were picking on me.	0	1	2	3
43. I was with a group of kids who picked fights with other kids.*	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
44. I told someone that I or my friends would beat them up.*	0	1	2	3
45. A kid made me do something that I did not want to do.	0	1	2	3
46. I did things to bother other kids and make them feel bad.*	0	1	2	3

Reynolds, W. (2003). *Reynolds Bully Victimization Scales*. San Antonio, TX: The Psychological Corporation, Harcourt Assessment.

Appendix I

Reynolds Bully Victimization Scale
asterisk (*) indicates item that is part of the RBVS Bully Scale

Modified from the BVS Reynolds Scale for Schools
William M. Reynolds

Directions: The following sentences tell about things that have happened in and out of school. Please read each sentence and CIRCLE the number that tells how often this has happened to you over the PAST MONTH. There are no right or wrong answers. Please work carefully and do not skip any sentences. If you need to change your answer, mark an X through the incorrect answer and CIRCLE the correct answer.

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
1. Other kids pushed me.	0	1	2	3
2. Other kids teased me or called me names in school.	0	1	2	3
3. I picked on younger kids.*	0	1	2	3
4. One or more kids hit me for no reason.	0	1	2	3
5. Some kids broke something of mine.	0	1	2	3
6. I pushed around other kids in school.*	0	1	2	3
7. Some kids said they would hurt me.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
8. I was afraid that other kids would hurt me.	0	1	2	3
9. Some kids said they would hurt my family.	0	1	2	3
10. Other kids tried to pick a fight with me.	0	1	2	3
11. Other kids did things to make me feel bad or get mad.	0	1	2	3
12. A kid threw something at me to hurt me.	0	1	2	3
13. I teased or called other kids names.*	0	1	2	3
14. I hit other kids because I felt like it.*	0	1	2	3
15. I picked on kids my own age*.	0	1	2	3
16. I threw something at other kids to hurt them.*	0	1	2	3
17. I made other kids do things for me.*	0	1	2	3
18. I told my parents other kids were picking on me.	0	1	2	3
19. I was with a group of kids who picked on other kids.*	0	1	2	3
20. Some kids took my books or papers.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
21. Some kids chased me and tried to hurt me.	0	1	2	3
22. A group of kids tried to beat me up.	0	1	2	3
23. I took things away from other kids.*	0	1	2	3
24. I started fights with other kids.*	0	1	2	3
25. I called other kids names to hurt them or make them mad.*	0	1	2	3
26. I broke things belonging to other kids.*	0	1	2	3
27. I was with a group of kids who threw things at other kids.*	0	1	2	3
28. I beat up someone.*	0	1	2	3
29. I chased kids to scare them.*	0	1	2	3
30. Some kids made me do something that got me in trouble.	0	1	2	3
31. I got away with hitting kids in school.*	0	1	2	3
32. Some kids were mean to me at school.	0	1	2	3
33. Other kids did things to me that made me feel bad.	0	1	2	3

In the Past Month:	**Never**	**Once or Twice**	**Three or Four Times**	**Five or More Times**
34. I ran away from a kid or kids who tried to pick a fight with me.*	0	1	2	3
35. I made kids do things they did not want to do.*	0	1	2	3
36. Some kids told me that they would hurt me.	0	1	2	3
37. I made fun of other kids to be mean to them.*	0	1	2	3
38. I started a fight with a kid I knew I could beat up.*	0	1	2	3
39. Some kids hit or kicked me.	0	1	2	3
40. Some kids spit on me.	0	1	2	3
41. I took money away from other kids.*	0	1	2	3
42. I told a teacher that other kids were picking on me.	0	1	2	3
43. I was with a group of kids who picked fights with other kids.*	0	1	2	3
44. I told someone that I or my friends would beat them up.*	0	1	2	3
45. A kid made me do something that I did not want to do.	0	1	2	3
46. I did things to bother other kids and make them feel bad.*	0	1	2	3

Reynolds, W. (2003). *Reynolds Bully Victimization Scales*. San Antonio, TX: The Psychological Corporation, Harcourt Assessment.

Appendix J

Physical and Verbal Bullying Items

Physical Bullying Items	Verbal Bullying Items
6. I pushed around other kids in school.	3. I picked on younger kids.
14. I hit other kids because I felt like it.	13. I teased or called other kids names.
16. I threw something at other kids to hurt them.	15. I picked on kids my own age.
23. I took things away from other kids.	17. I made other kids do things for me.
24.I started fights with other kids.	19. I was with a group of kids who picked on other kids.
26. I broke things belonging to other kids.	25. I called other kids names to hurt them or make them mad.
27. I was with a group of kids who threw things at other kids.	35. I made kids do things they did not want to do.
28. I beat up someone.	37. I made fun of other kids to be mean to them.
29. I chased kids to scare them.	44. I told someone that I or my friends would beat them up.
31. I got away with hitting kids in school.	46. I did things to bother other kids and make them feel bad.
38. I started a fight with a kid I knew I could beat up.	
41. I took money away from other kids.	
43. I was with a group of kids who picked fights with other kids.	

References

Baker, J.A. (1998). Are we missing the forest for the trees? Considering the social context of school violence. *Journal of School Psychology, 36*, 29-44.

Baldry, A.C., & Farrington, D.P. (2004). Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behavior, 30*, 1-15.

Batsche, G.M., & Knoff, H.M. (1994). Bullies and their victims: Understanding a pervasive problem in the schools. *School Psychology Review*, *23*, 165-174.

Behrens, C.B., Dahlberg, L.L., & Toal, S.B. (1998). *Measuring violence-related attitudes, beliefs and behaviors among youths: A compendium of assessment tools.* Atlanta, GA: Division of Violence Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Borg, M.H. (1999). The extent and nature of bullying among primary and secondary school children. *Educational Research, 41*, 137-153.

Bosworth, K., Espelage, D., & Simon, T.R. (1999). Factors associated with bullying behavior in middle school students. *Journal of Early Adolescence, 19,* 341-362.

Boulton, M.J., Bucci, E., & Hawker, D.D. (1999). Swedish and English secondary school pupils' attitudes towards, and conceptions of, bullying: Concurrent links with bully/victim involvement. *Scandinavian Journal of Psychology, 40*, 277-284.

Boulton, M.J., Trueman, M., & Flemington, I. (2002). Associations between secondary school pupils' definitions of bullying, attitudes towards bullying, and tendencies to engage in bullying: age and sex differences. *Educational Studies, 28*, 353-370.

Bradshaw, C.P., Sawyer, A.L., & O'Brennan, L.M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review, 36*, 361-382.

Brockenbrough, K.K., Cornell, D.H., & Loper, A.B. (2002). Aggressive attitudes among victims of violence at school. *Education & Treatment of Children, 25,* 273-287.

Brody, L. (1985). Gender differences in emotional development: A review of theories and research. *Journal of Personality, 53,* 102-149.

Carey, T. A. (2003). Improving the success of anti-bullying intervention programs: a tool for matching programs with purpose. *International Journal of Reality Therapy,* 22, 16-23.

Clarke, E.A., & Kiselica, M.S. (1997). A systemic counseling approach to the problem of bullying. *Elementary School Guidance and Counseling, 31*, 310-315.

Cohen, J. (1992). A power primer, *Psychological Bulletin, 112*, 155-159.

Cole, J.C.M., Cornell, D.G., & Sheras, P. (2006). Identification of school bullies by survey methods. *Professional School Counseling, 9,* 305-313.

Crothers, L.M., & Levinson, E.M. (2004). Assessment of bullying: A review of methods and instruments. *Journal of Counseling and Development, 82,* 496-503.

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin, 94*, 100-131.

Epstein, L., Plog, A., & Porter, W. (2002). Bully-Proofing your school: Results of a four-year intervention. *Emotional and Behavior Disorders in Youth*, *2*, 55-78.

Espelage, D., Bosworth, K., & Simon, T.R. (2001). Short-term stability and change of bullying in middle school students: An examination of demographic, psychosocial, and environmental correlates. *Violence & Victims, 16*, 411-426.

Espelage, D., & Holt, M.K. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. *Journal of Emotional Abuse*, *2*, 123-142.

Espelage, D, Holt, M.K., & Henkel, R.R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development, 74*, 205-220.

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.

Finger, L.R., Marsh, H.W., Craven, R.G., & Parada, R.H. (2005). *Strengthening anti-bullying research: An investigation into the misuse of dichotomous variables.* Self Concept Enhancement and Learning Facilitation (SELF) Research Centre, University of Western Sydney.

Frey, K.S., Hirschstein, M.K., Snell, J.L., Edstrom, L.V.S., Mackenzie, E.P., & Broderick, C.J., (2005). Reducing playground bullying and supporting beliefs: An experimental trial of the steps to respect program. *Developmental Psychology*, 41, 479-491.

Garrity, C., & Jens, K. (1997). Bully proofing your school: Creating a positive climate. *Intervention in School & Clinic, 32*, 235-243.

Hall, K.R. (2006). Using problem-based learning with victims of bullying behavior. *Professional School Counseling, 93*, 231-237.

Hazler, R.J., & Carney, R.J. (2000). When victims turn aggressors: Factors in the development of deadly school violence. *Professional School Counseling, 4*, 105-112.

Holt, M.K., Finkelhor, D., & Kantor, G.K. (2007). Hidden forms of victimization in elementary students involved in bullying. *School Psychology Review, 36*, 345-360.

Houbre, B., Tarquinio, C., Thuillier, I., & Hergott, E. (2006). Bullying among students and its consequences on health. *European Journal of Psychology of Education, 11*, 183-208.

Kert, A.S., Codding, R.S., & Shiyko, M. (2006). *Impact of the word bully: Do students display socially desirable responses to self-report measures?* Unpublished Manuscript, City University of New York: Graduate School and University Center.

Kilpatrick, D.M., & Kerres, C.M. (2003). Perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims in an urban middle school. *School Psychology Review, 32*, 471-489.

Kimmel, M.S., & Mahler, M. (2003). Adolescent masculinity, homophobia, and violence. *American Behavioral Scientist, 46,* 1439-1458.

Leff, S.S. (2007). Bullying and peer victimization at school: Considerations and future directions. *School Psychology Review, 36*, 406-412.

Leff, S.S., Kupersmidt, J.B., Patternson, C.J., & Power, T.J. (1999). Factors influencing teacher identification of peer bullies and victims. *School Psychology Review, 28(3)*, 505-517.

Loeber, R., Green, S.M., & Lahey, B.B. (1990). Mental health professionals perception of the utility of children, mothers, and teachers as informants on childhood psychopathology. *Journal of Clinical Child Psychology, 19*, 136-143.

Lumsden, L. (2002). *Preventing Bullying*. Retrieved November 5, 2006, from http://web.ebscohost.com/ehost/delivery?vid=9&hid=15&sid=533b5bbb-eb18-4b48-b457-a565ba49bc28%40sessionmgr3.

Ma, X. (2002). Bullying in middle school: individual and school characteristics of victims and offenders. *School Effectiveness and School Improvement*, 63-89.

Nansel, T.R., Overpeck, M., Pilla, R.S., Ruan, W.J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, *285,* 2094 -2100.

Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school-based intervention program. In D. Pepler and K. Rubin (Eds.), *The development and treatment of childhood aggression, (p.p. 411-448).* Hillsdale, NJ: Erlbaum.

Olweus, D. (1993). *Bullying at School: What We Know and What We Can Do.* Malden, MA: Blackwell Publishing.

Olweus, D. (1994). Bullying at school: Long-term outcomes for the victims and an effective school-based intervention program. In L.R. Huesmann (Ed.), *Aggressive behavior: Current Perspectives* (pp. 97-130). New York: Plenum.

Olweus, D. (2003). A profile of bullying at school. *Educational Leadership, 60*, 12-17.

Olweus, D. (2005). A useful evaluation design, and effects of the Olweus Bully Prevention Program. *Psychology, Crime & Law, 11*, 389-402.

Oskamp, S., & Schultz, P.W. (2005). *Attitudes and Opinions*, 3rd ed.. Mahwah, NJ: Lawrence Erlbaum Associates.

Parada, R.H., Marsh, H.W., & Craven, R.G. (2004). *There and back again from victim to bully: A reciprocal effects model of bullying behaviours in schools.* Self-Concept Enhancement and Learning Facilitation (SELF) Research Centre, University of Western Sydney.

Pellegrini, A.D., & Bartini, M. (2000). An empirical comparison of methods of sampling aggression and victimization in school settings. *Journal of Educational Psychology, 92*, 360-366.

Pepler, D.J., & Craig, D.M. (1995), A peak behind the fence: Naturalistic observations of aggressive children with remote audiovisual recording. *Developmental Psychology, 31*, 548-553.

Power, T.J. (2007). Editorial note: The context of peer victimization. *School Psychology Review, 36*, 343-344.

Raskauskas, J., & Stoltz, A.D. (2004). Identifying and intervening in relational aggression. *The Journal of School Nursing*, 20, 209-215.

Reynolds, W. (2003). *Reynolds Bully Victimization Scales*. San Antonio, TX: The Psychological Corporation, Harcourt Assessment.

Rigby, K. & Slee, P. (1991). Bullying among Australian school children: Reported behavior and attitudes toward victims. *Journal of Social Psychology, 131*, 615-627.

Salmivalli, C., Karhunen, J., & Lagerspetz, K.M.J. (1996). How do the victims respond to bullying? *Aggressive Behavior, 22*, 99-109.

Salvia, J., & Ysseldyke, J.E. (1991). *Assessment,* 4th ed.. Boston, MA: Houghton Mifflin Company.

Seals, D., & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence, 38*, 735-747.

Sharp, S., & Smith, P.K. (1991). Bullying in UK Schools: The DES Sheffield Bullying Project. *Early Childhood Development and Care*, *77*, 47-55.

Sink, C.A., & Edwards, C.I. (2005). Test review of the Reynolds Bully-Victimization Scales. From R. A. Spies & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* [Electronic version]. Retrieved April 7, 2006, from the Buros Institute's *Test Reviews Online* website: http://www.unl.edu/buros.

Smith (2004). Bullying: Recent Developments. *Child and Adolescent Mental Health, 9,* 98-103.

Smith, P.K., Cowie, H., Olafsson, R., & Liefooghe, A.P.D. (2002). Definitions of bullying: A comparison of terms used, and age and sex differences, in a 14-country international comparison. *Child Development, 73*, 1119-1133.

Smith, P.K., Moody, J.C., & Madsen, K.C. (1999). What causes the age decline in reports of being bullied in school? Towards a developmental analysis fo the risks of being bullied. *Educational Research, 41*, 267-285.

Smokowski, P.R., & Kopasz, K.H. (2005). Bullying in school: An overview of types, effects, family characteristics, and intervention strategies. *Children & Schools, 27*, 101-110.

Solberg, M.E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, *29,* 239-268.

Tabachnick, B.G., & Fidell, L. S. (1989). *Using multivariate statistics*, 2nd ed.. New York, NY: Harper & Row.

Tritt, C., & Duncan, R.D. (1997). The relationship between childhood bullying and young adult self-esteem and loneliness. *Journal of Humanistic Education and Development, 36*, 35-44.

U.S. Department of Education. (1998). *Preventing bullying: a manual for schools and communities*. Washington, D.C.: Author.

Veenstra, R., Lindenberg, S., Oldehinkel, A.J., Winter, A.F., Verhulst, F.C., & Ormel, J. (2005). Bullying and Victimization in Elementary Schools: A Comparison of Bullies, Victims, Bully/Victims, and Uninvolved Preadolescents. *Developmental Psychology, 4,* 672 – 682.

Wolke, D., Woods, S. Stanford, K., & Schulz, H. (2001). Bullying and victimization of primary school children in England and Germany: Prevalence and school factors. *British Journal of Psychology, 92,* 673-696.

Whitted, K., & Dupper, D. (2005). Best practices for preventing or reducing bullying in schools. *Children & Schools*, 167-175.

Wrobel, N.H., & Lachar, D. (1998). Validity of self- and parent-report scales in screening students for behavioral and emotional problems in elementary school. *Psychology in the Schools, 35*, 17-27.