

**AGGRESSION AND VICTIMIZATION IN MIDDLE SCHOOL:
A MIXED METHODS ANALYSIS OF THE PROCESS AND EFFECTIVENESS OF
IMPLEMENTING A PREVENTION PROGRAM**

By

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To my parents

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TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS	4
LIST OF TABLES.....	9
ABSTRACT.....	10
CHAPTER	
1 INTRODUCTION AND LITERATURE REVIEW	12
Definition of Peer Victimization and Bullying.....	14
Forms of Peer Victimization.....	16
Involvement in Peer Victimization.....	18
Prevalence of Peer Victimization	21
Risk Factors	26
Gender	26
Age	29
Social Context	31
Ethnic Context	32
School Context	32
Psychosocial Adjustment.....	33
Aggression.....	34
Self-Worth and Self-Concept	36
Social Adjustment	37
Internalizing Disorders	38
Conclusion.....	40
Addressing the Peer Victimization Problem in Schools.....	41
Measuring Peer Victimization.....	42
Informal observations.....	42
Peer and teacher nominations.....	43
Rating scales.....	44
Comparison of various assessment techniques	44
Prevention Programs	46
Responsiveness to Program Goals.....	50
Program Effectiveness	50
Integrity of Program Implementation	53
Differentiation between school and teacher level factors	54
School-level factors.....	55
Teacher-level factors	57
Conclusions and Future Research.....	60

2	METHOD	65
	Participants	65
	District	65
	Schools	65
	Procedure	66
	Curriculum.....	66
	Integrity Checks.....	66
	Training, Curriculum Delivery, and Consultation Support	67
	Model Implementation condition	67
	Traditional Implementation condition.....	69
	Control condition.....	70
	Assessment of Student Outcomes	70
	Focus Groups.....	72
	Teacher groups	72
	Student groups.....	74
	Measures	75
	Revised Peer Experiences Questionnaire (RPEQ)	76
	Cyber Aggression and Victimization Questionnaire (CAV).....	77
	Relational Victimization Questionnaire (RVQ)	78
	The Centers for Epidemiological Studies – Depression Scale (CES-D)	78
	Social Anxiety Scale for Adolescents (SAS-A)	79
	Characterological Self-Blame for Victimization.....	80
	Attitudes to Victims Scale	80
	California School Climate and Safety Survey – Short Form (CSCC-SF).....	81
3	RESULTS	85
	Quantitative Analyses.....	86
	Teacher Implementation	86
	Student Questionnaire Data Screening	86
	Demographics	87
	Analysis of Covariance.....	88
	Assumptions check.....	89
	Victimization and relational victimization	90
	Aggression.....	90
	Depressive symptoms.....	90
	Social anxiety symptoms.....	91
	Self-blame for victimization.....	91
	Bystander empathy	91
	School climate	92
	Grade level influences on ANCOVA results	92
	Qualitative Analyses.....	93
	Teacher Focus Groups.....	93
	Curriculum elements: Facilitators and barriers to curriculum delivery	94
	Curriculum delivery: Facilitators and barriers to curriculum delivery.....	96

Appropriateness of curriculum: Facilitators and barriers to curriculum delivery	98
Teacher beliefs: Facilitators and barriers to curriculum delivery.....	100
Positive student responses: Responses to prevention program	104
Positive aggressor and victim responses: Responses to prevention program	104
Positive bystander responses: Responses to prevention program	104
Negative student responses: Responses to prevention program.....	105
Administrative support.....	106
Curriculum: Prevention program enhancement	106
School: Prevention program enhancement.....	108
Home and community: Prevention program enhancement.....	109
Student Groups	110
Thoughts regarding the curriculum	110
Perceived changes in student behaviors and attitudes.....	111
Beliefs about ability to change student behaviors.....	113
Description of peer victimization at school.....	114
Ideas for intervention enhancement	115
4 DISCUSSION.....	122
Key Findings.....	123
Administrative Barriers to Program Success.....	131
Teacher-Level Barriers to Implementation	131
Child-Level Barriers to Program Success	132
Limitations	132
Study Design and Sample Population	132
Measurement and Analyses.....	135
Implications for Policy and Practice	136
APPENDIX	
A PROGRAM ADHERENCE RATING SCALE AND GUIDELINES FOR SCORING.....	143
Program Adherence Rating Scale	143
Objective Guidelines for Completing the Program Adherence Rating Scale (PARS).....	145
B SAMPLE CONSENT FORMS.....	146
Parental Consent for Student Assessment	146
Parental Consent for Student Focus Group Participation	148
Teacher Consent for Focus Group Participation	150
Teacher Consent for Observation	151
C SAMPLE FOCUS GROUP QUESTIONS	152
Teacher Focus Groups	152
Student Focus Groups.....	152

D	ASSIGNMENT OF FOCUS GROUP PARTICIPANT NUMBERS.....	153
	Teacher Focus Groups	153
	Student Focus Groups.....	153
	LIST OF REFERENCES	154
	BIOGRAPHICAL SKETCH	165

LIST OF TABLES

<u>Table</u>		<u>page</u>
2-1	Demographic characteristics of participating schools	82
2-2	Description of treatment conditions for each school	83
2-3	Composition of student participant sample.....	84
3-1	Mean teacher scores on the Program Adherence Rating Scale at observations one and two.....	117
3-2	Means and standard deviations on student questionnaire scales by condition	118
3-3	Correlation matrix of pre and post implementation scale scores.....	119
3-4	Teacher focus group categories and subcategories.....	120
3-5	Student focus group categories and subcategories.....	121

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To address the growing public interest of school safety, many American schools implement school wide prevention programs to reduce the occurrence and associated psychosocial outcomes of peer victimization. Prevention programs targeting peer victimization in middle schools have demonstrated minimal effect sizes at reducing rates of aggression and victimization—variables affected by the actions of aggressors. However, programs are often designed to empower victims and encourage bystander interventions, highlighting the need to measure the effectiveness of such programs according to the attitudes and actions of the victims and bystanders. Goals of the study were to (a) assess the effectiveness of a previously established peer victimization prevention program, Aggressors, Victims, and Bystanders curriculum, at affecting victim and bystanders' attitudes and to (b) identify factors influencing program implementation and effectiveness.

Four schools participated this study. At the Model Implementation condition school (School 1), the AVB curriculum was delivered with monitored integrity and consultation support. At the Traditional Implementation condition schools (Schools 2 and 3), the curriculum was delivered, with no implementation monitoring or consultative support. Finally, at the

Control condition school (School 4) the program was not delivered. Participants were 283 students (Grades 6-8) attending the four middle schools who completed surveys before and after program implementation. Surveys included measures of victim resiliency (e.g., symptoms of depression and social anxiety and self-blame for victimization), bystander empathy, overall school climate, as well as frequency of aggression and victimization. Teacher and student focus groups were also conducted to identify barriers to program implementation and effectiveness.

It was hypothesized that students in the Model Implementation condition would demonstrate greater changes in response to the measures at post-implementation than students in the Traditional Implementation and Control conditions. No significant differences were found for any post-implementation variable among the three conditions across grade levels. Teachers identified several factors that influenced program implementation, including teacher beliefs and buy-in, administrative support, and developmental readiness of the students. Students identified revision of school discipline policies as an important component of future prevention initiatives.

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

In November 2002 school psychology scholars, practitioners, and students gathered at the Multisite Conference on the Futures of School Psychology to define school psychology practice and identify future directions for the field. Of the topics discussed, attendees identified that a key strategy to providing mental health services to all students is through the use of a public health framework (Myers, Myers, & Grogg, 2004; Nastasi, 2004). Within this framework, concentration is directed toward preventing psychosocial problems and academic deficits before they develop by using a proactive approach to reducing risk (Albee & Ryan-Finn, 1993). To accomplish this goal, prevention and intervention programs are implemented at the primary, secondary, and tertiary levels to reduce risk among all students. By implementing primary, school wide prevention programs, practitioners may be able to decrease the necessity of direct intervention and assessment services at the secondary and tertiary levels (Cummings et al., 2004). The following introduction section will expand upon the need for school psychologists to engage in consultation and prevention, specifically to address issues related to school safety. Additionally, the section will conclude with a discussion of the need to focus on the prevention and intervention of peer victimization to address school safety.

The occurrences of several large-scale acts of school violence and highly publicized adolescent suicides have brought issues of school safety to the forefront of media attention and made them a top priority for parents, students, and schools. Motives of revenge for peer victimization are repeatedly identified as risk factors associated with violent and homicidal behavior (Spivak & Prothrow-Stith, 2001) and other problems with psychosocial adjustment (Olweus, 2001). In addition, a report published by the Federal Bureau of Investigation (O'Toole, 2000) indicated that an underlying commonality among many perpetrators of school shootings is

an alleged history of being victimized by peers. As publication of this document indicates, there is a growing political interest in the issue of peer aggression and violence in American schools. This interest is also indicated by the drafting of legislation mandating that schools implement programs designed to promote school safety, particularly through the reduction of bullying and other forms of peer victimization (Srabstein, Berkman, & Pyntikova, 2008). Indeed, one major outcome of the School Psychology Futures Conference was the identification of the key problems that students face, which included violence and peer victimization (Crockett, 2003). Due to their knowledge of psychological and social development and the operations of educational systems, school psychologists have the opportunity to play a leading role in the development, implementation, and evaluation of prevention programs designed to promote school safety through the prevention and reduction of peer victimization.

Attendees of the Futures Conference identified the role of school psychologists in addressing peer victimization with a focus on prevention and emphasis on school wide interventions, implementation of evidence-based programs and the goal of reducing social and psychological barriers to learning (Dawson et al., 2003). To provide a foundation for implementing prevention programs in middle schools, the following sections will provide an introduction and overview of school peer victimization among middle schools students. This will include a description of the definition and involved students, prevalence, and risk factors for involvement. To provide an argument for the need for prevention and intervention, a discussion of the related psychosocial correlates and development of psychosocial problems will be presented. Next, an overview of the state of prevention activities will be discussed. This includes a description of best practices in prevention of peer victimization, including assessment, curriculum implementation, and revision of school discipline strategies, as well as a review of

the effectiveness of such programs. Following this is an analysis of the commonly-identified barriers to implementing such programs as prescribed. Finally, a brief description of the current investigation will be provided. The intent of this study is to determine the effectiveness of a peer victimization prevention program at altering the attitudes and actions of students involved in peer victimization and to identify potential barriers to teacher implementation and attainment of program goals.

Definition of Peer Victimization and Bullying

One predominant and widely researched form of peer victimization is bullying. Generally, peer victimization refers to any intentional infliction of harm that occurs between two or more students and bullying refers to repeated infliction of harm (Olweus, 1993). From the time that the original interest in bullying initiated in the Scandinavian countries in the late 1970's, bullying has been a widely researched topic globally (Smith & Brain, 2000). There exist many definitions of bullying in the research literature and a consensus on a definition has not yet been reached.

Several barriers exist that prevent the reaching of a consensus definition of bullying behavior. First, different definitions of bullying may be appropriate dependent on the setting and population for which they are applied, such as schools, workplaces, and prisons (Ireland & Ireland, 2003). Thus, separate definitions of bullying may need to be developed and agreed upon dependent on the setting in which the behavior is occurring. Kalliotis (2000) explained that another barrier to developing an international consensus for a definition is that bullying is viewed differently in varying countries. For example, in the country of Hellas, the term used for bullying refers to a person with no discipline or order. In Scandinavian countries the word used for bullying actions has a literal interpretation of “mobbing,” which suggests a group activity. Olweus (2001) explained that this term was adopted from ethology literature in which mobbing refers to “a collective attack by a group of animals or an animal of another species, which is

usually larger and a natural enemy of the group,” (p. 3). An additional problem in reaching a consensus definition of bullying occurs when trying to define bullying at the national level. Teachers and other professionals who work in the schools adopt their own definitions and perceptions of bullying (Craig, Henderson, & Murphy, 2000). A final impediment to the development of a consensus definition of bullying behavior is that some scholars have initiated an argument over whether bullying behaviors fall along a continuum, and thus cannot be described with a dichotomous definition (e.g., Espelage & Swearer, 2003). In the continuum perspective, bullying involves behaviors that occur in different degrees from low-level, such as verbal teasing, to high-level behaviors, such as physical aggression.

In the field of bullying research in the school system, the most widely adopted definition of bullying was set by Olweus (1993) as “a student is being bullied or victimized when he or she is exposed repeatedly and over time, to negative actions on the part of one or more other students” (p. 9). Elinoff, Chafouleas, and Sassu (2004) argued that this definition is too narrow, in that it does not describe the fundamental components of bullying. Generally, bullying is considered to consist of four major components: 1) intentionality; 2) repeated occurrences; 3) multiple forms; 4) imbalance of power (Garrity, Jens, Porter, & Stoker, 2002). The intentionality component states that negative actions are intentionally inflicted upon one student by another. Thus, a negative action is not considered bullying if it is not done with malice, such as if one student accidentally trips another student. The repeated occurrences component states that bullying is not an intentional negative action that happens in isolation; the negative actions occur repeatedly over a period of time. The multiple forms component dictates that bullying can encompass a variety of negative actions, verbal and nonverbal, direct and indirect. Verbal negative actions may involve taunting and threatening; nonverbal may involve physical aggression, rude gestures,

and making faces. Direct negative actions are acts that are performed directly to a student from one or more students and can be verbal or nonverbal; indirect negative actions involve an intermediary source, such as writing something about a person on a chalkboard or spreading rumors. Finally, the fourth component of bullying is an imbalance of power. An imbalance of power—also referred to as an asymmetrical power relationship—occurs when the victims have less power than the bullies and are therefore unable to defend themselves (Olweus, 2003).

The Olweus (2003) definition of bullying includes the repeated occurrences component, but does not make specific reference to the other three components. Additionally, Smith and Brain (2000) indicated that the various definitions of bullying traditionally only include two of the four components: repetition and imbalance of power. To incorporate all four elements into a single definition of bullying, (Elinoff et al., 2004) revised Olweus' original definition of bullying as it applies to school settings: "Bullying is a form of aggression that is hostile and proactive, and involves both direct and indirect behaviors that are repeatedly targeted at an individual or a group perceived as weaker," (p. 888).

The definition of peer victimization shares all the definitional components of bullying, except the repetition component. Peer victimization can therefore be broadly defined as the experience of a hostile and proactive form of direct or indirect aggression from one or more students who are perceived as more powerful than the victim. The next section will further explore the clause that peer victimization may take the form of direct or indirect aggression by describing the various forms of peer victimization that have been identified and investigated.

Forms of Peer Victimization

The most commonly studied form of peer victimization involves overt forms of aggression, also referred to as direct victimization. This usually involves either physical or verbal aggression.

Physical aggression includes behaviors such as kicking, hitting, tripping, flicking, and pushing victims. Verbal aggression includes taunting, teasing, threatening, and intimidating.

Another category of aggressive behavior involves relational peer victimization, also referred to as indirect or social aggression. Relational victimization involves an attack on a victim's social status (Crick & Grotpeter, 1995). Crick (1996) explained, "Whereas overt aggression tends to be focused on harming others through physical means, relational aggression involves harming others through purposeful manipulation or damage to their peer relationships," (p. 2317). This is often completed through covert means, such as spreading rumors and divulging personal information shared in confidence. Relational victimization can also occur via direct routes to the victim, such as through the use of eye rolling and purposeful exclusion from activities.

A final form of peer victimization is cyber victimization. Cyber victimization involves the use of computers and cellular phones to harass victims both in and out of school. Patchin and Hinduja (2006) defined cyberbullying as "willful and repeated harm inflicted through the medium of electronic text," (p. 152). Therefore, cyber peer victimization is the intentional infliction of harm using electronic mediums. Aggressors use personal computers to victimize other students via email, instant messages, posts on online discussion and bulletin boards, and the formation of slanderous websites. They also utilize cellular telephones to send text messages with mean or threatening messages to victims. Some research indicates cyber victimization most frequently occurs through instant messages (Kowalski & Limber, 2007). Though the goals of aggressors to cause physical, mental, and social harm to victims are the same as in overt and relational victimization, cyber aggression and victimization are distinct forms of peer victimization (Dempsey, Sulkowski, Nichols, & Storch, no date). Cyber forms of peer

victimization may appeal to aggressors because they have the ability to remain anonymous (Ybarra & Mitchell, 2004a) and because there is little adult supervision in cyberspace to limit their aggressive agendas (Patchin & Hinduja, 2006).

Students may be involved in any of the three forms of peer victimization in a number of different roles. The following section will provide a description of the various roles that involved students may take in peer victimization situations.

Involvement in Peer Victimization

Within peer victimization situations, there are three broad categories of involved people: students directly involved in the act as aggressors and victims, and students indirectly involved in the situation, bystanders. In a factor analysis of different types of involvement in bullying, Wiens and Dempsey (in press) demonstrated that these three types of involvement (aggressors, victims, and bystanders) are categorically different from one another. That is, on a measure of involvement in peer victimization, students tended to answer questions that indicated their involvement in one group of students: aggressors, victims, or bystanders. Bystanders witness acts of peer victimization, the aggressors are the students who engage in the actual act of aggression, and victims are those that at the receiving end of these actions. Chan (2006) proposed that the categories of victims and aggressors can be further divided into subcategories. There are two categories of aggressors: the students that victimize one student or only occasionally engage in aggressive acts, and the serial bullies, who victimize multiple students and engage in repetitive and deliberate actions to inflict harm. There are also two categories of victims: those victimized by one student, and those targeted by multiple aggressors (Chan, 2006). In addition to children who are only aggressors and children who are only victims, there is another category of individuals, the “bully-victims”—also referred to as provocative victims. Bully-victims are students that engage in aggressive behaviors toward peers, and are also victimized. Nearly one-

third of individuals that are directly involved in bullying are bully-victims (Marini, Dane, Bosacki, & Ylc, 2006).

Traditionally, only students directly involved in peer victimization, aggressors and victims, have been the focus of research and interventions. More recently, students that are indirectly involved as bystanders have been considered an important group on which to focus in prevention programs. Bystanders' choices and actions significantly influence the outcome of peer victimization situations (Stueve et al., 2006). To clarify this point, Twemlow, Fonagy, and Sacco (2004) argued that the role of the bystander is an active one. They explained that, "the bystander is propelled into the role by dint or his or her interaction with the victim and victimizer, and the ongoing interaction can be activated in a helpful or harmful direction," (p. 217).

There are at least four potential roles of bystanders: (a) assisting the aggressors (i.e., joining in on the aggressive behavior); (b) reinforcing the aggressors (e.g., cheering for the aggressor); (c) defending the victim and intervening in the situation; and (d) withdrawing or ignoring the situation (Salmivalli & Voeten, 2004). Salmivalli and Voeten (2004) conducted an investigation of the individual characteristics that predicted bystander roles among a group of school-aged, Finnish children (grades four to six). First, they found that bystander actions differed by gender at all three grade levels. Males were more likely to engage in behaviors that supported the aggressive behavior (assisting or reinforcing) and girls were more likely to defend the victim. However, a potential confound to these results is that they did not define aggressive behaviors, and thus did not specify that relational forms of aggression are also forms of peer victimization. Therefore, it is possible that gender differences in bystander actions exist only for overt forms (verbal and physical) of aggression and not relational or cyber aggression. Further

empirical investigation is needed to determine whether gender differences exist in bystander actions when considering relational victimization situations.

Another finding of the study by Salmivalli and Voeten (2004) was that attitudes towards aggression predicted bystander roles, as did classroom contextual factors. Classroom contextual factors were assessed by asking students what they believed students' and teachers' responses and actions would be in response to five overt victimization situations. Classroom contextual factors more strongly predicted female bystander roles than male bystander roles and were stronger influences in lower grades than upper grades. It is important that future studies use multi-level modeling techniques to determine whether there are classroom-level differences in bystanders' actions. The results indicated that both attitudes toward peer victimization and classroom context may need to be targeted in school-level prevention programs. Further research needs to be conducted to determine the other factors that influence bystander actions so that these may also be targeted in interventions.

Though the broad categories of involvement in peer victimization have been established, it is unclear whether students tend to fill the same role over time or whether direct involvement in peer victimization is transient. To answer this question, Camodeca, Goosens, Terwogt, and Schuengel (2002) conducted a study that investigated the stability of peer aggression and victimization. Using peer nomination techniques, they identified aggressors, victims, and provocative victims from a sample of 215 school-aged children at age seven (time one). One year later (time two) they again used peer nomination to identify aggressors and victims among the same sample of children. Results of employed cross-tabulations revealed that 50% of children identified as aggressors at time two were also identified as aggressors at time one. Additionally, 27% of children identified as victims at time two were also victims at time one. Finally 100% of

children identified as provocative victims at time two were also provocative victims at time one. Overall, boys demonstrated more stability in their roles than did girls. The results demonstrated that aggression and victimization is moderately stable in middle childhood, especially for children who are aggressors and provocative victims. Fortunately, for most children, involvement in victim roles is transient. It is important for future research to determine whether the minority of children who are continuous victims have more negative psychosocial and academic outcomes.

It is clear that there are numerous ways that students may be involved in peer victimization. The next section will provide an overview of research investigating prevalence of peer victimization in American schools, as well as barriers to understanding true prevalence rates.

Prevalence of Peer Victimization

Accurate prevalence rates of peer victimization in schools are difficult to ascertain for several reasons. First, the lack of a standard definition of peer victimization and bullying leads to problems comparing prevalence rates across studies (Craig et al., 2000). Though some studies provide a definition of bullying, thus describing that it is repeated, intentional, and involves an imbalance of power (e.g., Nansel et al., 2001), many studies only ask for specific behaviors and instead measure the larger concept of peer victimization because repetition of behaviors is not assessed (e.g., Prinstein, Boergers, & Vernberg, 2001).

One cross-national study assessing prevalence of reports of peer victimization/bullying from students (ages 11, 13, and 15) in 28 countries found that international reports of student victimization range from 4.1% in Sweden to 41.4% in Lithuania (Due et al., 2005). In the same study, 16% of American males and 11% of American females endorsed being victims of "bullying" in the current school term. However, these results may not provide accurate estimates

of peer victimization among American youth. No objective definition of bullying was provided to students. Thus, they may have endorsed being bullied when they experienced only single episodes of peer victimization, thus leading to an overestimation of rates of bullying. In contrast, the numbers presented may be an underrepresentation of true rates of victimization because students tend to subjectively report that they are victims of bullying less often than they are willing to report being victims of specific acts that fall under the definition of bullying (Stockdale, Hangaduambo, Duys, Larson, & Sarvela, 2002). The term bullying may create ideas of weakness and physical aggression, leading students to shy away from saying they are bullied because they associate being bullied with weakness. Students may also only consider bullying to be associated with physical aggression and thus fail to indicate whether they had been victims of relational aggression. Another limitation to assessing prevalence rates exists even when the same questionnaire is utilized across studies and countries and a definition of bullying is provided because other individual and systemic factors may affect variability in reporting (Olweus, 2003). These factors may include language differences, public attention to bullying, and the students' concept of bullying behaviors.

Nationally, as well as internationally, barriers exist to attaining true prevalence rates of peer victimization. Barriers consist of a lack of teacher and administrator knowledge of what constitutes peer victimization behavior. For example, Elinoff and colleagues (2004) argued that educators and administrators within school settings often do not recognize peer victimization in the low-level forms, and so frequently do not report behaviors that would fall within the definition of peer victimization. In support of this line of reasoning, when pre-service teachers were asked to define bullying, only 6% recognized that bullying is a repetitive behavior and 28% indicated that it involves an imbalance of power (Bauman & Del Rio, 2005). In a different

qualitative study in which teachers were asked to provide their definitions of bullying and attitudes toward the need to intervene, some teachers indicated their beliefs that bullying is a natural part of growing up, victims often bully, and victims frequently “see” bullying when it does not exist (Mishna, 2004).

Finally, research into peer victimization in American schools is much more limited than it is in other countries; few studies exist that have examined nationwide prevalence (Bauman & Del Rio, 2005). In a notable exception to this, Nansel and colleagues (2001) analyzed data from a large national survey of over 15,000 students in grades 6 through 10 in the United States to determine rates of peer aggression and victimization. In this study, a nationally representative sample of students was provided with a definition of “bullying” stating that it may take various forms and involves a power differential, though it did not directly state that it involved intention to harm or repetition. Students were prompted to indicate the frequency with which they were victimized and the frequency with which they engaged in peer aggression during the current school term. Additionally, victims were prompted to indicate the way with which they were victimized. The study found a national prevalence rate for engaging in peer aggression behaviors to be 10.6% sometimes and 8.8% at least once a week. Overall, 8.5% of the sample indicated that they were sometimes victimized and 8.4% indicated that they were victimized at least once per week. The overall rates of victimization and peer aggression may be under reported in this sample, because many aggression/victimization behaviors were not assessed. For example, relational victimization was only assessed through a question that asked about rumor/lie spreading, though not exclusion, eye-rolling, or divulging personal information. Additionally, overt victimization was assessed through verbal teasing, and physical aggression (hit, slap, push), though behaviors such as threatening and flicking objects were not included in the overall

assessment. Finally, the overall rates of peer victimization may also be underestimated in this study, because the researchers did not include cyber aggression behaviors in the definition.

Demographic differences in rates of peer aggression and victimization also existed in the above study. Overall, males reported being both aggressors and victims more frequently than did females. Additionally, males reported higher rates of physical victimization than did females; females reported that they were most frequently victimized via relational and verbal/sexual aggression. There were no gender differences in rates of relational aggression or victimization. Children in 6th to 8th grade reported being victimized with more frequency than did children in higher grades. Youth from rural regions reported engaging in more frequent peer aggression than did youth from non-rural regions; no differences were found among geographic region (rural, town, urban, suburban) in frequency of victimization.

Due to the recent trend of using technology to engage in peer aggression, few studies have examined the prevalence rates of aggression and victimization in cyberspace. In one study of over 1,000 American children and adolescents (grades 5, 8, and 11), cyber aggression was measured with a single question asking students to indicate the frequency with which they told or spread lies about another student, thus only focusing on a narrow range of cyber victimization behaviors (Williams & Guerra, 2007). Less than 5% of students in grade 5 endorsed that they engaged in this behavior, whereas 12% of students in grade 8 and 10% of students in grade 11 indicated their engagement in this behavior. This suggests that rates of cyber aggression and victimization may be highest in middle school, similar to other forms of bullying. In another study assessing the rates of cyber victimization in a sample population consisting of over 350 youth under age 18, 11% of respondents indicated that they engaged in online bullying and 29% indicated being victimized online (Patchin & Hinduja, 2006). Additionally, 47% of respondents

indicated that they had witnessed online bullying. Chat rooms, email, and computer and cellular text messages were the most commonly reported modality for cyber victimization. Gender differences in aggression and victimization were not assessed.

Gender differences were examined in another study assessing the prevalence of cyber victimization among a sample of junior high students. In that study, 22% of males and 11% of females reported engaging in cyber aggression behaviors and 25% of both male and female respondents indicated that they had been victims of cyber aggression (Li, 2006). Another study of peer victimization in cyberspace asked youth (ages 10-17) who regularly used the Internet to report on two indices of cyber victimization: (a) feeling threatened or worried because they were bothered or harassed online; and (b) feeling threatened or embarrassed because another person posted or sent an electronic message about them that other people could see (Ybarra & Mitchell, 2004b). Only 6% of youth respondents indicated that they had been harassed online in the past year. This significantly smaller rate in comparison to the aforementioned studies could have resulted because cyber victimization via cellular text messages was omitted from the survey or because questions attached an emotional reaction to prevalence rates (e.g., only considered harassment if the youth felt threatened, worried, or embarrassed). Additionally, youth respondents may have reported less harassment online because their caregivers were present when they answered the telephone survey. Similar to the findings by Li (2006), no gender differences were reported in rates of victimization.

In contrast, one study examining rates of cyber aggression and victimization among 3,000 students in grades six, seven, and eight identified gender differences in both aggression and victimization (Kowalski & Limber, 2007). In this study, students completed a questionnaire that examined a broad range of experiences with cyber “bullying” and being “bullied”—each

question specifically asked students whether they had been bullied by a specific cyber victimization behavior. Females reported being bullied more often than did males, and males indicated more frequent engagement in bullying than did females.

Prevalence rates of cyber victimization may vary by geographic region and socioeconomic status of students because students from lower socioeconomic backgrounds may have limited access to the technology necessary to engage in cyber aggression. In support of this postulation, in a sample of middle school students from a rural region in the Southeastern United States, only 14% of students reported being victims of cyber aggression and only 10% reported being aggressors (Dempsey, Sulkowski et al., no date). Additionally, 36% reported that they had observed cyber aggression that was perpetrated by their peers. There were no grade or gender differences in frequency of cyber peer victimization.

Despite the difficulties in identifying consistent estimates of prevalence of involvement in peer victimization, those that exist demonstrate that peer victimization occurs frequently within schools and many students are involved in the process as aggressors, victims, and bystanders. There are several factors that influence student involvement in peer victimization, including individual and environmental characteristics. Both the individual (gender and age) and environmental (social, ethnic, and school contexts) will be described in detail in the following section.

Risk Factors

Gender

Research into gender differences in reports of peer bullying and victimization has found similar trends to those described by Nansel and colleagues (2001), in which males reported higher rates of physical aggression and victimization than do females. In a sample of 279 students in 6th grade (early adolescence), males reported higher rates of overt physical and verbal

victimization than did females (Grills & Ollendick, 2002). Additionally, in a study of adolescent students between the ages of 13 and 17, males reported being victimized via overt forms of aggression more often than females (Storch, Crisp, Roberti, Bagner, & Masia-Warner, 2005). In the majority of studies, females report higher rates of involvement in relational victimization than in physical victimization (e.g., Crick & Grotpeter, 1995; Prinstein et al., 2001).

Research on gender differences in prevalence rates of relational victimization has demonstrated mixed results. Many researchers examining peer victimization in adolescent populations have demonstrated that males and females report similar rates of relational aggression and victimization (e.g., Prinstein et al., 2001; Storch, Brassard, & Masia-Warner, 2003; Storch, Crisp et al., 2005). In contrast, other studies in which gender differences are found with females reporting higher rates of relational aggression and victimization than males, the sample populations are categorically different. For example, Ostrov and Keating (2004) studied relational aggression in preschool students and reported that females engaged in relational aggression more than did males. Similar trends were found in a population of elementary-aged students (Crick & Grotpeter, 1995). Finally, in two studies of adolescents from different rural populations, gender differences were again found in rates of relational aggression and victimization (Dempsey, Haden, Goldman, Sivinski, & Wiens, no date; Dempsey, Sulkowski et al., no date).

It is possible that the mixed results in the finding of gender differences exist due to variations in sample populations, which may have varying acceptance of traditional gender roles and values. Furthermore, age differences may exist in which females become more independent and rebellious in adolescence and therefore are more likely to challenge traditional gender roles, thus explaining the differences in trends in peer victimization by gender between children and

adolescents in nationally representative populations (Nansel et al., 2001). Future research in this area should be conducted to investigate the role of gender expectations as a potential moderator in male and female engagement in relational and physical aggression.

Another theory explaining the higher rates of female engagement in relational aggression versus physical aggression postulates that relational victimization is viewed as more socially acceptable for females than is physical aggression (Crothers, Field, & Kolbert, 2005). Thus, the cognitive mechanism of internalization of traditional gender roles and values may mediate the relationship between gender and engagement in relational and physical victimization. Females may also engage in relational aggression more often than physical aggression because they understand that attacks to social status may be more devastating to females than overt attacks (Paquette & Underwood, 1999). This cognitive theory of mind approach to understanding peer victimization asserts that aggressors understand the mental states of their victims and take advantage of this understanding by selecting the most harmful form of aggression.

Supporting the hypothesis that cognitive mechanisms may partially explain the relationship between gender and aggression, Vernberg, Jacobs, and Hershberger (1999) confirmed that attitudes about violence partially explained the relationship between overt victimization and gender. In addition to assessing rates of victimization and aggression in a sample of over 1,000 adolescents in grades 7, 8, and 9, they also queried respondents' attitudes about the legitimacy and utility of violence and the degree to which respondents believed bystanders should ignore aggressive behavior among other students. Using hierarchical regression analyses, the authors demonstrated that attitudes about violence reduced the error variance in the regression equation between gender and bullying by 30 percent. Thus, males demonstrated higher (more acceptable) attitudes about violence than females and attitudes toward violence were strongly correlated with

victimization of others. After controlling for attitudes about violence, the relationship between gender and bullying behavior was significantly weakened. Thus, adolescents who view aggression to be useful in obtaining a goal are more likely to engage in peer aggression than others.

Werner and Nixon (2005) reported similar findings in their study of the relationship between normative beliefs regarding the acceptability and utility of aggression, and use of aggression as a retaliatory mechanism. Their findings extended those of Vernberg and colleagues (1999) because they examined both physical and relational aggression. Female students in grades seven and eight provided self-reports about their engagement in physical and relational aggression, as well as their attitudes toward use of physical and relational aggression. Beliefs about the utility of aggression uniquely contributed to the prediction of self-report of relational aggression after controlling for physical aggression. Furthermore, attitudes regarding aggression also uniquely contributed to an explanation of the variance in reports of physical aggression after controlling for relational aggression.

Cognitive mechanisms could also potentially explain the observed differences in effects of gender at different ages and among different populations. It is possible that age moderates the relationship between gender and attitudes regarding the utility of aggressive behavior. This needs to be examined in future studies to provide further clarification about the role of cognitive mechanisms in explaining gender differences in aggression and victimization. Additionally, given that such cognitive mechanisms play a role in aggressive behavior, they should be considered when developing prevention and intervention strategies.

Age

Both physical and relational peer victimization are observable in children as early as preschool (e.g., Ostrov & Keating, 2004) and continue into adulthood in the workplace (e.g.,

Tehrani, 2004). Peer victimization in schools increases as children progress through elementary school and many studies indicate that it peaks in middle school, before making a slow decline through the high school years (e.g., Nansel et al., 2001). A potential explanation for the increase in relational forms of peer victimization during early adolescence can be framed within a developmental context. Adolescence is the developmental period youth begin to compare themselves to peers with greater frequency and place increasing importance on peer status and sense of belonging when forming their self-concept (Jackson & Bracken, 1998). Aggressive students may view relational aggression as an especially harmful technique during adolescence because of this developmental change.

Dominance theory may also partially explain the increase in peer victimization in early adolescence, especially in its overt forms (Pellegrini & Long, 2002). Early adolescence corresponds with the transition from elementary school into middle school, and thus the formation of new peer groups. Dominance theory posits that individuals, particularly males vie for dominance in the peer group by exhibiting their power status (oftentimes through the victimization of their peers). Once these peer groups are formed and a dominance hierarchy has been established, there is no longer a need to vie for dominance, leading to a decrease in aggression in mid-adolescence. Using a sample of 321 students followed through grades 6 to 8, Pellegrini and Long (2002) gathered teacher reports of individual student behaviors and student self-reports of engagement in peer aggression. Teachers' reports included an indication of each student's assertion of dominance. Supporting the dominance theory hypothesis, both peer aggression and assertion of dominance changed in a similar trend across time.

Another potential explanation to account for the increase of peer victimization in middle school is the increased opportunity to engage in aggression. Students in middle school do not

spend their days in the same classroom and are given several unstructured “passing periods” throughout the day to transition to their classes, allowing more frequent opportunities for victimization. In addition, supervision in middle school may also decrease in comparison to elementary school. In a comparison of elementary and middle school teachers, elementary school teachers correctly identified 47% of aggressors that were peer-identified and 46% of victims that were identified by peers; middle school teachers correctly identified only 22% of aggressors that were peer-identified and 16% of victims that were identified by peers (Leff, Kupersmidt, Patterson, & Power, 1999). This finding suggests that peer victimization in middle school occurs away from the supervision of adults and also implies that aggressors and/or victims are less likely to receive much needed services to reduce peer victimization and any related problems with psychosocial adjustment.

Social Context

Homophily is the concept dictating that during early adolescence students tend to demonstrate similar behaviors to others in their peer group (for a review see Espelage & Swearer, 2003). The homophily hypothesis attempts to explain observed increases in rates of physical victimization in early adolescence, when identification with peer groups becomes particularly important. Espelage, Holt, and Henkel (2003) assessed the degree to which peer groups among students in grades 6 through 8 account for engagement in physical fighting (retaliating against aggression by hitting a student back, getting in fights, and threatening to hit another student) and peer victimization behaviors (teasing, rumor spreading, and social exclusion). A confound to this study is that threats of physical violence can be considered a peer victimization behavior, instead of a physical fighting behavior. The investigators identified the peer groups of individual middle school students and then asked each student to indicate their engagement in specific peer victimization and fighting behaviors within the last 30 days. Using

hierarchical linear modeling, they found that peer group levels of engagement in peer victimization accounted for individual levels of engagement in peer victimization over time. Thus, students who were in peer groups with other students who engaged in aggression toward peers were also highly likely to engage in peer victimization. Therefore, peaks in peer victimization in adolescence may result from adolescents' need to fit in with their peers and thus adopting behaviors similar to those of their peer group.

Ethnic Context

Individual ethnicity is less important in the study of bullying than the ethnic dynamics of the school context (Espelage & Swearer, 2003). Though much peer victimization research is conducted in urban schools with high rates of ethnic diversity, few studies have examined the role of ethnic context in peer victimization. The lack of examination of ethnic contexts is problematic because risk and resiliency factors that moderate psychosocial adjustment of aggressors and victims may be influenced by ethnic context (Graham, 2006). In a study of 2,000 students attending 6th grade at multiple middle schools (Graham, 2006), ethnic diversity of the school was inversely related to student reports of victimization and associated psychosocial adjustment problems (loneliness, poor self-worth, perceived threats to school safety). One hypothesis for this finding is that exposure to a greater diversity of students may promote tolerance for individual differences as opposed to intolerance and need for dominance.

School Context

Though peer victimization has been demonstrated to occur across rural (Stockdale et al., 2002), urban (Sullivan, Farrell, & Kliewer, 2006), and suburban environments (Werner & Nixon, 2005), continued research is needed to identify factors that contribute to the variance in prevalence of peer victimization between schools. Few studies have investigated this important area of research (especially in the United States), though with the development of advanced

statistical techniques such as multilevel modeling, it is an area that should be expanded in the coming years. Specifically, studies need to be completed in which hierarchical linear models are utilized to indicate the degree to which school differences, especially school climate variables, account for variations in individual reports of peer victimization.

Schools may differ in prevalence rates due to the individual factors of attending students (e.g., age), community variables (e.g., acceptance of violence, availability of supportive resources), and school variables (e.g., ethnic context, school culture, attitudes of teachers toward peer victimization). In a Norwegian study of variance in rates of peer victimization between elementary schools, teacher reports of professional culture within the school on such dimensions as leadership, professional cooperation, and agreement on professional issues was related to parent, teacher, and student reports of peer victimization within the school (Roland & Galloway, 2004). However, this study was limited by the use of multiple single comparisons among schools to assess between school differences, as opposed to the use of advanced statistical techniques (i.e., multilevel modeling), and therefore is a need for further replication of these findings.

The previous sections have now demonstrated that peer victimization occurs with high frequency in middle schools and involvement varies as a function of individual and contextual characteristics. To show that peer victimization is not simply a natural and benign developmental process, the following section provides an overview of research indicating that peer victimization is associated with problems with psychological and social development.

Psychosocial Adjustment

Much research has examined associations between involvement in peer victimization and psychosocial adjustment (e.g., Dempsey, Haden et al., no date; Graham & Juvonen, 1998; Grills & Ollendick, 2002; Juvonen, Graham, & Schuster, 2003; Prinstein et al., 2001). The majority of such studies examine the short-term correlates of peer victimization by assessing current

involvement in victimization and reports of psychosocial functioning using cross-sectional research designs. Due to the nature of the research paradigm, it is difficult to establish a causal link between peer victimization status and psychological and social maladjustment. Thus, it is possible that students are victimized because they demonstrate lower levels of psychosocial adjustment and are therefore perceived as weaker than their peers. Similarly, it is possible that aggressors engage in aggression as a manifestation of psychological and/or social problems. Additionally, it is also possible that direct involvement in peer victimization causes students to experience increased adjustment problems.

Longitudinal research designs are needed to demonstrate causality, yet few studies have followed students over long periods of time to establish the lasting effects of victimization in childhood/adolescence on later psychosocial adjustment. Retrospective studies are occasionally utilized to provide information about possible long-term effects, though they are severely limited as the accuracy of retrospective recall of peer victimization is questionable. Nevertheless, retrospective studies have provided support for the hypothesis that associations between victimization and psychosocial adjustment are causal (Rigby, 2003). Research using longitudinal designs and the application of structural equation modeling should be conducted to ascertain causality within peer victimization and psychosocial adjustment relationships. Regardless of the considerable limitations of identifying consequences of peer victimization, it is essential that relationships between involvement in peer victimization and psychosocial adjustment be identified and discussed.

Aggression

In an investigation of the role of social information processing (Crick & Dodge, 1994) in perpetration of peer victimization, Camodeca and Goosens (2005) assessed the presence of proactive and reactive aggression and perceived ease of engagement in aggressive behavior

among aggressors and victims. They defined proactive aggression as deliberate and unprovoked aggression, and reactive aggression as a defensive reaction to perceived aggression from another. Individuals who display reactive aggression, a form of retaliation, exhibit a misinterpretation of the actions of others, which results in biases in all steps of social information processing (Crick & Dodge, 1996). In contrast, individuals who display proactive aggression are biased in later steps of information processing in which they consider the perceived consequences of particular actions, and thus possess antisocial motivations for the aggressive behavior (Crick & Dodge, 1996). Deficits in social information processing can account for both relational and physical aggression (Werner & Nixon, 2005). That is, physically aggressive youth make hostile attributions in instrumental provocations, whereas relationally aggressive youth create hostile attributions to social provocations.

In another investigation of the roles of reactive and proactive aggression in peer victimization, Camodeca and Goosens (2005) utilized peer nomination techniques to identify physical aggressors and victims among a sample of 242 Dutch school children. They utilized a teacher questionnaire to identify the degree to which each child displayed reactive and/or proactive aggression. Additionally, each student was asked to self-report about the level of ease associated with engagement in aggressive behaviors. The researchers found that engaging in peer victimization behaviors was associated with both proactive and reactive aggression, whereas being a victim was only associated with reactive aggression. Additionally, aggressors and victims displayed higher rates of aggression, increased deficits in their social-information processing skills, and greater ease of engaging in aggressive behaviors, than did defenders of victims and non-involved peers. This supported previous findings from a sample of 236 children (ages 7 and 8), which revealed that aggressors engaged in both proactive and reactive aggression,

victims engaged in reactive aggression, and noninvolved peers demonstrated neither reactive nor proactive aggression (Camodeca et al., 2002).

Self-Worth and Self-Concept

In a review of research demonstrating correlations between peer victimization and self-worth, Grills and Ollendick (2002) hypothesized that low self-worth serves as a mediating factor between victimization and anxiety in females and a moderating factor between victimization and anxiety in males. Self-worth reflects the degree to which a child feels confident in his/her abilities in specific areas of functioning, as well as an overall global sense of efficacy (Harter, 1982). Grills and Ollendick (2002) assessed a sample of 279 6th grade students to test their hypotheses. Overall, they found a negative relationship between reports of overt (physical and verbal) victimization and self-worth, and this relationship was stronger among females than among males. They also found a negative relationship between self-worth and anxiety and a positive relationship between victimization and anxiety. Further analyses confirmed their hypotheses that self-worth mediated the relationship between victimization and anxiety for girls and not boys. Self-worth served as moderating variable for the relationship between victimization and anxiety for boys, but not girls. Boys that reported low levels of self-worth reported higher rates of anxiety when they were victimized than did victimized boys with high-levels of self-worth. To date, no research has examined if these trends are present in situations involving relational and cyber aggression.

To further investigate the role of self-worth in the relationship between victimization and psychosocial adjustment, Lopez and DuBois (2005) utilized structural equation modeling to assess the mediating effects of negative self-evaluation (self-worth). Their findings added to those of Grills and Ollendick (2002) as they established that the relationship between peer victimization and emotional problems is stronger for females than for males.

Another study analyzed the relationship between involvement in peer victimization and global self-worth, as well as specific domains of self-concept, such as social competence, athletic competence, physical appearance, and self-control (Houbre, Tarquinio, Thuillier, & Hergott, 2006). Victims reported lower self-concept on scales assessing social competence, athletic competence, physical appearance, and global self-worth in comparison to nonvictimized peers. In contrast, aggressors reported lower self-concept on measures of physical appearance and self-control than peers not involved in bullying. However, aggressors reported higher levels of self-concept on measures of athletic competence and social competence than their noninvolved peers, thus revealing that victims' self-concepts are worse than those of their aggressors. Finally, provocative victims had the lowest self-concept on all measures in comparison to aggressors, victims, and noninvolved peers.

Social Adjustment

Aggression and victimization not only affects individual students' internal states, but also the ways in which other students perceive them. Juvonen and colleagues (2003) examined student perceptions of aggressors, victims, and provocative victims (as identified by their peers) to determine the effects of involvement of bullying on social status in a sample of nearly 2,000, predominantly African-American and Latino 6th grade students. They found that aggressors had the highest social status of all individuals included in the sample, including those not involved in peer victimization; victims had the lowest social status of all individuals. Furthermore, although social status of provocative victims did not significantly differ from noninvolved students, this was the group most likely to be avoided by their peers.

Retrospective studies of victimization in childhood and adolescence have provided a compelling argument that victimization may have lasting impact for students beyond high school years. Jantzer, Hoover, and Narloch (2006) asked 170 college students about their peer

victimization experiences in elementary and secondary school and also measured current indicators of social adjustment (quality of friendships, shyness, and trust in relationships). They found correlations between recall of victimization and shyness, satisfaction with friendships, and trust in early adulthood. As with all retrospective methodology, there are several limitations to this study, including lack of ability to draw causal associations, and potential for bias in recall. However, the findings provide support for the need to conduct longitudinal studies to determine long-term outcomes of victimization.

Internalizing Disorders

Relational and overt victimization is associated with depression, loneliness, social anxiety, poor self-esteem (Juvonen et al., 2003; Prinstein et al., 2001) and symptoms of social phobia (Storch, Masia-Warner, Crisp, & Klein, 2005) in males and females. Furthermore, being a victim of overt aggression is also associated with externalizing symptoms in males (Prinstein et al., 2001). Children that engage in relational aggression demonstrate concurrent social problems (Grotjewald & Crick, 1996) and peer rejection six months after being identified as an aggressor (Crick, 1996). Victimization through cyber forms of peer victimization is also associated with depressive symptoms. Youth that are victims of cyber aggression report rates of depressive symptomatology three to five times higher than do youths not involved in online victimization (Ybarra & Mitchell, 2004a).

An association between victimization in adolescence and internalizing disorders in adulthood has also been established. Ledley and colleagues (2006) demonstrated that recall of adolescent verbal victimization is associated with interpersonal difficulties, such as decreased self-esteem regarding social skills, problems with intimacy and trust in relationships, and increased anxiety about being unloved and abandoned, in early adulthood. Additionally,

Dempsey and Storch (2008) demonstrated that recall of relational victimization was associated with increased symptoms of depression and anxiety in early adulthood.

Self-blame may mediate the relationship between peer victimization and psychological adjustment (Graham, 2006). More specifically, adolescents who attribute victimization as resulting from internal inadequacy are more likely to experience problems with psychosocial adjustment in response to bullying than are victimized students who attribute victimization to external causes (Graham, 2006). In a qualitative study of victimization experiences in middle childhood (fourth and fifth grades), girls reported feelings of responsibility, or blame, for victimization whereas boys did not (Mishna, 2004). Such a trend suggests that gender may moderate the relationship between victimization and psychosocial adjustment in middle childhood. This is an important topic to further investigate, especially in adolescent populations.

In addition to gender, ethnicity may serve as a mediating factor between overt and relational victimization and internalizing disorders (e.g., loneliness, depression, social avoidance). In a population of African American schoolchildren (ages 8 to 13), overt victimization was positively related to fear of negative evaluation (social anxiety), social avoidance, and depression; relational victimization was not a predictor of any psychosocial adjustment after controlling for gender and overt victimization (Storch, Zelman, Sweeney, Danner, & Dove, 2002). However, due to the small sample size of this study, additional studies should attempt to replicate the mediating effect of ethnicity (or urbanicity) in the relationship between relational victimization and psychosocial adjustment.

The association between perpetration of peer victimization and internalizing disorders is less clear. Prinstein and colleagues (2001) found that engagement in overt aggression is associated with depressive and externalizing symptoms in males and females and engaging in

relational aggression is also associated with externalizing symptoms in females. In contrast, Juvonen and colleagues (2003) failed to find a positive relationship between internalizing symptoms and perpetration, though they did not assess for differences in overt and relational forms of victimization. Instead, they reported that aggressors actually reported fewer symptoms of depression, anxiety, and loneliness than students who were not involved as victims or aggressors. The contrasting results between these two studies could be due to the differing definitions of aggressors. Prinstein and fellow researchers (2001) analyzed the relationship between perpetration of peer victimization and internalizing symptoms while differentiating between relational and overt aggression, whereas Juvonen and colleagues (2003) grouped both forms of victimization into one definition. Furthermore, the two samples were from very different contexts (suburban vs. urban) and were comprised of different ethnicities.

Conclusion

Peer victimization is clearly prevalent and problematic in middle schools. Though it may be implemented in many forms and via different media, the goal of the perpetrator is to cause harm to the victim. An examination of the psychosocial correlates of peer victimization, especially from research indicating that victimization precedes the development of psychosocial problems, indicates that harm is indeed inflicted and can affect a students' social, emotional, and academic functioning. This evidence underscores the need for the problem of peer victimization to be addressed in the environment in which it frequently takes place—schools.

The remainder of the introduction chapter is dedicated to discussing the implementation of prevention programs to address peer victimization in middle schools. This will begin with an overview of the steps school psychologists need to take to implement a peer victimization prevention program, including assessing current rates of peer victimization and selection of prevention programs. Following this is a review of research indicating the effectiveness of

prevention programs. Finally, the section will conclude with a discussion of the potential barriers to implementation, focusing on issues related to integrity of implementation.

Addressing the Peer Victimization Problem in Schools

Schools need to take several steps to address peer victimization to ensure the safety, and promote social and psychological well-being and academic success for all attending students. In recognition of this need, some states have adopted legislation mandating that their schools implement prevention programs to reduce bullying and other forms of peer victimization (Furlong, Morrison, & Greif, 2003). As of June, 2007, 35 states have adopted some form of legislation to address school bullying/peer victimization (Srabstein et al., 2008). Among these 35 states, 25 had provided actual definitions of “bullying” in their legislation, though the definition of “bullying” varied among the states and did not consistently include the four components of bullying (Elinoff et al., 2004) that were previously described. Therefore, many of the enacted laws may actually pertain to the larger construct of peer victimization, rather than bullying. Furthermore, the scope of the legislation varied by states. Some states included language in their legislation that acknowledged that peer victimization is associated with poorer mental health. In addition, some legislative acts strictly prohibited school peer victimization and others either mandated or encouraged implementation of prevention programs.

To address this legislative demand, and to meet the needs of students, schools should implement comprehensive, evidence-based prevention program that involves actions at the primary, secondary, and tertiary levels. Best practices in bullying prevention specify that schools should take several steps to achieve this goal (Whitted & Dupper, 2005). The steps involved in addressing the school peer victimization problem are assessment of prevalence, implementation of an evidence-based prevention plan, and individualized interventions for current aggressors and victims (Olweus, 2001). The following sections will describe each step in greater detail. The first

section on measuring peer victimization will provide a review of the different strategies to assessing peer victimization and identifying involved students. The next section will provide a description of the elements that should be included in prevention programs. Finally, there will be a presentation of the research related to program effectiveness and barriers to program implementation and effectiveness.

Measuring Peer Victimization

Crothers and Levinson (2004) provided a review of the different methods used in the assessment of school peer victimization. They identified several methods including informal observations, sociometric procedures (i.e., peer and teacher nomination), teacher ratings, self-report, and survey instruments. When selecting a measurement method, it is essential to consider the purpose for the measurement (i.e., to identify specific bullies and victims for individualized interventions, to evaluate rates of victimization in an entire school). When attempting to identify specific children who are bullies and victims so that individualized interventions can be implemented, techniques such as peer and teacher nominations and self-report are appropriate to use. When conducting an assessment of prevalence of peer victimization in an entire school, such as for evaluation of a prevention program, anonymous self-report surveys, reviews of discipline referrals, and direct observations around the school are appropriate measurement techniques.

Informal observations

Direct observations can be utilized to objectively gather information about observable peer victimization behavior in schools. Observations need to be conducted across environments (e.g., lunchroom, hallways, classrooms) and over multiple time periods to gather information about the variables and contexts that promote peer victimization behaviors (Espelage & Swearer, 2003). Information gathered from direct observations can aid in prevention planning, as it will indicate the environments most in need of increased supervision. Informal observations are not

recommended for gathering information regarding the specific prevalence of peer victimization within a school because many forms of peer victimization may not be observable (e.g., forms of relational and cyber victimization).

Peer and teacher nominations

Peer nomination is a sociometric technique in which students are asked to nominate (or name) students who are victims and students who are aggressors from a list of students (usually students in the same classroom or grade). The evaluator then tallies the nominations for each child, and usually assigns a Z-score to indicate the degree to which a child is identified as an aggressor or victim in comparison to other students. Students with the highest Z-scores, or who received a given number of nominations, on the two dimensions are then considered aggressors and/or victims (or provocative victims) and thus are identified as those most in need of direct intervention services. Teacher nomination works much the same ways as does peer nomination. Teachers are prompted to provide names of students who are aggressors/victims or who engage in specified behaviors with the most frequency. Espelage and Swearer (2003) argued that peer nomination is easiest to use in elementary school populations rather than middle or high school populations because teachers and students remain in the same classes throughout the day. They recommended that for older populations of students, it is more useful to ask students to name a specified number of students in their grade (not from a provided list) who engage in specific behaviors (e.g., shoving other students). Solberg and Olweus (2003) explained that peer nominations are inappropriate techniques to utilize for assessing general prevalence of peer victimization within a school because cutoff points tend to be arbitrary and may vary as a function of individual classroom context and are not reproducible from study to study.

Rating scales

Rating scales are useful instruments to utilize for the assessment of prevalence of peer victimization. They can be used in research studies or within schools to identify specific behaviors and rates of victimization. The Olweus Bully/Victim Questionnaire (Olweus, 1996) is the most well established instrument for measuring prevalence rates of school bullying and peer victimization. It is an anonymous 36-item questionnaire on which students are asked to indicate the frequency that they have been bullied and engaged in bullying within a given time frame. The survey provides a definition of bullying to the students and asks them about rates of global bullying/victimization and rates of specific behaviors, which include overt and relational forms of bullying. However, the questionnaire does not provide differentiated scores for overt and relational bullying, rather they are grouped into one category. Based on response patterns, individuals are then considered, bullies, victims, bully-victims, or uninvolved. Furthermore, the scale does not include an assessment of cyber victimization behaviors.

Rating scales can also be used to classify respondents into groups based on severity, type, and frequency of involvement in peer victimization. Using students' responses to rating scales, researchers and practitioners can also complete a latent factor analysis to classify students into groups of victims and aggressors based on their response patterns (Nylund, Bellmore, Nishina, & Graham, 2007).

Comparison of various assessment techniques

In an investigation of the most accurate method of identifying perpetrators of peer victimization, Cole, Cornell, and Sheras (2006) compared the congruency of peer nominations of aggressors to self-report of perpetration of peer victimization behavior in a sample of over 300 middle school students. The researchers found virtually no correlation ($r = .003$) between students who self-reported as aggressors and students that other students identified as aggressors,

thus indicating that the two methods identify very different categories of students. Students that were identified through peer nomination techniques had significantly more discipline referrals, detentions, and suspensions than self-reported aggressors, as well as higher self-concepts. They concluded that use of survey instruments asking students to self-identify themselves as aggressors may underestimate the prevalence of engagement in peer victimization, and therefore peer nomination techniques should be utilized when the purpose of the assessment is the identification of specific aggressors needing individualized interventions.

In another comparison of the correlations between the various overt bullying and victimization assessment techniques, Pellegrini and Bartini (2000) compared the correlations between direct observation, survey instruments, self-report via the use of a diary, and two forms of peer nominations. They asked students to indicate three students who were aggressors and three victims and put marks next to the names of students who engage in or are victims of 36 specific behaviors. Overall, direct observations of both aggression and victimization were the least congruent with the other assessment methods. The two forms of peer nomination were highly correlated ($r = .75$), which suggests that either method of peer nomination is appropriate for the identification of aggressors and victims.

Though peer nomination allows for the identification of aggressors and victims, it is an inappropriate technique for measuring the peer victimization problem in a school because it does not provide information about prevalence rates. Therefore, teacher or students rating scales should be used to gather information about the occurrence of peer victimization. In a comparison of elementary and secondary teacher and student rating scales assessing the prevalence of peer victimization, teachers consistently underestimated the frequency and percentage of students involved in peer victimization in comparison to information provided by students (Bradshaw,

Sawyer, & O'Brennan, 2007). Thus, this finding indicates that student rating scales are more accurate measures to use when the goal is to assess prevalence of peer victimization within a school setting.

Prevention Programs

In a comprehensive review of best practices in prevention of peer victimization in schools, Whitted and Dupper (2005) outlined the necessary components that prevention initiatives should include. First, they argued that interventions should be different than interventions for children engaging in mutual fighting because peer victimization is a qualitatively different construct that involves a power differential. They further indicated that school peer victimization intervention initiatives must target the entire school, not just individual students: “Strategies to prevent or minimize [peer victimization] in schools must include school-level interventions designed to change the overall culture and climate of the school; classroom-level interventions targeting teachers and other adults in the school; and student-level interventions that target individual or small groups of victims and bullies,” (p. 169).

Interventions at the school-level are implemented with the goal of altering the current school climate from one in which students easily perpetrate peer victimization of other students without consequence to one where there are diminished opportunities and increased consequences for aggressive behavior. In a comprehensive review and evaluation of whole-school approaches to peer victimization prevention, Smith, Schneider, Smith, and Ananiadou (2004) outlined several components/steps essential to prevention programs. The first step in reaching this goal is to objectively define peer victimization behaviors so that all school personnel are aware of the behaviors that necessitate a consequence. The school also needs to increase supervision in areas in which peer victimization is likely to occur, as indicated by student reports. Finally, school administrators need to decide on a code of conduct that

specifically delineates consequences for engaging in peer victimization and need to widely communicate this to all members of the school community, including lunchroom personnel and bus drivers, and to the students. Furthermore, all school personnel need to accept the responsibility to act on peer victimization behaviors every time they are observed to communicate to students that such behaviors are unacceptable and will yield unfavorable consequences for aggressors. Students and teachers often abstain from reporting incidents of peer victimization because they experience a diffusion of responsibility, each assuming that it is the task or responsibility of other students or administrators to intervene (Olweus, 2001). A school wide Positive Behavior Support (PBS) plan is one way to punish perpetration of peer victimization behavior and reinforce prosocial behavior, such as defending victims. PBS plans have been demonstrated to reduce problem behaviors, including overt victimization (kicking and pushing), outside of individual classrooms in middle schools (Oswald, Safran, & Johanson, 2005).

The goal of many classroom-level interventions is to stimulate discussions about peer victimization and to empower bystanders to take actions to intervene in peer victimization. Twemlow and colleagues (2004) theorized that the overriding goal of school peer victimization interventions should be to shift the bystanders' perception of their role from abdicating (avoiding the acknowledgement that they play an active role in the bullying process) to a helpful, altruistic role in which they feel inclined to defend the victims. Salmivalli (1999) further clarified the goal of classroom-level interventions when she suggested that they be utilized to raise awareness of the peer victimization problem, allow opportunity for self-reflection of personal participation in peer victimization, promote commitment to engagement in victim-defending behaviors, and allow opportunity to role-play these behaviors. Classroom-level interventions are usually

implemented via a set curriculum. One example of such a curriculum is the Aggressors, Victims, Bystanders program (Slaby, Wilson-Brewer, & Dash, 1994), which was developed toward the goal of altering attitudes about the acceptability of violence and changing the perceptions of bystanders from their view of passive to active participants in situations involving peer victimization.

Finally, individual-level interventions should also be implemented directly with aggressors and victims. Individual level interventions for victims should include direct counseling to increase coping mechanisms and resiliency, and assertiveness training. Problem-based learning may also be an effective strategy for decreasing victimization (Hall, 2006).

Whole-school approaches to preventing and intervening in peer victimization involve creating a school-wide discipline policy, increasing adult supervision on school grounds, particularly in places where students report peer victimization is most likely to occur, and delivering curriculum to all students with the particular focus of empowering bystanders to defend victims and stop reinforcing or joining aggressors (Smith, Cousins, & Stewart, 2005). Using a survey of elementary and secondary school principals in Ontario, Canada, Smith and colleagues (2005) identified specific actions and characteristics of schools and programs that were reportedly effective in reducing school peer victimization. Of the 1,734 randomly selected public and Catholic schools solicited to complete the survey, 395 responded (22.8%). A strong sampling bias may exist in that only principals that were conscientious and concerned about the school peer victimization problem may have selected to return the survey. The survey queried each principal about their schools' demographic characteristics, nature and severity of the peer victimization problem (as indicated by incidents of both overt and relational victimization), resources directed toward addressing the problem, current interventions, and efforts to evaluate

the effectiveness of implemented programs. One significant confound to this study was that all information was to be answered by school officials, thus true rates of peer victimization may not be reflected. Using multiple regression analyses to analyze the survey information, they found that schools reporting increased utilization of adequate resources (time, money, and personnel) and amount of programming (e.g., individual counseling, classroom discussion, committees specifically designed to address school victimization) perceived their initiatives to be more effective. They conclude that, “a piece-meal approach [to peer victimization] with inadequate resources will likely have little impact on [aggressor/victim] problems,” (p.758).

To date, there are no programs described in the research literature that target relational aggression, nor is there evidence of the effectiveness of the existing prevention programs at reducing rates of relational forms of victimization. Young, Boye, and Nelson (2006) emphasized the critical need for research in this field. They recommended two strategies that schools may adopt until this information becomes available: (a) implement interventions designed to target overt forms of victimization or (b) develop new intervention strategies based on the relational victimization. Clearly, neither of these suggestions is in accordance with best practices for prevention and intervention practices. Merrell, Buchanan, and Tran (2006) also identified the problem of lack of research in the area of interventions. They recommended that until such information becomes available, school psychologists could take steps toward interventions by making teachers and other school personnel aware of the relational aggression problem through in-service presentations that include definition, prevalence, potential negative outcomes, gender, family, and cultural issues contributing to relational aggression, and a description of assessment procedures. Furthermore, they cautioned against the development of specific programs and instead advocated for the inclusion of relational victimization in programs to promote healthy

emotional development and decrease antisocial behavior, such as those that increase social emotional learning utilizing positive behavior support.

Responsiveness to Program Goals

There are two common methods by which to evaluate an intervention: efficacy trials and effectiveness trials (for a review, see Prochaska, Evers, Prochaska, & Johnson, 2007). The goal of efficacy trials is traditionally to generate a maximum effect size for a specific intervention. To do this, efficacy trials involve highly controlled experimental conditions that include (a) a homogeneous sample of participants who are likely to respond to the intervention; (b) implementation by highly trained interventionists/researchers; and (c) tightly controlled conditions in a single site. In contrast, the goal of effectiveness trials is to evaluate the responsiveness of an entire targeted population to an intervention under realistic conditions. Interventions in effectiveness trials are frequently implemented across sites (e.g., schools) by professionals in the settings (e.g., counselors, teachers), as opposed to researchers in a laboratory setting. Thus, efficacy trials usually yield higher effect sizes than effectiveness trials, though they sacrifice external validity. Evaluations of peer victimization prevention programs are most frequently conducted using effectiveness trials.

Program Effectiveness

Many programs exist to decrease peer victimization and associated adverse outcomes, yet the programs are seldom effective when school officials adopt and implement them in the United States (Olweus, 2001; Smith, Ananiadou, & Cowie, 2003). Olweus (1993) developed a peer victimization prevention program widely implemented in Scandinavian schools and demonstrated positive results. However, a lack of program effectiveness was found in a meta-analysis of studies evaluating the effectiveness of peer victimization prevention programs implemented in North America and Europe (Smith et al., 2004). More specifically, the purpose

of the meta-analysis was to investigate the specific factors related to effective interventions, including age of the targeted students, components of the implemented program, and characteristics of the design utilized to evaluate effectiveness of the programs, such as controlled or uncontrolled studies and degree to which random assignment was utilized. Included in their meta-analysis were studies that evaluated the implementation of whole-school peer victimization prevention programs in more than one classroom with reported quantitative outcome data regarding the prevalence of peer victimization in the school. At the time that their data collection was finished in December 2002, only 14 studies were identified, thus demonstrating the paucity of evaluation research in this area. The authors concluded that nearly all of the 14 studies reported effect sizes that were small, negligible, or even negative for reducing self-reports of victimization and aggression from pre to post program implementation. Furthermore, they found that studies that reported using integrity checks for implementation reported more positive outcomes than did studies with no integrity checks. Integrity checks involved use of questionnaires, observations, and activity logs. They also reported that the programs that reported significant effects were implemented in elementary and middle schools. Programs implemented in high schools did not yield positive effects.

A more recent investigation of a peer victimization prevention program implemented in Finland also provided evidence that prevention programs are most effective when implemented with increased integrity (Salmivalli, Kaukainen, & Voeten, 2005). This study not only examined changes in prevalence of aggression and victimization, but also bystanders' attitudes and perceived efficacy toward intervention in peer victimization situations. They found that in schools with high levels of implementation, effect sizes were moderate, ranging from .31-.44, for decreasing bystander attitudes to peer victimization and increasing their perceptions of efficacy

about intervening in peer victimization situations. However, effect sizes were significantly smaller, even in high-level implementation schools, at decreasing self-reported victimization and aggression. This suggests that prevention programs may be beneficial when implemented with high levels of integrity, at changing bystander attitudes and actions, though not at reducing overall levels of peer victimization. Therefore, prevention programs may actually be beneficial, though effectiveness cannot be demonstrated with the traditional method of only measuring prevalence of perpetration and victimization. It is possible that though prevalence does not decrease, bystander interventions may increase and thus diminish the relationship between victimization and problems with psychosocial adjustment.

In a recent study, the Olweus Bullying Prevention Program (Olweus, 1993) was implemented in 10 middle schools (7 intervention and 3 comparison) serving grades 6 through 8 and evaluated for its effectiveness at altering rates of overt and relational victimization, as well as students' attitudes toward victims (Bauer, Lozano, & Rivara, 2007). Attitudes toward victims were measured using three dichotomous questions designed for the study. Overall, there were no changes in prevalence of either overt or relational victimization. However, when results were stratified by ethnicity, the researchers found that Caucasian students reported a decrease in prevalence of both relational and physical victimization in comparison to students in schools that did not implement the prevention program; other ethnic groups did not demonstrate these differences. No differences were found between intervention and comparison schools in regards to students' attitudes toward victims. When results were stratified by grade, they found that 6th grade students at intervention schools reported more positive attitudes toward victims than 6th grade students in comparison schools.

Integrity of Program Implementation

A review of school-based prevention programs in the United States indicated that lack of program fidelity is a common problem and contributes to the lag in responsiveness to peer victimization prevention program objectives (Gottfredson et al., 2000). In an influential report, Sharon Mihalic, the Director of the Blueprints for Violence Prevention Initiative at the Center for the Study and Prevention of Violence, asserted that the mere implementation of evidence-based programs is not sufficient to decrease violence peer victimization in the schools and emphasized that it is the quality of implementation that yields intended outcomes (Mihalic, 2002). In a response to the debate over the need for adaptation of program elements to fit the specific needs of a school, Elliott and Mihalic (2004) emphatically stated, “The available research demonstrates that fidelity is related to effectiveness and any bargaining away of fidelity will most likely decrease program effectiveness,” (p. 51).

Gresham, Gansle, and Noell (1993) specified guidelines for evaluating quality of implementation of school-based behavioral interventions: (a) intervention components should be objectively defined and measureable; (b) each intervention component should be objectively measured through direct observation; (c) treatment integrity should be monitored by assessing the number of days it was implemented out of total days of the intervention and number of components properly implemented per day; and (d) objective measures of integrity should be corroborated with self-reports. Though these guidelines were directed toward the evaluation of interventions for individual students, they can be extended to school wide prevention programs.

There are two major concerns that surround the issue of implementation quality of peer victimization prevention programs (Kallestad & Olweus, 2003). The first concern relates to general factors that affect implementation of programs and the second concern relates to the variability within these factors at the school and teacher levels. General factors that affect

implementation of programs and reform initiatives are directly related to the features of the programs/plans themselves. Much research has been done in the field of educational reform that delineates necessary components of programs that influence implementation. In a comprehensive description of the factors influencing state and local adoption and implementation of educational reform initiatives, Datnow (2000) explained that there is a paradigm shift in the field of educational reform toward the adoption of externally designed reform programs, such as peer victimization prevention programs developed by researchers. This is beneficial to school districts because they do not have to spend time and money to develop reform initiatives anew. There is a current paradox in which there is a strong need for schools and districts to adopt programs that fit the needs of their schools, yet many administrators feel uninformed and unprepared to evaluate programs for goodness of fit (Datnow, 2000). To overcome this paradox, it may be beneficial to provide a strong media presentation that describes the current bullying problem and presents a highly structured intervention program (Kallestad & Olweus, 2003). There is a need for systematic evaluation of this potential strategy (Shinn, 2003).

Differentiation between school and teacher level factors

Along with individual program factors, there exist general school level variables that influence adoption and implementation of programs and individual teacher variables that influence the delivery of program components. To differentiate between school context variables and individual teacher variables that influence integrity of program implementation, studies utilizing multilevel model analyses are needed. According to Price (2003), “Prevention research is at a point in history in which the context of prevention programs can no longer be ignored. The myopic focus of the microsocial analysis must be supplemented by a contextual framework that enlarges practitioners’ understanding of microsocial processes,” (p. 2). To further expand upon this point, Shinn (2003) explained that multilevel models are necessary to use for statistical and

conceptual reasons when evaluating integrity of implementation. The statistical purpose of using multilevel models in prevention research is that single level designs are based on the assumption that there are not between-school differences in integrity of implementation. Violation of this assumption results in underestimating the standard errors of predicted coefficients (Raudenbush & Bryk, 2002). The conceptual reasons for the utilization of multilevel models in evaluation of prevention research are twofold. First, children and teachers are not normally distributed across school environments in the United States. Schools differ by socioeconomic levels, parental education levels, and many other important characteristics. Second, knowledge of the degree to which factors at the school and teacher levels influence integrity of implementation will be essential to researchers and practitioners so that program fidelity can be maximized.

School-level factors

Kallestad and Olweus (2003) conducted an investigation of factors that accounted for the varying degree of implementation of peer victimization prevention programs at the classroom level between and within schools using a multilevel design. They assessed integrity of implementation by asking teachers to self-report on their engagement in several dimensions of program implementation, such as use of role-play and holding class meetings about incidents of peer victimization. The absence of objective measures to monitor implementation integrity, such as direct observations of classrooms and review of permanent student products related to prevention program activities, is a potential confound to the study. They reported that school climate factors are associated with variance between schools. One school climate factor that accounted for a significant proportion of the variance between schools was degree of openness in communication among school staff. Openness of communication was an index of the frequency by which teachers engaged in informal conversations with one another regarding classroom issues and relationships with students. Another factor that accounted for a significant proportion

of the between-school variance was overall school attention to peer victimization. Schools that held a school conference day dedicated to learning about peer victimization and presented questionnaire results on the prevalence of peer victimization in the specific school to teachers at a staff meeting had teachers who displayed higher rates of implementation integrity.

In a review of over 3,500 school-based prevention programs implemented in the United States targeting such problems as drug abuse, gang involvement, and violence, and other problem behaviors, Gottfredson and Gottfredson (2002) delineated several school-level factors that influence adoption and implementation of programs. Overall, they found that schools reported consistently implementing programs approximately 60% of the time. Thus, 40% of programs were not regularly implemented, and thus had low treatment fidelity.

Furthermore, they outlined four characteristics of schools that demonstrated higher rates of implementation integrity than others. First, schools with low organizational capacity tend to experience more problems than those with a higher capacity. Low organizational capacity may be demonstrated by schools with poor staff morale and attitudes of hopelessness and resignation about the possibility of improving school conditions, as well as high rates of teacher turnover. Second, schools that have high organizational support in terms of training and resources are more likely to implement programs with integrity than schools in which faculty and staff did not receive adequate training for implementation of a program. They hypothesized that adequate training involves adequate amount and quality of instruction, supervision, and support, including corrective feedback. Third, schools that adopt prevention programs with higher degrees of structure are more likely to demonstrate more treatment fidelity. Therefore, they recommended that schools adopt highly structured programs that include detailed manuals and prepared materials for use by educators. Finally, the more program activities are aligned with normal

school activities, the more likely they are to be implemented. Thus, the authors recommended that professional educators, and not volunteers, deliver programs in a teaching context in the regular classroom.

Payne, Gottfredson, and Gottfredson (2006) furthered this research of general, school-level factors by examining contextual differences in schools that led to increased implementation integrity. They found that four school demographic factors accounted for 78% of the variance in reports of integrity of prevention program implementation. First, poverty-level (and related to this, ethnic make-up) of the school accounted for 30% of this variance; size of the school and urbanicity accounted for 23% of the variance; grade level accounted for 13% of the variance; and rate of teacher-turnover accounted for 12% of the variance. All of these factors can be considered related to the aforementioned characteristics associated with increased implementation integrity (organizational capacity and support, quality and quantity of training, ability to purchase a highly structured program, and degree of integration in normal school culture). In fact, when structural equation modeling fit these school characteristics into an integrative model, they found few direct relationships between demographic factors and integrity of implementation; rather the relationships were mediated by the four implementation characteristics.

Teacher-level factors

In their study of the factors that predict variability between and within schools in program implementation, Kallestad and Olweus (2003) indicated that the strongest predictor of within school variability was simply whether the teachers implementing the program read and reviewed program related materials (e.g., informational handouts and manuals). An additional factor that accounted for teacher implementation variability was teachers' perceptions of the degree to which their actions in the implementation program would produce outcomes associated with decreased bullying. They also reported that teacher age, years of experience, and education-level

were not predictive of integrity of implementation. Shinn (2003) cautioned that this study, conducted in Norway, may not be generalizable to schools in the United States because American schools are composed of more diverse populations on multiple dimensions (e.g., ethnicity, socioeconomic status, urbanicity).

A recent research study in the United States, however, examined barriers and facilitators to program integrity in the implementation of a PBS intervention (Kincaid, Childs, Blase, & Wallace, 2007). Using a qualitative research design, the researchers found that lack of teacher buy-in was the most frequently identified barrier to achieving program integrity, whereas the most frequently identified facilitator was receiving district and administrative support for implementation of the program.

Whitted and Dupper (2005) also identified individual teacher variables as influences on implementation integrity. They explained that often teachers do not properly implement peer victimization prevention programs due to time constraints or they make modifications to programs, drastically diluting or eliminating the effectiveness of such programs. Thus, perceived teacher time, training, and support could be potential barriers to implementation integrity.

A recent study examined the effects of teacher integrity of implementation on bullying prevention program success (Hirschstein, Van Schoiack Edstrom, Frey, Snell, & MacKenzie, 2007). In this study, three schools were randomly assigned to a control condition and three matching schools were randomly assigned to the peer victimization prevention program condition. The *Steps to Success* program (Committee for Children, 2001) was implemented to 549 children in grades 3 through 5. Two types of teacher implementation were monitored in the study: (a) the degree to which teachers “talk the talk” and (b) “walk the walk.” The “talk the talk” element of implementation was the delivery of the designated program curriculum and was

measured by dosage (i.e., number of lessons delivered), adherence (i.e., the key ingredients of the lessons were delivered), and overall quality of lesson delivery (e.g., classroom management, instructional techniques, and emotional tone). The “walk the walk” component of implementation was the degree to which teachers generalized skills taught in the curriculum to real school situations. This involved modeling/guiding appropriate behaviors using references to the curriculum (as opposed to just telling children when they are misbehaving) and coaching students to acquire taught skills through one-on-one interactions and role-play.

The integrity of both elements of implementation was monitored using direct observations of teachers and the research then assessed whether integrity was associated with intended outcomes of the prevention program. Outcomes were measured using pre-post comparisons of playground behaviors, teacher ratings of children’s perpetration of peer victimization and overall social skills, and students’ self-report of aggression, victimization, bystander actions, and perceived adult responsiveness.

The “talking the talk” dimension of analyses indicated that teachers did not differ in number of lessons delivered, but they did differ on the adherence and quality of lesson delivery. Teachers that demonstrated greater lesson adherence reported better child social skills than teachers with low adherence. However, child reports of aggression, victimization, and bystander actions, as well as observed peer victimization behaviors on the playground, were unrelated to adherence. In addition, lesson quality actually increased student reports of difficulty responding to aggression (bystander actions) and self-reports of victimization.

When looking at the “walking the walk” dimension, the authors found that teachers that provided greater support for skill generalization using modeling had students with less observed playground aggression and victimization. However, this trend was only found among older, but

not younger children. Teacher modeling did not affect student reports of peer victimization, aggression, or bystander activity. Finally, teachers that engaged in coaching and role-playing of skills had students with demonstrated decreases in observed victimization, aggression, and encouragement of peer victimization, but no changes in student or teacher reports of aggression and victimization. These results indicate that teacher integrity of implementation is associated with some program outcomes (e.g., teacher perceptions of student behavior and observed playground behaviors), but not overall student reports of direct involvement in victimization or bystander actions. This suggests that even with increased quality of implementation, programs still may not yield decreases in student reports of aggression and victimization.

Conclusions and Future Research

Adolescent bullying and victimization is a significant problem in American schools and school psychologists have the opportunity and responsibility to work with schools to alter attitudes toward peer victimization and the negative effects it has on victims. Nearly one-third of adolescent students are either victims or aggressors (Nansel et al., 2001) and even more students serve as bystanders. Bullying occurs in multiple forms (i.e., overt, relational, and cyber) and all forms are related to negative social and emotional adjustment for victims (e.g., Prinstein et al., 2001). It is particularly prevalent and problematic in early adolescence when students transition into middle school and vie for positions in the social hierarchy (Pellegrini & Long, 2002).

Although many programs have been developed to address peer victimization, they show few to no positive effects when implemented in American schools. Lack of implementation integrity may contribute to the lack of responsiveness to programs (Gottfredson et al., 2000). It is also possible that programs find little success, as measured by students' self-reports of aggression and victimization, because they increase awareness and knowledge of peer victimization, resulting in more recognition and reporting of the problem. In future studies, it

may be beneficial to measure other dimensions of “success” of programs, such as changes in student attitudes toward peer victimization. It is also possible that programs do not decrease rates of aggression and victimization, but may still promote resiliency in victimized children and result in decreases in associated psychosocial adjustment problems. This is also an area of research that needs to be further examined.

This study contributes to research on the efficacy of peer victimization prevention programs and the possible barriers to achieving positive student and school outcomes. In this mixed method study, a previously established peer victimization prevention curriculum, *Aggressors, Victims, and Bystanders* (Slaby, Wilson-Brewer, & Dash, 2002), was delivered to sixth, seventh, and eighth grade middle school students in three rural middle schools. The AVB program uses a 12-session curriculum to teach students problem-solving and conflict resolution skills and to promote classroom conversations about peer victimization. At one middle school, a model program was implemented (Model Implementation Condition). For the Model Implementation Condition, the researchers presented to all teachers in the school on peer victimization prevention and provided training to deliver the program curriculum. All teachers at the school were responsible for program delivery. In addition, researchers monitored the integrity of implementation and provided feedback regarding adherence to the program curriculum. The use of observations to monitor implementation and the provision of corrective feedback following these observations is one of the four components that Gottfredson and Gottfredson (2002) delineated as being influential to maintaining treatment integrity. In addition, the researchers also attempted to promote integrity of implementation by utilizing a highly structured program and aligning the program with normal school activities as teachers implemented it in classrooms.

Two other schools were assigned to the Traditional Implementation Condition. The Traditional Implementation Condition involved training all teachers about peer victimization prevention, but only training a subset of teachers (Social Studies teachers) to deliver the curriculum. The Social Studies teachers then delivered the curriculum in their classes, though integrity of implementation was not monitored by observation and corrective feedback was not provided. The researcher provided teachers with contact information to ask questions about the program as they arose. Finally, at a 4th middle school, no curriculum was delivered and no staff training on peer victimization was provided (Control Condition).

The current study extends the existing research literature by assessing the effectiveness of the program at altering bystander attitudes, school climate, and victim resiliency in addition to self-reported frequency of aggression and victimization. First, one goal was to determine whether the program altered bystander attitudes toward victims—an established predictor of bystander interventions in peer victimization (Salmivalli & Voeten, 2004)—and overall school atmosphere and climate. A second goal was to determine whether the program promoted resiliency in victims, as measured by student-reported changes in symptoms of depression and social anxiety. Finally, self-blame regarding victimization—a factor thought to mediate the relationship between victimization and psychosocial adjustment (Graham, 2006)—was assessed. Little research has examined changes in these indices with prevention program implementation and thus specific, directional hypotheses could not be formed. However, it was hypothesized that greater changes would be observed among students in the Model Implementation condition versus students in the Traditional Implementation and Control conditions. Because all resources were not in place to promote integrity of program implementation in the Traditional Implementation schools, it was

hypothesized that there would be no significant differences among the responses of students in the Traditional Implementation and Control conditions.

The current study also contributes to research on peer victimization prevention in schools by providing qualitative information about the process of implementation and barriers to achieving changes in student rates of peer victimization. This qualitative information was gathered from focus groups with teachers in the Model and Traditional Implementation conditions, as well as students in the Model Implementation condition. The goal of the teacher focus groups was to develop an understanding of barriers to program delivery, perceptions of utility and effectiveness of the program, and suggestions for program improvement. The goal of the student focus groups was to elicit opinions on the curricular components of the program and any perceived changes (positive or negative) that resulted from the peer victimization prevention initiative at the school. Use of qualitative inquiry, specifically using grounded-theory, is warranted when attempting to gather information about process (Creswell, 2002; Creswell, 2007). Thus, the information gathered from qualitative research methods will enhance understanding of the data obtained through quantitative methods and will influence future attempts to enhance the utility of school-based prevention programs.

The research questions addressed in the current study are as follows:

Does the AVB program alter student self-reports of victimization and aggression from pre to post implementation?

Does the AVB program alter student perceptions of school climate and students' empathy toward victims?

Does the AVB program promote resiliency in students, which will be measured by changes in self-reported symptoms of depression and social anxiety, and self-blame for victimization?

What are the factors that make implementation of the program difficult for teachers?

What were teacher's overall perceptions regarding students' responsiveness to the curriculum?

What did students' perceive to be the most effective components of the program?

What components of the program did students find ineffective?

CHAPTER 2

METHOD

Participants

District

Participating schools were located in a predominantly rural county in the Southeastern United States. According to the 2000 census data (United States Census Bureau, 2000), approximately 16% of families in the county live at or below the poverty line—this exceeds national levels of families living at or below poverty (9%). The median family income of the county (\$34,499) is lower than the median income of the United States (\$50,046).

Schools

Four of the five middle schools in the county, serving students in sixth, seventh, and eighth grades, participated in the study with the consent of school principals. In January 2007 the district's school psychology department conducted an evaluation of the prevalence of bullying and victimization in district middle schools, as well as associated psychosocial indices of adjustment (depression and anxiety). This assessment revealed that there were no significant differences in student-reported rates of being an aggressor, victim, or bystander; thus, it was assumed that there were no relevant differences between the schools in the current study with regard to rates involvement in peer victimization. The demographic characteristics of each school are presented in Table 2-1. A summary of the treatment condition in each school is presented in Table 2-2. School 1 was assigned to the Model Implementation condition, Schools 2 and 3 were assigned to the Traditional Implementation condition, and School 4 was assigned to the Control condition. Overall, 283 students (61% females) returned forms indicating parental consent for students' responses to be used in the study. The demographic characteristics of participating students are presented in Table 2-3.

Procedure

All study procedures were completed with the approval of the University of Florida, Institutional Review Board, the director of special education services and the lead school psychologist of the district, and the principals at each of the participating schools. Sample copies of all consent forms are included in Appendix B.

Curriculum

The Aggressors, Victims, and Bystanders (AVB) curriculum (Slaby et al., 1994), was delivered to all students at all treatment condition schools. The 12-session curriculum, appropriate for students in grades 6 through 9, encouraged students to contemplate how to use a 4-step conflict resolution model to problem-solve and contribute to the resolution of peer conflict in the roles of aggressors, victims, and bystanders. Curriculum materials came from the AVB teacher's manual, which included detailed instructions for curriculum delivery for the teachers, as well as activities and handouts to be completed by students (i.e., permanent products).

Integrity Checks

Trained observers completed the Program Adherence Rating Scale (PARS) as a measure of teacher adherence to AVB program guidelines at the Model Implementation condition school. A copy of this measure is included in Appendix A. Observers were graduate students in school psychology and licensed school psychologists working in the district. They were provided with training and detailed guidelines for completing the PARS. All observers completed the PARS in pairs until inter-observer agreement (IOA) was 80% or greater. All pairs of observers achieved IOA over 80% during their first observations—a number conventionally agreed upon as acceptable for reliability (for a review, see Kennedy, 2005). Average IOA across raters was 93%, with all disagreements within one rating scale point of each other.

Observers made unannounced visits over the 12 weeks of curriculum delivery to all teachers at the school who provided consent (n=22) and observations were completed for the entire curriculum delivery session. After the session, observers indicated on a rating scale from 1 (*no implementation*) to 5 (*no deviation*) the degree to which teachers adhered to program guidelines for (a) amount of time delivered; (b) use of group participation; (c) completion of student products; and (d) meeting specified session objectives. Ratings were tallied to provide an overall score (ranging from 4 and 20) for the entire session; higher scores indicated a greater degree of integrity of implementation. This scale was designed for the current study and was based on the system used by Hirschstein and colleagues (2007) in their study on the influence of implementation integrity on program outcomes for a bullying prevention program. In that study, the researchers evaluated integrity of implementation based on teachers' adherence (i.e., the key ingredients of the lessons were delivered) and overall quality of lesson delivery (e.g., classroom management, instructional techniques, and emotional tone). A copy of the measure and guidelines for scoring are included in Appendix A.

Training, Curriculum Delivery, and Consultation Support

Model Implementation condition

The researcher delivered a presentation to all school staff during a teacher planning period in mid-August. The first hour of the training session involved an introduction to the topic of peer victimization, including definitions and recognition of behavior, a discussion of the peer victimization problem at the school, as indicated by survey data completed the prior year, and small group discussions regarding teacher perceptions of bullying and peer victimization. The following two hours were a training session for delivery of the AVB program and it was delivered to every teacher in the school. The AVB curriculum training included a description of the goals and structure of the program, and a review of each lesson. The first three lessons were

reviewed in detail and the teachers were provided with an overview of the remaining nine lessons. Each lesson was described in detail in the training manual. In addition, an emphasis was placed on delivering all components of the program with integrity. Teachers were then allotted time to ask questions about the curriculum and provided with the contact information for the researcher and encouraged to contact the researcher with any questions. They were also informed that the researcher would be at the school regularly on Mondays and Tuesdays to answer questions about the curriculum and to observe its implementation in randomly selected classrooms.

Teachers at the model implementation school voted on the time and days that they would deliver the curriculum. The goal of allowing teachers to vote on some delivery variables was to increase the likelihood of teacher buy-in. The teachers voted to deliver the curriculum during fourth period on either Monday or Tuesday each week because their fourth period had an extra 30 minutes of class time each day to allow for staggering of lunch periods, which would allow for lost class time to be made up over the week. The AVB curriculum was delivered to students over 12 weekly sessions from October to January. All 29 teachers with a 4th period class delivered the curriculum to their classes. Teachers were asked to complete a brief lesson summary at the end of each session.

Teachers delivering the curriculum were asked to provide written consent to allow their classrooms to be randomly observed two times over the twelve weeks. Out of the 29 teachers delivering the curriculum, 22 provided consent for observation. The researchers observed the delivery of the curriculum in randomly selected classrooms each Monday and Tuesday to monitor implementation integrity using the PARS and to provide brief feedback to teachers after the session. Each teacher was observed on two occasions, with a different researcher/observer on

each occasion. After each observation the researcher completed the PARS as an indication of program guideline adherence. Immediately following each observation session, the researchers briefly met individually with teachers to provide feedback regarding adherence to program guidelines and to provide suggestions to encourage increased or maintained integrity of implementation.

Traditional Implementation condition

All staff in the Traditional Implementation condition schools received the one-hour presentation about peer victimization that was delivered at the Model Implementation condition school. This also took place during teacher planning period in mid-August. In addition, the researcher met with social studies teachers over the following two weeks during 90-minute, after school meetings to train them to deliver the AVB curriculum. Only the social studies teachers at the traditional implementation schools received training in the curriculum. Teachers were asked to complete a brief lesson summary at the end of each session. Teachers were then provided with the contact information for the researcher(s) and encouraged to contact them with any questions. The researcher met with the groups of teachers after approximately the third lesson was delivered to answer any questions and problem-solve to overcome any barriers to implementation. Social studies teachers at both schools voted to determine when they would deliver the curriculum. At school 2, the teachers did not come to a consensus decision to deliver the curriculum on a weekly basis and so one teacher opted to deliver the curriculum in twelve consecutive class periods. The other five teachers delivered the curriculum once weekly. At School 3, all teachers selected to deliver the curriculum in twelve consecutive class periods.

Similar to the curriculum delivery in the model school, the AVB curriculum was delivered to students in 12 sessions between October and January. Integrity of implementation was not monitored at these schools and the researchers did not regularly provide feedback about

adherence to program guidelines. Researchers were available for consultation by email, though no teachers at these schools contacted the researcher for help.

Control condition

School 4 did not receive training or implement any element of the prevention program during the period when data collection occurred, though students did take the survey at both pre and post test. Upon request of the principal, School 4 received similar training to school 2 and 3 in the spring 2008 semester and began curriculum delivery in March 2008.

Assessment of Student Outcomes

All students at the four participating schools were provided with an opportunity to complete self-report measures during their class time as part of a district evaluation of the program. Survey questions were developed in consultation with the school district. The district assumed all costs related to survey administration (i.e., photocopying). Teachers administered the surveys during classroom time. As part of the post-test survey administration, the school district opted to send passive consent forms to all parents to allow parents to request that their children not take part in the district's evaluation.

The researchers requested parental consent for students' responses to be used as part of this research study. Consent forms for using student survey responses in research were sent home to all 2,230 students at the four participating schools in September and each school provided an incentive for students to return the forms with parental consent or refusal. Of the surveys sent home, 628 surveys were returned with parental consent to participate in research. Students participating in the survey provided their assent or refusal of assent to complete the surveys and were informed that there would be no penalty for refusal of assent. Only students with parental consent for study participation and students' assent for participation at both pre and post test were included in the study. Of the 628 students with parental consent to participate in research,

only 283 provided their assent to participate at both pre and post implementation time points.

One reason for the large gap between students with parental consent and the number of participants is that a large number of surveys at Schools 3 and 4 were never located at post-implementation (either because teachers did not administer the survey or because students did not write their names on the slip of paper accompanying the survey).

All students participating in the district's evaluation received a packet of survey materials. Materials included the survey questions, a sheet to bubble in their responses, a slip of paper on which to write their names and indicate assent/refusal of assent to allow responses to be used for research, and a large envelope. Teachers instructed students to write their names on the loose sheet of paper and to check whether they assented or refused to assent to allow their responses to be used for research. They were informed that their names would only be used for pairing their responses to the surveys before and after curriculum implementation. If they did not have parental consent for research and/or refused to assent to research participation, the names were discarded from survey packets. Students were also informed that no teachers or in-school personnel would have access to the surveys with their names on them and so their responses were anonymous to in-school staff. To ensure the confidentiality of their responses, teachers instructed students to place their response sheets and name slips in the envelope and to seal the envelope before handing in their surveys.

After survey administration, the research team sorted through all envelopes to remove student names from surveys so that response forms were anonymous. Student forms with both parental consent and student assent were assigned a random number so that pre and post test response forms could be paired. All response forms without either parental consent or student

assent for participation in research were separated from the name slip and made completely anonymous before they were returned to the school district.

Survey packets contained a demographic questionnaire (age, grade, gender, and ethnicity), the Revised Peer Experiences Questionnaire, Cyber Aggression and Victimization questionnaire, Relational Victimization Questionnaire, Attitudes to Victims Scale, Centers for Epidemiological Studies – Depression scale, Social Anxiety Scale for Adolescents, Characterological Self-Blame for Victimization Scale, and the School Climate portion of the California School Climate and Safety Survey. Students completed survey packets during class time at two time points during the semester. Students were allotted approximately 50 minutes to complete the surveys. Pre-implementation surveys were administered the week prior to the start of curriculum delivery in September, when school had been in session for approximately four weeks. The post-implementation data were collected four weeks into the spring semester in February after the curriculum delivery was completed.

Focus Groups

Teacher groups

Teachers at the three intervention schools voluntarily participated in focus group discussions to provide information regarding their perceptions of the program and factors affecting implementation. The teacher focus groups were held in February and March, after program implementation was completed. Teachers were informed that participation was optional and that they had the right to withdraw from the group at any time. Eight teachers participated in the focus group at School 1 (model implementation condition) and therefore two focus groups were held, each with four teachers. The first group consisted of four females and the second group consisted of equal numbers of male and female teachers. Four of the six social studies teachers (one male and three females) at School 2 (Traditional Implementation condition) agreed

to participate and the three social studies teachers (all females) at School 3 (also Traditional Implementation condition) agreed to participate.

Each focus group meeting lasted approximately 45 minutes. At the beginning of each focus group, participants were informed of the anticipated length of the session and their right to withdraw their participation at any time. With the teachers' permission, focus group sessions were audio taped so that transcripts could be made of the sessions to facilitate coding of themes. Participants were assured that only members of the research team would have access to the tapes and that tapes would be destroyed after transcripts of the sessions were made. Only the teachers at School 2 refused to allow their responses to be audio taped. In this case, detailed notes of the session were used for theme analysis.

Two members of the research team were present during all focus group sessions. One member served as the moderator and the other served as the assistant moderator and took detailed notes of each session. The moderator of the groups provided the topics to be discussed and then took a middle level role in moderating the group—probing and redirecting participants as necessary when they drifted from the specified topics. When participants remained on topic, the moderator played a minimal role in the group.

All focus groups opened with the opportunity for each participant to provide their general opinions regarding the program for approximately three, uninterrupted minutes. Following this, the moderator asked specific questions about participants' reactions to the prevention program and factors affecting implementation. The moderator elicited teacher perceptions along the following topics: (a) ease of curriculum delivery; (b) barriers to curriculum delivery; (c) observed student reactions to curriculum and overall program; (d) level of support from administration; (e) additional suggestions for peer victimization prevention. A list of sample

questions is included in Appendix C. Finally, each participant was allowed time to summarize their thoughts at the end of the session. This sequencing of the questions, suggested by Krueger (1998) allowed participants time to organize their thoughts and reduced the likelihood that participants would change the direction and content of their statements throughout the focus group session. At the end of each focus group, the moderator provided a two to three minute summary of the critical points that emerged during the focus group to provide participants the opportunity to offer corrective feedback (Krueger, 1998).

Following each session, the moderator and assistant moderator debriefed to discuss and note first impressions of themes and to compare information with that gathered in other focus group sessions. The research team used detailed notes of focus group sessions taken by the assistant moderator and the moderator and transcripts of the audio taped focus group sessions to ensure the verifiability of information collected. Transcripts were then created from the audio taped sessions. The transcripts were reviewed several times and coded for themes related to the elicited topics, following the general process recommended by Bogdan and Biklen (2003). Inter-coder reliability for the teacher focus groups was 89%.

Student groups

Three student focus groups were conducted with students in the Model Implementation condition. Student groups were conducted during lunch time and so three groups were conducted, one for each lunch period. Consent forms were sent home to all interested students and all students who returned forms with parental consent were allowed to participate in the groups. The first lunch group consisted of four female students in sixth grade, the second group consisted of one male in seventh grade and one female in eighth grade, and the final lunch group consisted of one female and three males in seventh grade. Parental consent and student assent was provided to allow for audio recording of focus group responses. Student participants were

assured that only members of the research team would have access to the tapes, not school staff or administration. As with the teacher focus groups, a moderator and assistant moderator were present for all focus groups. The specific topics discussed were student perceptions of the curriculum, effectiveness of the curriculum, and barriers to reducing peer victimization in the school. A sample list of questions is included in Appendix C. The audio taped sessions were transcribed, reviewed several times, and coded for themes related to the elicited topics, as was described previously for the teacher focus groups. Inter-coder reliability for the student focus groups was 93%.

Measures

Several student report variables were selected for use in the current study to evaluate the effectiveness of the prevention program. First, student reports of victimization and aggression were measured, as is traditionally done in prevention program evaluation (Smith et al., 2004). However, because the purpose of the study was to assess the effectiveness of the program at influencing variables other than victimization/aggression, several other indices of student functioning were administered. More specifically, both symptoms of depression and social anxiety have repeatedly been demonstrated to be associated with self-reported victimization (e.g., La Greca & Harrison, 2005; Prinstein et al., 2001). Therefore, it is possible that although rates of victimization do not change, victims' resiliency increases, thus leading to decreases in symptoms of depression and social anxiety. It has been hypothesized (Graham, 2006) that these relationships are mediated by attribution of victimization and therefore self-blame for victimization was also assessed.

The AVB program was designed to target all students involved in peer victimization situations (aggressors, victims, and bystanders). Therefore, it is important to measure not only changes in victims and aggressors, but also the attitudes of bystanders (Salmivalli et al., 2005).

To assess changes in bystander attitudes, bystander empathy toward victims was measured in the current study. In addition to student level variables, school level variables are also thought to be associated with the prevalence and severity of peer aggression. Consequently, overall school climate was assessed in this study to determine if changes were present pre and post implementation.

Revised Peer Experiences Questionnaire (RPEQ)

Frequency of experience engaging in and being a victim of physical and relational aggression within the past 30 days was assessed using the RPEQ (Prinstein et al., 2001). The RPEQ is an 18-item, self-report measure of overt and relational aggression and victimization with a stable four factor structure: (a) relational victimization; (b) overt victimization; (c) relational aggression; and (d) overt aggression (Dempsey, Sulkowski et al., no date; Prinstein et al., 2001). Respondents were prompted to indicate the frequency of each form of aggression and victimization item on a rating scale ranging from 1 (*never*) to 5 (*a few times per week*). Responses in each subscale were summed to provide a score between 4 and 20 for overt subscales and 5 to 25 for relational subscales; higher scores indicated more frequent aggression and victimization.

The RPEQ has been used in several research studies examining rates of adolescent victimization and aggression (De Los Reyes & Prinstein, 2004; La Greca & Harrison, 2005; Prinstein et al., 2001). Evidence of its reliability has been demonstrated by its internal consistency—Cronbach's alpha for the victimization scales range from .82 to .84 for relational victimization and .78 for overt victimization (De Los Reyes & Prinstein, 2004; La Greca & Harrison, 2005). Cronbach's alpha for the aggression subscales are .68 for relational aggression and .83 for overt aggression (De Los Reyes & Prinstein, 2004). Concurrent validity of the victimization scale was established by demonstrating its correlation with peer reports of

victimization (De Los Reyes & Prinstein, 2004). Factor analyses have demonstrated the discriminant validity of the subscales (Dempsey, Sulkowski et al., no date; Prinstein et al., 2001).

Cyber Aggression and Victimization Questionnaire (CAV)

In addition to the RPEQ, the CAV (Dempsey, Sulkowski et al., no date) was used to assess frequency of involvement in cyber aggression and victimization. The CAV is an 8-item self-report measure that prompts students to indicate the frequency with which they served as an aggressor or victim for four cyber aggression behaviors: (a) sending/receiving a text message, email, instant message, or web space posting containing mean or threatening content; (b) creation of a web page revealing embarrassing or hurtful information; (c) using trickery to send a mean message from the victim's account; (d) sending a message containing personal information to a large group of peers. Questions from the CAV were added to the RPEQ victimization and aggression scales and followed the same rating scale format. In an exploratory factor analysis conducted on the CAV and RPEQ items (Dempsey, Sulkowski et al., no date), CAV items correlated with other overt and relational aggression and victimization items, thus establishing the convergent validity of the CAV. The factor analysis also confirmed the scale's discriminant validity, as the cyber aggression and victimization items emerged as separate sub-factors from relational and overt forms of aggression and victimization. In the same study, reliability of the scale was demonstrated by its adequate (as interpreted by Nunnally & Bernstein, 1994) internal consistency (Cronbach's alpha = .74). In the current study, Cronbach's alpha for the victimization items on the RPEQ and CAV was .79 at pre-implementation and .82 at post-implementation. Cronbach's alpha for the aggression items on the RPEQ and CAV was .83 at pre-implementation and .89 at post-implementation.

Relational Victimization Questionnaire (RVQ)

One limitation of the RPEQ is that it assesses a limited range of relational aggression and victimization behaviors, predominantly exclusion. Therefore, a more comprehensive measure of relational victimization was also administered in the current study. The RVQ (Dempsey & Storch, 2008) is a modified version of a 7-item measure that assesses frequency of relational victimization. The original RVQ scale was designed to assess retrospective recall of adolescent experiences with relational victimization. For the current study, the measure was modified to assess experiences within the past 30 days on a rating scale ranging from 1 (*never*) to 5 (*a few times per week*). A factor analysis of the original measure indicated that the seven items form one general factor of relational victimization with individual item loadings ranging from .51 to .79. Internal consistency of the measure in that study was adequate (Cronbach's alpha = .79). In the current study, Cronbach's alpha for the RVQ was .82 at pre-implementation and .83 at post-implementation.

The Centers for Epidemiological Studies – Depression Scale (CES-D)

The CES-D questionnaire (Radloff, 1977) was administered to assess experiences of depressive symptoms within the past week. The CES-D is a 20-item measure that yields a total score ranging from 0 to 60—higher scores indicate greater severity of depressive symptoms. Four items are phrased positively and require reverse coding. Participants are prompted to indicate the accuracy of each statement on a rating scale ranging from 0 (*not at all*) to 3 (*a lot*). In their review of screening measures for depressive symptoms, Sharp and Lipsky (2002) recommended the CES-D because of its low cost, adequate psychometric properties, and ease of scoring. This scale has been repeatedly used in research studies that assess depressive symptoms in adolescents (e.g., Wardle, Williamson, Johnson, & Edwards, 2006).

Phillips and colleagues (2006) presented validity evidence for use of the CES-D with a young adolescent population by reporting the results of a confirmatory factor analysis using the CES-D responses of over 3,500 students in 7th grade. Based on the results of this analysis, the authors recommended that a one-factor solution should be used with adolescent populations in which only a total depressive symptom score is yielded (as opposed to breaking the CES-D into subscales). In another study of the psychometric properties of the CES-D with a large sample of young adolescents in grades seven and eight, a longitudinal design allowed the researchers to demonstrate the stability of the CES-D (Motl, Dishman, Birnbaum, & Lytle, 2005). Finally, the test-retest reliability of the scale ranges from $r = .45$ to $r = .71$ and estimates of internal consistency are adequate (Cronbach's alpha = .85 – .90) (Fountoulakis et al., 2007; Roberts, Andrews, Lewinsohn, & Hops, 1990). In the current study, Cronbach's alpha for the CES-D was .87 at both pre and post-implementation.

Social Anxiety Scale for Adolescents (SAS-A)

The SAS-A (La Greca, 1998) is a 22-item questionnaire (with 4 filler items) that assesses social anxiety in adolescents and has been demonstrated to discriminate between adolescents with and without symptoms of social anxiety (Ginsburg, La Greca, & Silverman, 1998). Students were prompted to endorse the veracity of each statement on a rating scale ranging from 1 (*not at all true*) to 5 (*true all the time*). The SAS-A discriminates between socially anxious and non-anxious adolescents (Ginsburg et al., 1998; La Greca, 1998) and has adequate 12-month test-retest reliability ($r = .60$) (Storch, Masia-Warner, Dent, Roberti, & Fisher, 2004). In the current study, Cronbach's alpha for the SAS-A was .93 at pre-implementation and .94 at post-implementation.

Characterological Self-Blame for Victimization

The Characterological Self-Blame for Victimization scale is a 7-item measure, derived from the Attributional Questionnaire, which was designed for students in middle school (Graham & Juvonen, 1998). Characterological self-blame refers to a victim's tendency to blame victimization on character traits, such as popularity and likelihood of fighting back. A factor analysis conducted by the authors of the scale indicated that the 7 items (with individual item loadings range from .40 to .79) form one factor. Discriminant validity of the scale was demonstrated by its emergence as a separate factor from other portions of the Attributional Questionnaire, such as perceive acceptance and rejection and attributing victimization to characteristics of bullies (e.g., bully's tendency to pick on many children). Convergent validity was established by its moderate relationship ($r = .58$) to behavioral self-blame (e.g., blaming victimization on being in the wrong place). In the current study, Cronbach's alpha for the Characterological Self-Blame for Victimization scale was .82 at pre and post-implementation.

Attitudes to Victims Scale

The Attitude to Victims Scale (Rigby, 1997) is a 10-item scale used to measure bystander's attitudes toward the plight of victims on a 3-point rating scale from 1 (*disagree*) to 3 (*agree*). The scale is a shortened version of the original Attitude to Victims Scale (Rigby & Slee, 1991); the ten items were chosen from the original 20-item version based upon their item total correlations. Half of the items are positively worded and half are negatively worded, consequently reverse scoring was required before summing responses to produce a total score. Higher scores indicated more empathetic attitudes toward victims. Individual item responses were summed to provide a total score. The original scale was designed for use with school children ranging in age from 6 to 16 years old. Rigby (1997) reported that the Cronbach's alpha coefficient for this scale based on the responses of over 4,000 male and female respondents (ages

9 to 18 years) was .78 for females and .81 for males. In that same study, predictive validity of the measure was demonstrated by its negative relationship to bullying behavior in both males and females. Cronbach's alpha for the Attitude to Victims Scale was .71 at pre-implementation and .78 at post-implementation in the current study.

California School Climate and Safety Survey – Short Form (CSCC-SF)

The School Climate portion of the CSCSS – SF, (Furlong et al., 2005) was used to assess student's perceptions of teacher support and respect toward students and perceived fairness of school rules. This portion of the 102-item CSCSS consists of seven items on which students are prompted to rate the accuracy of each item on a rating scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The seven items for this school climate factor were selected based on a principal component analysis conducted on the original CSCSS and a confirmatory factor analysis on the retained items (Furlong et al., 2005). Higher scores on this survey indicate more positive perceptions of school climate. Psychometric properties of the scale were established based upon the responses of over 7,500 students in grades 6 through 10. Evidence of the reliability and validity of this scale was demonstrated by results from a principal components analysis and confirmatory factor analysis (Furlong et al., 2005). Individual item loadings onto the School Climate portion of the survey ranged from .41 to .79 and no items demonstrated cross-loadings on other factors greater than .09. In addition, the goodness of fit indices for the scale were also sufficient. The scale discriminated between school climate and perceived school safety, thus demonstrating its discriminant validity. In the current study, Cronbach's alpha for the scale was .82 at pre-implementation and .85 at post-implementation.

Table 2-1 Demographic characteristics of participating schools

School	Condition	Enrollment ^a	% Minority ^a	% Free and Reduced Lunch ^a	% Endorsing Victimization ^b			% Endorsing Aggression ^b		
					Overt	Relational	Cyber	Overt	Relational	Cyber
1	Model Implementation	544	27	72	46	63	11	36	62	8
2	Traditional Implementation	593	67	80	54	59	16	49	68	11
3	Traditional Implementation	338	11	63	57	69	16	49	66	12
4	No Implementation	706	39	60	55	70	15	49	72	8

^aAll data came from 2007-2008 academic year statistics; ^bAll data came from survey conducted by school district during the 2006-2007 academic year; *Analysis of Variance indicated that none of the differences in rates of aggression and victimization between schools were significant for any form of aggression/victimization.

Table 2-2 Description of treatment conditions for each school

	School 1	School 2	School 3	School 4
Condition	Model Implementation	Traditional Implementation	Traditional Implementation	Control (No Implementation)
Bullying Prevention Training	All teachers and staff	All teachers and staff	All teachers and staff	None
Curriculum Training	All teachers and staff	Social studies teachers	Social studies teachers	None
Curriculum Delivery Implementation	All teachers and staff	Social studies teachers	Social studies teachers	None
Observations and Feedback	Yes	No	No	No
Programs Already in Place	No	No	Yes – peer mediation ^a	No

^aPeer mediation has not been demonstrated to be an effective strategy to reduce bullying (for a review see Merrell, Buchanan, & Tran, 2006)

Table 2-3 Composition of student participant sample

Condition	N (% female)	Ethnic Breakdown (%)					Grade Levels (%)		
		Caucasian	African American	Asian American	Hispanic	Other	Sixth	Seventh	Eighth
Model Implementation	66 (70)	73	9	1	12	5	30	38	32
Traditional Implementation	150 (56)	81	11	1	3	4	38	35	27
Control	67 (66)	70	27	1	1	1	18	63	19

CHAPTER 3

RESULTS

The current study used quantitative and qualitative methodology to evaluate the effectiveness of a peer victimization prevention program and to identify factors that influence program implementation and program effectiveness. Specifically, students completed self-report scales to provide information regarding rates of victimization and aggression, bystander empathy, victim resiliency, and school climate. One goal of the current study was to assess whether there were changes in students' responses associated with program implementation. That is, the study aimed to determine whether students at the Model Implementation condition school demonstrated greater changes in these variables at post implementation than did students at the Traditional Implementation and Control condition schools. A second aim of the study was to elicit teacher and student feedback regarding the AVB program and factors affecting its implementation and effectiveness.

This chapter will present results of the study using quantitative analyses to assess for differences in students' responses on self-report questionnaires and qualitative analyses to identify themes that emerged during student and teacher focus groups. First, information regarding teacher implementation of the program at the Model Implementation condition school will be presented to provide confirmation that the program was implemented with integrity. Following this, results of the quantitative analyses will be presented to address study questions regarding whether the AVB program resulted in changes in responses to self-reported questionnaires assessing bystander empathy, victim resiliency, and school climate, as well as involvement in peer victimization. The results of post-hoc analyses to assess for grade-level differences in post-implementation self-reported measures will also be presented. These analyses were conducted due to information provided during student and teacher focus groups that there

may be differences in student responsiveness to the program associated with grade. Finally, the chapter will conclude with a presentation of the major themes and categories that emerged during teacher and student focus groups.

Quantitative Analyses

Teacher Implementation

To ensure that the curriculum was implemented with integrity at the Model Implementation condition school, mean scores on the Program Adherence Rating Scales (PARS) were calculated and examined for both sets of observations. The average ratings along each PARS item are listed in Table 3-1. Overall, teachers exhibited the greatest deviation from program guidelines on the item addressing whether program elements were delivered according to the specified time range. There were no significant changes between observation one and observation two scores, except for the group participation item. Teachers were rated as demonstrating higher adherence ($t(21) = -2.247, p < .05$) to using and encouraging group participation at observation two ($M = 4.77, SD = .53$) than they were rated at observation one ($M = 4.36, SD = 1.09$). Despite small deviations from program guidelines, these results indicate that teachers demonstrated a high level of program integrity.

Student Questionnaire Data Screening

Student response sheets were visually screened for nonsense responses (e.g., “Christmas-treeing”). Those with obvious nonsense responses were discarded from analyses. Following visual inspection of the data, participants’ responses were screened to further identify any respondents with random data patterns. There were eight different validity check items throughout the survey that directed respondents to fill in a specific bubble for that item number (e.g., “Fill in bubble A for item 67). Participants who had two or more incorrect responses to check items were excluded from analyses.

Next, individual item analyses were conducted to identify any items needing removal from the data set. As Cronbach's alpha for each scale was calculated (results were presented in Chapter 2) each individual item loading was examined to determine whether removal of the item would largely affect the reliability of the scale. That is, each item was examined to ensure that removal of the item would not cause a substantial decrease in the scale reliability. No item demonstrated a disproportionate decrease in scale reliability, and so all items were retained in this step. Next, items on which more than 10% of respondents had missing data were examined to determine whether responses were missing systematically or at random. Item 20, related to physical aggression, was the only item with a disproportionate amount of missing responses. To determine whether to exclude this item from analyses or use mean imputation to replace missing values, an analysis was conducted to identify whether the item was Missing Completely at Random/Missing At Random or Missing Not at Random. This check followed the recommended procedures for handling missing data (McKnight, McKnight, Sidani, & Figueredo, 2007). On the pre-implementation questionnaire, 38 respondents excluded the item and 32 excluded the item at Post Test. A Mann-Whitney test was conducted to compare scores on all variables to determine whether students with a missing value differed from students who completed the item. Groups did not differ on any variables for either pre or post implementation missing values and so it was concluded that the item was Missing Completely at Random or Missing at Random.

Finally, mean imputation was also used to replace missing item values on all scales for which 20% or less of the items were missing. Means were calculated from the nearest four items on the scale to the missing item.

Demographics

The means on each pre-implementation and post-implementation measure by condition are reported in Table 3-2. In addition, Table 5 presents a correlation matrix depicting the

relationships between all pre and post implementation variables. Analysis of Variance (ANOVA) analyses were conducted to determine whether students in each condition differed from one another in their scores on the various scales at pre-implementation. There were significant differences in mean scores on the Self Blame for Victimization scale by condition ($F(2, 276) = 3.21; p < .05$). Tukey's post hoc test revealed that this difference was between students' responses in the Control condition ($M = 13.23, SD = 4.62$) and Traditional Implementation condition ($M = 15.28, SD = 5.99$). Students' responses in the Control condition indicated less self-blame for victimization at the pre-implementation survey point than did students in the Traditional Implementation condition schools. Furthermore, there were also significant differences by condition on the school climate measure, the CSCSS-SF ($F(2, 276) = 3.21; p < .05$). Tukey's post hoc test revealed that this difference was between students' responses in the Model Implementation condition ($M = 26.36, SD = 5.77$) and Traditional Implementation condition ($M = 23.81, SD = 5.79$). Students from the Model Implementation condition school indicated a more positive school climate than did students attending the Traditional Implementation condition schools. There were no other differences in mean scores at pre-implementation among the three conditions. Table 3-3 presents the correlation matrix for all variables.

Analysis of Covariance

Student self-report measure scores were assessed to determine if changes in scores on these measures were observed from pre to post implementation and to explore whether the magnitude of any changes were associated with the curriculum grouping (Model Implementation condition, Traditional Implementation condition, Control condition). Each participating student had two time points of data—pre and post implementation. Students who did not have data for both time points were excluded list-wise from analyses.

Overall, there were eight student self-report dependent variables from the post-implementation questionnaires: total victimization (VIC)—calculated from the victimization items from the RPEQ/CAV, total aggression (AGG)—calculated from the aggression items from the RPEQ/CAV, relational victimization (RVQ), symptoms of depression (CES-D), symptoms of social anxiety (SAS-A), Characterological Self-Blame for Victimization (SELF), bystander empathy (EMP)—measured by the Attitudes to Victims Scale, and perceived school climate (CLI), as measured by the CSCSS – SF.

A series of independent Analysis of Covariance (ANCOVA) equations were conducted to determine the relationship between curriculum condition and post-implementation scores on the dependent variables. ANCOVA analyses were used because they allow pre-implementation scores to be held constant in a regression equation. For each equation, the pre-implementation score on the specific measure was entered as the covariate and curriculum condition was entered as the independent variable.

Assumptions check

To ensure that the data for each ANCOVA analysis appropriately met the assumptions required for regression: (a) linearity; (b) conditional normality; and (c) homogeneity of variance, studentized residuals (standardized residuals divided by their standard errors) for each dependent variable were calculated and plotted against the covariate of each equation. The studentized residual plots of the Victimization and Aggression equations indicated a violation of assumptions and so the log transformation of each of the dependent variables were calculated and used as dependent variables to correct for the violations. Assumptions were appropriately met in the other ANCOVA equations and so no modifications to the data were required.

Victimization and relational victimization

Due to lack of prior research supporting changes in rates of peer victimization upon implementation of a prevention program, it was hypothesized that results would not demonstrate differences in rates of victimization (as measured by the victimization items of the RPEQ and CAV) or relational victimization (RVQ). Results supported this hypothesis. That is, no significant differences were found among conditions on the post-implementation log VIC scores after pre-implementation log VIC scores were entered into the analysis as a covariate, $F(2, 279) = 0.12, p = .89$. Similarly, no significant differences were found in post-RVQ scores among conditions after holding pre-implementation RVQ scores constant $F(2, 277) = 1.45, p = .25$.

Aggression

It was also hypothesized that there would be no significant differences among conditions on post-implementation aggressions scores (as measured by the aggression items on the RPEQ and CAV) after controlling for pre-implementation AGG scores. Consistent with this hypothesis, results of the ANCOVA failed to demonstrate significant differences among conditions, $F(2, 277) = 0.132, p = .88$.

Depressive symptoms

It was hypothesized that students in the Model Implementation condition would indicate fewer post-implementation depressive symptoms than students within the Traditional Implementation and Control conditions. An ANCOVA was conducted with post-implementation CES-D score as the dependent variable, implementation condition entered as the independent variable, and pre-implementation CES-D score entered as the covariate. The results did not support the hypothesis. No differences were found among implementation condition groups $F(2, 251) = 0.34, p = .71$. Because the CES-D was the last scale on the survey, there were several

participants with more than 20% missing data on this measure and so their total CES-D scores could not be calculated, leading to a smaller sample size than in the other analyses.

Social anxiety symptoms

It was hypothesized that students in the Model Implementation condition would indicate fewer post-implementation social anxiety symptoms than students within the Traditional Implementation and Control conditions. An ANCOVA was conducted with post-implementation SAS-A score as the dependent variable, implementation condition entered as the independent variable, and pre-implementation SAS-A score entered as the covariate. The results did not support the hypothesis. No differences were found among implementation condition groups $F(2, 268) = 0.29, p = .75$.

Self-blame for victimization

It was hypothesized that students in the Model Implementation condition would endorse less self-blame for victimization at post-implementation in comparison to students within the Traditional Implementation and Control conditions. An ANCOVA was conducted with post-implementation SELF score as the dependent variable, implementation condition entered as the independent variable, and pre-implementation SELF score entered as the covariate. The results did not support the hypothesis. No differences were found among implementation condition groups after controlling for pre-implementation SELF scores, $F(2, 271) = 2.44, p = .09$.

Bystander empathy

It was hypothesized that students in the Model Implementation condition would report more favorable attitudes toward victims than students within the Traditional Implementation and Control conditions. An ANCOVA was conducted with post-implementation EMP score as the dependent variable, implementation condition entered as the independent variable, and pre-implementation EMP score entered as the covariate. The results did not support the hypothesis.

No differences were found among implementation condition groups after controlling for pre-implementation EMP scores, $F(2, 277) = 0.36, p = .70$.

School climate

It was hypothesized that students in the Model Implementation condition would report more favorable perceptions of school climate than students within the Traditional Implementation and Control conditions. An ANCOVA was conducted with post-implementation CLI scores as the dependent variable, implementation condition entered as the independent variable, and pre-implementation CLI scores entered as the covariate. The results did not support the hypothesis. No differences were found among implementation condition groups after controlling for pre-implementation CLI scores, $F(2, 276) = 0.30, p = .97$.

Grade level influences on ANCOVA results

A final series of ANCOVA analyses were conducted after separating students' responses by grade level. Though this was not an original research question, teacher and students responses during focus groups suggested that there was a need to conduct post-hoc analyses to determine whether students in sixth grade demonstrated greater changes along self-report measures than did students in grades seven and eight at the Model Implementation school. Similar to the above results, there were no significant differences between post-implementation scales scores by condition at any grade level. The one exception to this was that difference in post-implementation scores by condition were for EMP scores among sixth grade students, $F(2, 85) = 3.54, p < .05$. Condition accounted for an 8% increase in explanation of variance of post-implementation EMP scores among students in 6th grade. Tukey's post-hoc analyses revealed that the mean post-implementation score for students in the Model Implementation condition ($M = 42.75, SD = 4.14$) significantly differed from students in the Traditional Implementation ($M = 38.34, SD = 6.97$), but not Control ($M = 40.67, SD = 5.45$) conditions.

Qualitative Analyses

Content analysis was used to identify themes in focus group participants' responses to topics posed by the moderator, using axial coding. First, the moderator, assistant moderator, and an additional member of the research team read and reviewed each transcript and independently noted emerging themes. Following this, the team met and agreed upon a list of themes. Next, two members of the research team again reviewed the transcripts and categorized each portion of transcribed data into one or more of twelve prescribed categories. Disagreements in coding were then discussed and coding was agreed upon. Each piece of text from the transcripts was then manually placed in its coded category and the text within each category was again reviewed to determine whether further subcategories and coding were needed.

Teacher Focus Groups

Four teacher focus groups were conducted—two with teachers in the Model Implementation condition and two with teachers in the Traditional Implementation condition. Refer to Appendix D to view the teacher numbers that correspond to each focus group. The goals of the teacher groups were to generate teacher responses along the following themes: (a) ease of and barriers to curriculum delivery; (b) observed student reactions to curriculum and overall program; (c) level of support from administration; (d) additional suggestions for peer victimization prevention.

In the first round of coding, three members of the research team agreed upon eleven coding categories that related to these themes. After the text was initially coded, it was subsequently re-examined to determine a need for further categorization or combining of categories. Two members of the research team then re-coded the text within final categories into subcategories using the same procedure as was used for the initial coding. Table 3-4 identifies the final

categories and subcategories. Each category/subcategory will be discussed in further detail below as it corresponds to the related elicited theme.

Curriculum elements: Facilitators and barriers to curriculum delivery

Teachers described several factors that facilitated and inhibited their ability and willingness to implement the program curriculum. The curriculum involved several elements for lesson delivery, including role playing, class discussions, homework, and completion of worksheets. Teachers were prompted to use scripts to ensure uniform delivery. First, the teachers named several components of the actual curriculum that were successful or unsuccessful. These included the use of role playing, distribution of homework assignments, use of scripts to ensure uniformity of delivery, and features related to the physical materials of the prevention program (e.g., handouts).

Overall, the teachers consistently indicated that they appreciated the incorporation of role playing exercises into the program curriculum. Several teachers pointed out that the role playing activities allowed children to become more engaged in the curriculum lessons and also allowed them to observe the actions and choices of aggressors, victims, and bystanders in a hypothetical situation. For example, a teacher from School 2 explained, “The kids seemed to like the role play—the interaction and the discussion,” and another teacher at School 3 stated, “Role playing was good, even by going overboard you could kind of watch the kids say, ‘oh wow, that looks stupid, we shouldn’t do that.’” However, a minority opinion regarding the use of role playing also emerged—that the role plays were too unrealistic and scripted for the students. Those holding the minority opinion emphasized that the role playing scripts were not representative of the way students speak and behave. A teacher at School 1 explained, “Rolling on...the role plays, I would throw out the scripts. I would set it more as a situation and let them...at 8th grade level. I don’t know about lower, but, I think the role plays need to be a little bit more

spontaneous.” In contrast, a few teachers explained that their students exhibited difficulties generating creative solutions to role plays and needed to rely on scripts. Teacher 9 stated, “The children, I found, unlike [Teacher 10], she has 7th graders...I don’t know how to put this kindly, so I’m just going to say it—in some of the role plays it called for some creativity that some of our children just, lacked the ability to do. And that’s as kind as I can say it.”

In contrast to the predominantly positive regard for the role playing activities, teachers repeatedly expressed negative feelings toward the incorporation of homework assignments into the program curriculum. The chief criticism regarding the homework assignments was that children failed to complete them and return them to school. Teacher 10 described her difficulty with the homework assignments, “And one other thing is homework. It’s a good idea for practice, kind of to reflect, but they don’t do it. Many times they didn’t even bring the paper back with them so we could do it together. That part just did not work.” Teacher 11 added, “Homework for a weekly basis thing is not going to work because they’re not going to keep up with it. Or they’re going to wait to the last minute because they’re going to forget to do it. One or the other.” Teacher 1 however, used incentives for students to return homework and remarked that this made the homework a positive element of the curriculum, “...and I would give them the homework, I kind of liked that too. I would give them a piece of candy for bringing it back because we, I would share their answers, and I kind of liked that too.”

Another program element that emerged as a topic of discussion during the focus groups was the use of scripts for the teachers to deliver the curriculum. Teachers who commented on the use of teacher scripts explained that they were too rigid and did not allow for freedom to be realistic with the students. Teacher 3 commented, “It was difficult to stick with the scripts. I know we had some freedom in it, but it still became difficult because it seemed detached from

where the kids were and what they wanted from it, so we ended up having conversations that sprang out of the ideas and the situations that were presented by the program.”

A final element of the program on which teachers consistently commented was the physical curriculum material, which included worksheets and homework assignments to be completed by the students. One theme that emerged within this category was the excessive amount of paper needed to deliver the program properly. Teacher 9 identified this as the most difficult barrier to program delivery, “I couldn’t use the handouts, I had to type quite a bit of it on the overhead for the children and they had to use their own paper, just—it would have taken 10 reams of paper, we calculated, so...I guess that was the most difficult part of implementing.”

Curriculum delivery: Facilitators and barriers to curriculum delivery

In addition to discussing specific elements of the curriculum, the teachers addressed topics related to the overall program delivery, including length/number of sessions, time of year to implement the program, and who should deliver program curriculum. The program consisted of 12, 50-minute sessions that were to be delivered by the students’ teachers. Teachers at the Model and Traditional Implementation condition schools began curriculum delivery approximately one and one-half months into the fall semester.

At every school, teachers commented on the length and number of sessions. Three general sub-categories emerged within this topic. First, many teachers explained that the individual lessons contained more information and activities than could be done in one 50-minute period. For example, Teacher 11 suggested, “It would be better in a two week chunk, maybe just a little bit shorter, actually shorter lessons in case you do get the ones who want to discuss more.” A second sub-category that emerged related to length and number of sessions was that there were too many lessons in the curriculum and that the number of sessions could be scaled back due to the repetition of the lessons. Teacher 9 stated, “If there was a way to combine some of the

lessons and make it a little bit shorter I think it would have been a little bit more effective because middle schoolers just...we lose them after a certain length of time." In addition, Teacher 15 explained, "As I was getting toward the end, I wish I had taken less time in the beginning and more time in the end. I wish I could have skipped 1-5 and just done the last half of it." Related to this, the final sub-category within the length and number of session topic was that the twelve sessions was too burdensome to take out of class time. This was a particularly strong theme from teachers at Schools 2 and 3, where the lessons were delivered during normal social studies classroom time. For example, Teacher 10 lamented, "Well, it took away from my class. Twelve weeks is a long time to take time out. I'm way behind now. I won't get through what I had planned for the year."

Another topic that continuously emerged during the focus groups related to the most appropriate time of year to implement the curriculum. Consistently, teachers indicated their desire to deliver the curriculum within the first two weeks of school. Reasons for this included that it would help establish a set of rules and expectations for behavior for the year, the curriculum would be less intrusive into regular lesson plans, and the topics would be developmentally appropriate for incoming sixth and seventh grade students. Teacher 13 recommended, "If we're going to do it again, I would suggest doing it the first two weeks of school. That's when they need it, especially 6th graders, before you get into curriculum. The first couple of weeks of school are logistical and housekeeping. That would be the perfect time." Additional suggestions were: "For the first five days of school, it might be good to set up the prevention program around classroom rules for the sixth graders to start it as a jumping off point for the school year," (Teacher 15) and "if you did consider that beginning of the year thing [7th

grade students] would be more receptive...Because they're really 6th graders at the beginning of the year," (Teacher 10).

Who should deliver the curriculum was the final curriculum delivery theme to emerge throughout the teacher focus groups. The majority of teachers that suggested someone else deliver the program identified guidance counselors as the most appropriately trained people. Teacher 9 explained, "I'd like to see our guidance counselors more involved in this. I know they can't do every lesson, but at least be more of a part of it." Additionally, Teacher 14 recommended, "Maybe if the person who wrote the book could come and teach it." Teacher 12 also suggested that someone else deliver the program curriculum, "All in all, I think the kids would have responded better to other teens. Perhaps you could train some key high school students, or young college students, to come to schools and teach other kids these skills. I didn't feel like the right person for the job."

Appropriateness of curriculum: Facilitators and barriers to curriculum delivery

Another set of topics that continuously emerged as barriers to curriculum delivery and achieving intended results were related to the appropriateness of the curriculum for students in middle school. The AVB curriculum was designed for students in grades six through nine. Teacher responses related to this topic were coded into two separate categories, academic skill level of students and developmental appropriateness of the curriculum.

Though the majority of teachers did not comment on the academic level of the material, a few teachers within the focus groups taught students with disabilities and identified that the materials were too difficult for these students. Teacher 2 described the difficulties she experienced with a remedial reading class:

Because with the lower level, I'm telling you people, it went on and on and on. We'd be in the third week trying to finish up lesson 6, you know? On the third week, my kids, you know, just struggling with the reading. And I read it, I would read to them, we would

discuss it, but then the vocabulary sometimes, they wouldn't understand. The vocabulary, or, um to make sure they were getting the point that you were trying to get across for those three or four children that are sitting in there.

In addition, another teacher (Teacher 6) working with a remedial reading class explained:

I had sixth through eighth in one classroom and they're exceptional children with learning disabilities. I found it difficult to present the material ...because they didn't understand the terminology. It wasn't ESE adjusted material for them.... I mean, if you have a worksheet, there maybe needs to be different levels of the same worksheet so that we can differentiate instruction...

Though only a minority of the teachers participating in the focus groups addressed concerns related to the academic skill level of the curriculum, the majority of teachers commented on the developmental appropriateness of delivering a peer victimization prevention program to middle school students. Nearly all teachers commenting on this topic expressed the need to implement a prevention program and teach the curriculum topics to children in elementary school. Teacher 4 stated, "As a former elementary teacher who taught first grade, I thought, 'Wow!' maybe the time to get to these kids would be kindergarten and first grade."

Teacher 5 also recommended that the program lessons be delivered in elementary school, citing:

Well, there is a culture of bullying or not bullying and elementary schools is a great place to start that. I taught elementary school before I came to middle school. And if we could deal with the kids before the 5th grade, where some of these would start acting out, it made a big difference in what happened as they moved on. And so I got to see that, you know, what happened and I got to feel that environment in two different places. So I think starting early as possible helps.

Beyond recommending the program in elementary school, some teachers went further to state that elementary school would be the ideal time to reach children because middle school is too late to teach the program lessons. Teacher 11 supported this argument, "The students, by the time they get here, they're already set in their ways. They have so much already with the changes and stuff that they could be taught to control themselves no matter what comes up before they reach that transition stage into the 6th grade."

A minority of the teachers commented on the timeliness of delivering the curriculum to students in middle school, particularly to students in the sixth grade. Teacher 13 stated:

The 6th graders bought into the bystander part of the program, because they didn't realize that the bystander played a part in the conflict at all. They just didn't realize how much they affected the outcome of a situation. As sixth graders, they can relate to doing something in mass. They have a hard time doing things on their own because they're scared to death because their response is to slink away so they don't get sucked into the fight unless they're the aggressor. Most of them can buy into that bystander part real well and they don't realize what kind of effect they can have.

Teacher beliefs: Facilitators and barriers to curriculum delivery

A final set of topics that teachers identified as either facilitating or impeding their ability and willingness to implement the prevention program were related to overall teacher beliefs.

Included in this broad category were the following sub-categories: (a) teacher buy-in; (b) congruency between personal beliefs and program lessons; and (c) personal beliefs about the factors that affect peer victimization.

Teachers identified personal attitudes that affected their willingness and enthusiasm to deliver the program curriculum—buy-in. Negative attitudes affecting teacher buy-in were expressed by all three teachers at one of the Traditional Implementation conditions schools (School 3). Teacher 14 indicated her lack of buy-in with the statement, “I was unhappy—livid that I had to do this,” and explained that it affected her behavior, “I was really dragging my feet in the beginning. It didn't bother me as much at the end. I was very stubborn. I didn't take the [curriculum] home and read it. I didn't spend any extra time on it.” The teachers cited a lack of belief in the utility of prevention initiatives as affecting their buy-in. Teacher 15 stated, “This is a topic better left untouched, until it needs to be touched,” meaning that she did not accept a need to prevent peer victimization. Instead, she later indicated that schools need to provide discipline after peer victimization occurs. Another teacher from the same school (Teacher 13) stated similar beliefs, describing that she was “not a happy camper” and continued, “I'm probably the worst one

to teach this. I don't believe you're going to prevent a bully from bullying unless you go home with them."

Associated with buy-in, teachers at School 3 (one of the Traditional Implementation condition schools) indicated a strong lack of congruency between their personal beliefs and the goals and lessons of the prevention program. They further explained that this affected their delivery and enthusiasm of the program. Teacher 15 remarked, "I didn't feel like it was *me* talking. I don't have kids, but I didn't agree with the approach. The kids could look at my face and see that I didn't agree with the approach. I couldn't look them in the eye because it didn't make sense to me."

In contrast, teachers from the Model Implementation condition school expressed positive buy-in to the program. Teacher 3 commented, "I was glad to have the program here at school, I'm glad we're addressing it because it is a problem, bullying is a problem," and Teacher 7 explained, "I liked the program...I actually really enjoy getting to talk to the kids about bullying." Furthermore, teachers at the Model Implementation condition school expressed beliefs in the utility of prevention programs:

Of course, we like to think, as teachers, as educators, that we are planting seeds. Don't we like, and we wonder sometimes, maybe we don't get to see the fruit or the bloom or whatever, but we do sometimes feel that maybe things you say at some point, do come, maybe, especially the kids that think. I know that many kids in that class, many of them did think about that stuff, (Teacher 4).

Teacher 1 added, "If you can save two or three, if you can reach out and support those, then you're not only helping to be part of the solution to the bullies, but also, utilizing these materials that are built to support bystanders and victims, and especially the victims. It's hard to stand up and say you're a victim."

Finally, teacher beliefs about the factors influencing peer victimization emerged as a recurrent theme throughout the focus groups. Beliefs about the factors influencing peer

victimization may serve as facilitators or barriers to program delivery and outcomes because they reflect teachers' opinions regarding their ability to alter students' attitudes and behaviors. First, teachers expressed their beliefs about the individual factors that influence children's engagement in peer victimization. When discussing the reasons students participate in peer victimization, a few teachers attributed behavior to normal adolescent development. Teacher 15 stated, "When we came to that part of the lesson with the rumor, they all wrote these horrible things about these rumors 'she does it with her brother'. I realized this is what's mostly on their minds, this kind of stuff. I think that's the nature of teenage girls to be like that." Teacher 4 also discussed the nature of students in middle school, stating, "By middle school, they're kind of hardened, and it's very difficult to get them to change their attitude...I could see it wasn't reaching them, no matter what I said." Alternatively, some teachers also discussed factors that caused students to be victimized, "I think that it's size...But it's also the children that are not able to fit in socially. It's the children with exceptional needs...those children are targets because they don't know how to socially interact," (Teacher 6). Teacher 7 also commented on student involvement as both bullies and victims:

What I see is that a lot of the students that are doing the bullying are the ones that don't care about their school work or who can't do their schoolwork, so they act out in other ways to the ones that are caring about their schoolwork...But the ones that want to sit there and do their work seem to be targets at times too. Where the ones that seem could care less about their work, they're the ones that's doing the bullying.

Second, they attributed some school factors to peer victimization. One teacher at School 3 attributed engagement in peer victimization to program exposure, "they wouldn't have thought of a lot of these things unless we were talking about them," (Teacher 13). Teacher 2 argued that schools should be involved in teaching children social skills and peer victimization skills, even from an early age:

I am a parent of a third grader who asked me the other day, "Momma, how come we don't get social studies?" actually asked me that, and I said, I don't know, I used to teach it in second grade. I taught second grade for nine years, and I taught social skills all the time. And when I moved to middle school, I couldn't believe the same social skills that I was having to teach. They didn't learn back then, uh, excuse me, follow directions, that's the *rules*, be kind to one another, you know, don't talk when somebody else is talking, listen to them, show respect for their conversation.

Teacher 1 also lamented that a lack of schools teaching social skills contributes to the peer victimization problem:

Don't you feel though, that the last eight years has been testing, testing, testing...In elementary school, what is missing that used to be there? Social studies. We taught group behavior, we taught socialization, we taught community, we taught, the pledge of allegiance, we taught to be a good citizen. By the time they were in fifth grade, they had a good idea about having a sense of community within a school, and I think that by elaborating on all these other things in social studies, but it's not [standardized] testing...And you know, everything is geared around the [statewide standardized test]. We are missing social studies, a sense of community, a sense of family, a sense of morality, a sense of right and wrong, and empathy. Empathy is taught...and social studies shows them that...We don't have social studies anymore, it's not taught, and we have many families where the discipline is not there, and we can't fix families. When these kids are younger they really want to please, and if its taught like it should have been I don't think we would have seen this new group of disrespect, uncaring and not being able to see another person's point of view.

Finally, the teachers identified factors within the home that affect student involvement.

Teacher 13 indicated her beliefs that children learn to be aggressors because of value systems instilled in them at home, "They watch their parents do it. This is the way it is in these rural poor communities." Teacher 2 also cited parents as responsible for their children's aggressive actions, "A good parent participates. A good parent is concerned about their child having a bully problem or an anger problem, yes. But the parent where that's where the kid learned it, then that parent is going to say, 'I ain't going to that, they're crazy, what are you talking about? My kid is just doing what I told them to do.'"

Positive student responses: Responses to prevention program

A second goal of the teacher focus groups was to elicit information about the changes that teachers observed in student behavior. Teachers made several comments regarding observed changes in behavior. The majority of teachers noting changes described positive changes in behavior, though usually with only a specific group of children. Teacher 3 described this breakdown in student responses:

What I found to be difficulties were having children who pretty much are bullies in the class with the students who could really benefit from the program. And the students who wanted to participate. My fourth period class is a small group, but they're very polarized. They fit into one group or another, and there's no mixing with those kids. And it was an uncomfortable situation for some of the more timid children to participate in the activities, because they knew there would be a repercussion...They were just afraid of being truly expressive. Sometimes it worked, sometimes there were moments of glory. I was like, 'Holy cow, this is working, this is great!' But most of the time, it was, um, difficult. And I think some of the conversations we ended up with were fantastic but in that group, I don't know how much of an impact it had. I could really see it working with other kids, but with that mix it wasn't working.

Positive aggressor and victim responses: Responses to prevention program

No teachers at any school described changes in the behaviors of aggressors. Only one teacher (Teacher 6) specifically noted victims' positive responses to the program:

And a lot of the victims in my class were, have become a little bit more vocal, you know, 'You need to quit doing this to me, you're picking on me.' Or you know, where they normally they would be, you know, quieter. They were being more vocal about it in the classroom. And, you know, were able to address as a class, you know, you need to, 'Why are you doing this?' And so the class was more aware of it.

Positive bystander responses: Responses to prevention program

The majority of the teachers who noted changes in students' behaviors and attitudes noted that the children who were bystanders, not aggressors or victims, were most affected by the program. Teacher 4 said, "I think that the kids who actually do get bullied, I didn't see much change in them. I saw more of the empowerment for the kids who see it, or observe it or are around and see these... You're helping giving them skills, you're giving them ideas, and you're

giving them discussions of issues. So I felt they were helped to a certain extent.” Teacher 5 also described changes in bystander attitudes, “I think I saw more of an awareness on the not-so-innocent bystanders. What we call the ‘pot-stirrers.’” Another teacher (Teacher 9) at School 2, a Traditional Implementation condition school, cited a specific example of a bystander intervention that he witnessed and attributed to the prevention program:

I was at the roller rink with the kids—we were taking them on some sort of reward day and there were some students getting crossways with each other and by the time I got over there I had kids that had already intervened and had already stopped the situation. They said to me, Mr. X, we remembered what we learned and we kept our cool-heads, and not only that, we were also realizing we couldn’t just stand around. But they literally stopped the fight. And to be honest with you, I’ve seen that on more than one occasion. And the kids will actually say I’m keeping the cool-head about being actively involved in helping others settle their problems. So I have to see something work. If it didn’t come out of the classroom and make a difference in their real world it’s not worth the time doing it. But to see this working, in real life—which I was surprised—and even the kids were talking about, you know, they remembered. And I bragged them, you were so good to remember to keep a cool-head. You solved your problem even before I got here. So that, you know, if that is one of the goals of this program it did succeed.

Negative student responses: Responses to prevention program

Though the majority of teachers, especially those at the Model Implementation condition school described small, but positive changes among some groups of students, other teachers also indicated some undesirable changes or lack of student behavior changes. Teachers from School 3 expressed that students did not like the program and that the teachers only observed negative changes in student behaviors. These changes included an increase in the number of school fights, which they attributed to the prevention program curriculum. For example, Teacher 13 noted, “Three days after I started teaching [the program curriculum] we had our first fight of the year, because it was right in the front of their mind.” The same teacher also stated, “they enjoyed the skits because it let them pretend they were fighting. They wanted to be the ones standing on the side yelling, ‘Fight, fight.’” A teacher at School 2 expressed disappointment due to a perceived lack of student response, “I was especially disheartened when one of the students told me this,

‘We know the right choice. We can tell you what's right, but do you really think we will choose to do...?’ I can only hope that my students will remember a few suggestions if they decide fighting isn't worth it. I especially hope that students understand the major role of a bystander.”

Administrative support

A third topic on which teacher thoughts were elicited during focus groups was related to perceptions of administrative support and perceived administrative barriers to implementation and intended results. Teachers cited two predominant administrative issues that served as barriers to quality implementation. First, two teachers explained that a lack of advanced notice regarding implementation of the program lead to difficulties with program preparation. Teacher 14 verbalized this difficulty, “Not giving us any notice made it even harder. If we knew over the summer, we could do it better.” Teacher 5 also identified lack of ability to sufficiently prepare as a barrier to implementation:

There was an issue with the implementation because most of us had thought that it was going to start at a certain time and they actually started weeks ahead and we weren't ready for that. It was just like Boom! There it is. We had already planned on doing it and planning is a big issue for use. Things have to happen in a certain sequence. We tend to plan weeks ahead in terms of these special kinds of things. So that was an issue.

A second administrative barrier that emerged during teacher focus groups was failure to implement consistent consequences for aggressors. Teacher 13 explained, “If administration had more consistent discipline, there wouldn't be large scale problems...If the little things were taken care of, they wouldn't be big things.”

Curriculum: Prevention program enhancement

The fourth and final goal of the teacher focus groups was to elicit teacher suggestions for prevention program enhancement. The teachers' comments to this theme were coded along several categories. First, two categories related to suggestions for the program curriculum. One sub-category of suggestions involved writing down true experiences to facilitate role plays and

class discussions. The teachers at School 3 recommended that students journal their peer victimization experiences. For example, Teacher 14 suggested, “sixth graders should keep a journal of anytime they get bullied in the first two weeks that they weren't expecting, that would be a jump off for some discussions of what's going on.” Teacher 5 at School 1 also recommended that students write about real-life experiences instead of using the scripted role plays, “There were a couple times that I actually had them sit in groups and rewrite. I would say, ‘Okay, rewrite these how you think they would go in a normal way.’ And so instead of standing up and acting it out they were actually working and that was to vary the format somewhat.”

A second category of suggestions to improve the curriculum involved the incorporation of reality into the curriculum through media sources or personal recollections of peer victimization experiences. Teacher 4 advised, “It might be nice to incorporate reality to this. Actual real events that happened, those real events that happened, really grabbed my kids.” Teacher 2 agreed, “Yes, the real world stories. I shared mine with every class.” In another focus group at the Model Implementation condition school, Teacher 7 also suggested that video clips and articles be used to facilitate discussions about real-life events, “But if they could have had a little bit more reality....If we could have a little bit more of the reality, maybe articles or things like that, video clips.” Teacher 8 further proposed that adolescents or adults visit the classes and share their past victimization experiences with the students, “If you could get people that could give testimonials, like witnesses, or you know, that had particular situations that they could share with the students, whether it be peers or grownups, in addition to the audio-video we mentioned already. I think that could have been set-up.” Teachers at School 2 also indicated a desire for more real-life events to be incorporated into class discussions. Teacher 9 suggested that the

relationship between highly publicized school shootings and peer victimization be presented to students:

I think a tie-in, something that could be included—and this is graphic, but it's happening. It just recently happened...they find that a lot of these kids that are bullied are the same ones that are coming and shooting others. You know, I don't know if that was included much within the thing, but we did talk about that. You know, guys, you can do this if you want to, you can take advantage of what you perceive to be a weaker person, if you want to, but there could be some very serious consequences down the road. When they bring the gun to school they usually shoot the one that was the worst bullier.

School: Prevention program enhancement

Teachers also provided several recommendations for additional prevention program elements that could be conducted at the school level. The two major categories that they discussed involved use of discipline and implementation of counseling groups for students involved in peer victimization.

When discussing implementation of discipline strategies, teachers focused on providing more consistent consequences to students who perpetrate peer victimization. The majority of teachers provided suggestions in which the school could legally and ethically engage. For example, Teacher 14 described a novel approach that she used to provide discipline to students. Working with the student council, the teacher arranged for an ice cream party for all children in the school who did not receive discipline referrals (including those who received referrals for peer aggression). Teacher 6 also described the need for a more comprehensive school behavioral plan, especially for students who engage in peer aggression:

I don't see much results coming from when we refer someone for bullying, I don't see an end result. I don't see a consequence. I see the same students doing the same things over and over again and then when things are reported, well, they'll talk to them and then, you know, it's...There needs to be some kind of discipline system put in place that reinforces this program. Because children are not going to want to report being bullied if that person is not going to feel intimidated by being disciplined and they're not going to stop. I had a student tell another student, you know, "snitches get stitches." And that child, because, he had told on him before, and he didn't—nothing happened. Actually, it got

worse...so...there needs to be something, some consequence, and maybe some ongoing group counseling or something to make a change. Otherwise, it's not going to stop.

The second predominant sub-category of suggestions for school-level intervention enhancement involved the use of counseling groups for children involved in peer victimization. This group of suggestions came from a focus group at the Model Implementation condition school. Teacher 2 proposed:

It seemed to me, that, and I don't know, the school would probably think this is the stupidest idea in the whole world, but I truly believe that this program, for an after-school program, looking at building it into especially the victims. I think the victims would be much more open, much more supported and much more empowered if they could have their own group. If they could really talk about it and work through this program in that way. Secondly, I think bystanders are those kids that are on the fence. I think that's another kind of grouping that kids who are more, not more verbal, but who are being torn back and forth: 'Well, I stand up and sometimes I don't.' That might be a whole other group. I think the guidance counselors should be looking at working with some programs and incorporating as consequences for some of this bullying behavior, required after-school, not detention, but required participating in a five week or a ten week or a whatever after school here. Look at that for something which gives us an additional tool for bullying behaviors and would actually target those kids to actually work on things that they could talk about and we would have a pair of teachers to work together to maintain order, maintain respect for each other within it, because bully on bully, you'll see a lot of that there...I would like to see something incorporated like that, rather than during the day instructional time.

Building off Teacher 2's recommendations, Teacher 4 suggested that parental involvement be incorporated into the proposed counseling groups:

Now, if you were to do middle school, I think separating them out is good. Basically, the kids who are having bullying issues should get more intensive help, and I think after school is a good option. If kids are having problems in bullying areas, it would be wonderful if you could even try and involve the parents, and making it as a consequence for bullying. If your child is having issues with this, we are offering classes to deal with this issue. There are anger management classes, parenting classes.

Home and community: Prevention program enhancement

The final recommendations for intervention enhancement were categorized as home/community involvement. Teacher 8 proposed:

You might also want to target the community. Community centers. Like, local churches, or outside of church communities. We've already mentioned parents. These areas, I want to say buildings, or, we think of church when we think of community center. That do have an outlet for young people, children, youth, that perhaps [this] program could approach them as well to see if they can make an effect upon these children. Um, so that they'll be targeted from all and many ends as possible...And I think they would want to do it because, you know, they have the same problems by what we hear already.

Student Groups

The goals of the three student focus groups were to generate student responses along the following themes: (a) overall reactions to program; (b) observed changes in peer behavior; and (c) additional suggestions for peer victimization prevention and intervention. Refer to Appendix D to view the student numbers that correspond to each focus group. In the first round of coding, three members of the research team agreed upon five coding categories that related to these themes. After the text was initially coded, it was subsequently re-examined to determine a need for further categorization or combining of categories. Due to the small amount of text within each category, it was deemed that no further sub-categorization was necessary, thus there were five total coding categories for the student groups. They are presented in Table 3-5.

Thoughts regarding the curriculum

All students participating in the focus groups expressed positive reactions to their involvement in the prevention curriculum. When asked whether they would recommend that it be implemented the following school year, no students said no. Instead, Student 2 said, "I say yes because some of the kids in 5th grade that are coming over here, they probably used to pick on kids in the lower classes. But when the bullying program comes they probably learn that they were doing wrong and not good."

In response to the moderator's prompt to provide their opinions about the program, students identified several portions of the program that they enjoyed. Referring to the incorporation of role plays, Student 2 stated, "I liked that, how you got to actually solve the

problems and stuff in it as if you were the adult.” Student 10 also commented, on the role playing activities, “Our class especially enjoyed, uh, the, uh, where we played it out, we had a lot of fun doing that. And you just, when you have something like that, you just take what you have and you make the best out of it, and you try to make it fun to where everyone is learning in a fun way.” Student 7 also commented on the helpfulness of the role plays, “I think half of the school liked [the program], because most of them, when they heard about the scripts and other things that were involved in it, they some of them volunteered, and they made it seem funny and helpful.” Only one student (Student 8) noted a dislike for the role plays, though the student indicated an overall favorable opinion of the curriculum, “Uh, we liked the uh, most of all, we liked the discussions and stuff, does that help? Uh, the uh, role playing was kind of hard to get into, because some of the things were kind of dumb, but, uh, it helped.”

When asked about their general impressions of the program, the seventh grade group of students (all from one classroom) indicated that the program had a slow start and was initially difficult to understand. Student 9 reported, “I thought it was like, hard at the beginning, and I didn’t really get it, but after three or four sessions I started understanding it and I started liking it.” In addition, another student (Student 7) explained, “I liked it, because like, I could understand most of it, but when they started handing out the homework, I started understanding it more.”

Perceived changes in student behaviors and attitudes

The moderators elicited students’ opinions as to whether the program produced changes in the attitudes and actions of aggressors, victims, and bystanders. Student responses to this question were mixed. Some students indicated that they were personally victimized less frequently or engaged in aggression toward others less frequently. For example, Student 2 reported a reduction in the experience of peer victimization, “I feel that [the program] helps, it

helps a lot of the students including someone that used to pick on me a lot. After they heard the bullying program.” Additionally, Student 3 reported that the curriculum helped reduce personal involvement in peer victimization, “I used to pick on people when I was in elementary, but I don’t do it anymore because of the bullying session and I realized that it hurts other people’s feelings when you pick on them.” Student 5 also reported a similar revelation, “...it helped me like see like, I should or should not do,” and further indicated that the program decreased personal peer victimization.

However, the majority of students did not indicate changes in the attitudes and actions of other students. Student 3 stated, “it didn’t work because a lot of people, like, call people names, and they didn’t stop calling people names.” When asked whether the program increased the likelihood that other students would intervene in peer victimization situations, all students in the sixth grade group reported that they did not observe changes in bystander actions. In response to a question regarding whether the program led to a decrease in rates of peer victimization among peers, Student 7 described, “Actually, um, maybe a moderate amount, but it’s still, um, going around. I’ve seen the students do just as their old ways. Like instincts, but bad ones.” In addition, Student 9 indicated that though the program may have helped empower victims, the aggressors may have responded with more aggression. The student described that the program, “made [victims] feel better, and made them feel more confident, but after bullies hear about it, they’ll just get worse and worse and the victims get beat worse.” Finally, Student 10 summed up the different observations with the comment, “I think that it just depends on the person and if they wanted to pay attention to it, then it would help, and if they didn’t want to pay attention and they didn’t care at all, then they would still do whatever they felt like.”

Beliefs about ability to change student behaviors

Another category that continuously emerged throughout the three student focus groups was the students' beliefs about the ability of adults to change the behaviors of aggressors and bystanders. Overall, students indicated that a prevention program curriculum is not likely to affect the behaviors of aggressors. Student 1 explained, "People would still [engage in peer victimization] because they think they're cool and they think that makes other people like them," and Student 10 commented, "I don't know how much you can really do in a situation where there's bullying going on because you can do things but if the person still chooses to do it, they're going to do it no matter what." Some students also indicated their beliefs that peer victimization is a normal, developmental process. According to Student 6, "It's just like a natural middle school thing" and Student 9 stated, "I think that bullying is just, I'm not saying it's a good thing, but it's just a natural order, like animals fight other animals. It's just a way of order."

The students also provided reasons for resistance experienced by bystanders to intervene and defend victims. One student cited fear that intervention would harm social relationships, "Because they think the other person won't be their friend anymore and then they will get into an argument," (Student 1). Other students indicated fear of being picked on as a reason for avoiding intervening in peer victimization or reporting it to a teacher. Student 2 explained that bystanders "are also afraid because maybe that the bully would come after them next for telling about what he's doing to the victim." Student 5 also mimicked this belief from an aggressor's point of view. In response to the moderator's question, "What do you think would happen if [someone] stepped in ...?" the student replied, "Well then, I, uh, change the target to the person who's uh, trying to intervene." Student 9 also indicated a belief that aggressors would increase their engagement in peer victimization with more victim empowerment, "It's just that the bullies are attacking the victims because they think that they're all like confident, so they're weaker."

Description of peer victimization at school

The moderators elicited students' comments regarding the nature of peer victimization at their school to determine the extent to which the current program was relevant to the school climate and to identify any future areas for intervention development. The majority of students indicated that the predominant forms of peer victimization that occurred at their school were relational victimization in the form of gossip and overt victimization in the form of teasing and name-calling. Student 8 stated, "a lot of name calling, or, that's mostly what you hear going around... as soon as the teacher leaves the classroom it gets thrown around, you go into the halls, it gets thrown around," and Student 10 described, "Well, if people don't like other people, they usually call them names and spread rumors about them. Then, when people get word of it, they usually keep spreading it and it goes around to the whole school, to where everybody is messing with the person that the rumor's about.

In contrast, according to the students, physical forms, such as intimidation, and cyber forms of peer victimization were significantly less common. Student 9 explained, "There used to like, in school, there used to be people slamming people against lockers and saying, like, give me your money, give me your lunch money and stuff, now there's not very much of that, I don't even think I've ever seen that in the school, but. Now there's more like, name calling...a lot more name calling and just plain out pushing around." One student explained that relational victimization occasionally elevates to physical fighting, "That's what probably causes all the fights. Rumors," (Student 1).

The students also identified the primary setting in which peer victimization most frequently occurs. They explained that settings in which there are less adults to observe peer victimization and intervene are the most common places that peer victimization occurs. These

included the bus, hallways, and lunch room. Student 9 clarified, “as soon as the teacher’s gone it starts happening.”

Ideas for intervention enhancement

The final category of comments that students provided during the focus groups were related to students’ ideas for prevention and intervention enhancement. That is, the comments were in response to the question, “What else can teachers and school do?” First, one student indicated a need for greater teacher supervision, especially in areas where peer victimization is likely to occur, “I think they should start letting teachers, like, well, they should put more of them on hall duty, in the hallways, outside the hallways and on the sidewalks,” (Student 7). Student 9 also supported this suggestion, “Like, take your, if you’re going somewhere, not like lines, but make it so they go there as a class, because I don’t like lines. But, take them as a class like to the lunchroom and the library, wherever they’re going.”

The most consistently recurring theme to increasing the effectiveness of prevention was the provision of consequences for peer victimization and positive reinforcement for students who do not engage in aggressive behavior and for those who take steps to defend victims. For example, Student 4 indicated a need for a revised discipline code, “They could make different rules and add new rules to it because people sometimes don’t follow all the old rules, but if there’s new rules I think maybe people would listen to it.” Student 1 also indicated a need for “better punishments...maybe not just getting a warning.”

In addition to revising the discipline policy to provide more consistent and severe consequences for aggressors, the students also suggested that a policy be drafted to encourage bystander interventions. Student 1 suggested, “Sort of like student 4 was saying about the rules, I think they should, maybe if you do, better things, uh, not get into trouble as much, have more like, more, I forgot what the word is, where you can get rewards. More rewards...” Student 6

explained that students' actions will not change "unless, uh, like they do something to like, uh, reward people who um, have like a clean record or something, or increase punishment or something."

Table 3-1 Mean teacher scores on the Program Adherence Rating Scale at observations one and two

Item	Observation One Mean (SD)	Observation Two Mean (SD)	Total Mean (SD)
Each component was delivered according to the specified time range	4.32 (.72)	4.23 (1.07)	4.27 (.80)
Group participation was used, as specified, and encouraged by the teacher	4.36 (1.09)	4.77 (.53)*	4.57 (.75)
Student products (e.g., homework) were assigned and collected as designated	4.77 (.53)	4.86 (.35)	4.82 (.29)
Focus was directed and maintained toward appropriate lesson objectives	4.86 (.47)	4.82 (.50)	4.84 (.32)
Total Score	18.32 (1.96)	18.68 (1.96)	18.50 (1.66)

*Mean group participation score significantly increased from time one to time two, $t (21) = -2.247; p < .05$

Table 3-2 Means and standard deviations on student questionnaire scales by condition

Scale	Model Implementation Condition		Traditional Implementation Condition		Control Condition	
	Pre	Post	Pre	Post	Pre	Post
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
VIC	19.68 (6.63)	19.09 (6.54)	18.86 (5.22)	18.32 (5.43)	18.38 (4.25)	18.08 (5.45)
AGG	16.75 (3.89)	16.58 (4.67)	18.10 (5.91)	17.66 (6.67)	17.33 (4.10)	16.71 (4.28)
RVQ	13.32 (5.76)	12.92 (5.21)	13.44 (5.00)	12.27 (4.84)	13.06 (5.16)	12.82 (4.82)
CES-D	39.39 (11.74)	39.65 (11.01)	41.22 (11.56)	40.52 (11.13)	38.31 (10.87)	38.67 (9.69)
SAS-A	40.23 (15.42)	37.55 (15.19)	40.07 (14.66)	38.87 (14.47)	39.31 (16.65)	37.17 (14.36)
SELF	13.99 (6.31)	13.52 (5.83)	15.28 (5.99) _a	14.61(5.46) _c	13.23 (4.62) _a	12.19 (4.82) _c
EMP	40.77 (5.90)	40.25 (6.84)	38.99 (6.58)	38.44 (6.93)	39.40 (5.87)	39.20 (6.92)
CLI	26.36 (5.77) _b	23.82 (6.96)	23.82 (5.79) _b	22.91 (5.86)	24.24 (4.74)	22.90 (6.22)

^acPre and Post-implementation SELF scores differed among the Traditional Implementation and Control conditions; ^b Pretest CLI scores differed among the Model Implementation and Traditional Implementation conditions

Table 3-3 Correlation matrix of pre and post implementation scale scores

		Pre-Implementation Questionnaires							Post-Implementation Questionnaires								
Post- Implementation Questionnaires	Pre-Implementation Questionnaires	VIC	AGG	RVQ	CES-D	SAS-A	SELF	EMP	CLI	VIC	AGG	RVQ	CES-D	SAS-A	SELF	EMP	CLI
	VIC	1															
	AGG	.36*	1														
	RVQ	.68*	.33*	1													
	CES-D	.44*	.29*	.57*	1												
	SAS-A	.35*	.02	.46*	.53*	1											
	SELF	.24*	.00	.34*	.28*	.41*	1										
	EMP	.04	-.30*	.07	-.04	.12†	.07	1									
	CLI	-.08	-.34*	-.05	-.16*	.09	.08	.33*	1								
	VIC	.53*	.28*	.57*	.43*	.31*	.22*	.01	-.04	1							
	AGG	.21*	.67*	.24*	.24*	.05	-.04	-.29*	-.21*	.36*	1						
	RVQ	.50*	.21*	.63*	.47*	.35*	.32*	.06	-.04	.70*	.27*	1					
	CES-D	.35*	.33*	.41*	.64*	.36*	.18*	-.11	-.10	.49*	.31*	.52*	1				
	SAS-A	.29*	.04	.40*	.49*	.68*	.35*	.09	.07	.46*	.06	.50*	.53*	1			
	SELF	.18*	-.04	-.04	.23*	.34*	.42*	.03	.01	.31*	-.06	.33*	.23*	.41*	1		
	EMP	.00	-.38*	-.38*	.01	.15†	.04	.63*	.23*	.00	-.35*	.05	-.16*	.12†	.02	1	
	CLI	-.02	-.28*	-.28*	-.14†	.04	.01	.32*	.38*	-.06	-.24*	-.07	-.24*	.01	-.01	.52*	1

Table 3-4 Teacher focus group categories and subcategories

Theme	Category	Subcategory
Facilitators and barriers to curriculum delivery	Curriculum elements	1. Role playing 2. Homework 3. Scripts 4. Physical materials
	Curriculum delivery	5. Length/number of sessions 6. Time of year 7. Person to delivery curriculum
	Appropriateness of curriculum	8. Academic skill level 9. Developmental appropriateness
	Teacher beliefs	10. Teacher buy-in 11. Congruency between beliefs and program lessons 12. Personal beliefs about the factors that affect peer victimization
Observed student reactions to curriculum and overall program	Responsiveness to program	13. Positive student responses 14. Negative student responses
Level of support from administration	Administrative support	15. Administrative support
Additional suggestions for peer victimization prevention	Curriculum	16. Written experiences 17. Incorporation of reality
	School	18. Discipline policies 19. Counseling groups
	Home and community	20. Collaboration with home and community

Table 3-5 Student focus group categories and subcategories

Theme	Category	Subcategory
Overall reactions to program	Thoughts regarding the curriculum	1. Thoughts regarding the curriculum
Observed changes in peer behavior	Perceived changes in student behavior and attitudes	2. Personal changes 3. Changes in peer behaviors and attitudes
	Beliefs about ability to change student behaviors	4. Adults' ability to prevent peer victimization 5. Factors influencing resistance to behavior change
	Description of peer victimization at school	6. Types of victimization 7. Settings where victimization occurs
Additional suggestions for peer victimization prevention	Ideas for intervention enhancement	8. Provision of consequences and positive reinforcement 9. Encouragement of bystander interventions

CHAPTER 4

DISCUSSION

There is a growing recognition in education that school safety should be a priority, as some of the most significant problems facing students are violence and peer victimization (Crockett, 2003). In recognition of this need and in response to a growing number of legislative acts mandating that schools address issues of peer victimization (Srabstein et al., 2008), school psychologists have recognized that they have the opportunity to play a key role in preventing social problems, such as peer victimization, that interfere with students' ability to learn (Dawson et al., 2003). One way that school psychologists work to prevent psychosocial and academic problems is the implementation of school wide programs to prevent peer victimization, such as the Aggressors, Victims, and Bystanders (AVB) program (Slaby et al., 1994).

Though many programs exist to address peer victimization, effectiveness trials have failed to demonstrate that the programs reduce rates of peer aggression and victimization in American middle schools (Merrell, Geuldner, Ross, & Isava, 2008). While issues related to implementation integrity may contribute to this inability to detect meaningful effect sizes (Mihalic, 2002), it is also possible that effectiveness of programs is measured along inappropriate constructs, which are predominantly influence by the attitudes and actions of aggressors. In contrast, programs such as the AVB program, primarily focus on providing skills to victims and bystanders. Therefore, the aim of the current study was to extend research in peer victimization prevention by examining the effectiveness of the AVB program at altering victim resiliency, bystander empathy, and school climate, while taking steps to promote implementation integrity. The purpose of the study was twofold: (1) to use quantitative techniques to assess treatment-level differences in students' changes in responses at pre to post implementation survey points; and (2) to gather qualitative data through student and teacher focus groups to further understand

reactions to the prevention program, barriers to implementation, and suggestions for intervention enhancement.

A considerable strength of the study was that individual student data was collected at two points to track individual student changes over time, and not just group mean changes in overall student responses within a school. The qualitative data from the teacher focus groups served to triangulate the quantitative results of the study by helping to identify successful features of the prevention initiative and more problematic features that potentially served as barriers to achieving intended changes in student behavior and attitudes. The qualitative data provides a contextual understanding of the quantitative results and aids the development of potential hypotheses that can be the subject of future investigations. Therefore, in the following review and discussion of the results, information from the focus groups will be used to provide a deeper understanding of the results of the quantitative analyses.

The following text will provide a review of the key findings of the study and discussion of the link to existing literature related to prevention of peer victimization. Next, implications of the study's findings for policy and practice will be presented. Finally, the chapter will conclude with an examination of the limitations of the study and directions for future research.

Key Findings

The first question addressed by the research study was to determine whether the AVB program produced changes in students' reports of aggression and victimization. Consistent with past research with American middle school populations (for reviews, see Merrell et al., 2008; Smith et al., 2004), the current study did not find any differences in post-implementation reports of aggression and victimization between the treatment condition (Traditional and Model) and control condition schools after controlling for pre-implementation differences in student reports. Additionally, no trends in the data emerged from pre to post implementation. That is, students

reported that rates of personal aggression and personal victimization remained constant throughout the period that the study was conducted.

Student and teacher responses during focus groups mirrored the findings that the behaviors of aggressors, and subsequent rates of victimization, did not change as a result of the prevention program. Many students commented on their skepticism that the behaviors of perpetrators of peer victimization can be changed with a prevention program curriculum, citing that it is simply the nature of some teenagers and that the students who engage in aggression did not attend to the program, or merely made a joke of the lessons. The teachers also provided similar comments indicating their lack of beliefs that the actions of the aggressors were reduced with the prevention curriculum. The teachers explained that the peer victimization behavior would not change as a result of curricula because the perpetrators learned and adopted aggressive values in the home environment. They also explained that by the time children reach middle school, the values were so ingrained that they could not be changed, though they shared their optimism that programs presented in elementary schools may be more successful.

That the program did not produce changes in peer aggression and victimization is not surprising, as both these constructs are influenced predominantly by the behaviors of aggressors. In contrast, peer victimization prevention curricula, including the AVB curriculum, primarily focus on changing attitudes and actions of victims, reactive victims, and bystanders. It is therefore encouraged that constructs related to these populations be measured (Salmivalli, 1999; Salmivalli et al., 2005; Twemlow et al., 2004).

The second research question addressed by the current study was whether the AVB program altered changes in victims' resiliency, as measured by self-reported symptoms of depression and anxiety, and self-blame for victimization—a variable theorized to mediate the

relationship between peer victimization and psychosocial adjustment (Graham, 2006). Overall, the study failed to identify differences in post-implementation reports of symptoms of depression and social anxiety and self-blame for victimization among students in the two treatment conditions and the control condition. Thus, in the current study, the AVB program did not result in changes in victim resiliency. This research question was exploratory in nature because past research has not used such constructs to evaluate the effectiveness of intervention programs at the middle school level. Thus, these findings are one of the first to indicate that intervention programs may not be effective at increasing victims' resiliency and empowerment, as they were measured in the current study. Teacher reports in focus groups provided potential hypotheses for the null findings, as fifteen of the sixteen participating teachers failed to provide any examples of changes in victims' behaviors. In fact one teacher explained that the victims in her class were intimidated by the more aggressive students and so did not fully participate in the curriculum delivery sessions.

However, it is possible that changes may not have been observed in victim variables because of the experimental design and analyses. When assessing changes in these variables, the study examined the changes in depressive and anxious symptoms and self-blame for victimization in all students participating in the study. Lack of changes among the majority of students may have muted the ability to detect changes in these variables among actual victims. It would have been beneficial to couple the experiment with a peer or teacher nomination technique to identify specific victims (or use a measure with cut-off scores to identify the highest quartile of students experiencing peer victimization) and to examine changes among these students along victim variables. Additionally, it is possible that the research instrument used in the study, the Characterological Self-Blame for Victimization scale (Graham & Juvonen, 1998) was not

sensitive to victim changes in resiliency. Perhaps a measure designed to assess victim empowerment or victim resiliency directly would be more appropriate for assessing changes in these constructs.

A third research question addressed by the current study was whether the AVB program altered student perceptions of school climate and students' empathy toward victims. Overall, no differences in post-implementation scores on measures assessing bystander empathy or school climate were found among the control and treatment conditions. This is in contrast to the finding in a Finnish sample of middle school students that a prevention program curriculum resulted in increased bystanders' attitudes and perceived efficacy related to intervening in peer victimization situations (Salmivalli et al., 2005). A potential explanation for the null finding may be the non-representativeness of the student response sample, as it was not made up of equal proportions of males and females. As Salmivalli and Voeten (2004) discovered, males are more likely than females to engage in aggressor-helping behaviors when they are in bystander situations. Therefore, it is possible that their opinions/behaviors did change, though these were overshadowed by the females' lack of change. They also found that bystander attitudes towards aggression predicted bystander roles. Therefore, it can be surmised that because the prevention program in the current study did not alter bystanders' attitudes, it also did not change their behaviors. Consistent with this, students participating in the focus groups reported that there were few to no changes in bystander behaviors; some students further explained that student bystanders are often afraid to intervene due to worries that the aggressors will then target them.

However, when the results were stratified by grade level, sixth grade students at the Model Implementation condition school indicated more favorable attitudes toward victims at post-implementation than did students at schools in the Traditional Implementation condition, but not

the Control condition. Indeed, this mirrors the findings of a recent study examining the effectiveness of a prevention program in American middle schools in which only students in sixth grade demonstrated favorable changes in their attitudes toward victims as a result of exposure to the program curriculum (Bauer et al., 2007).

The finding that only sixth grade students at the Model Implementation condition school exhibited an increase in favorable attitudes toward victims has several potential explanations. First, the difference in condition indicates that treatment integrity may be responsible for the lack of responsiveness to the program among sixth graders at the Traditional Implementation condition school. Only the integrity of implementation was monitored at the Model Implementation school. Therefore, sixth grade students may have exhibited changes in bystander empathy because they received the entire curriculum as indicated. In contrast, no steps were taken to monitor integrity at the Traditional Implementation condition schools and it is therefore possible that sixth grade students at those schools did not receive all elements of the program as intended. Second, the results are consistent with a prominent theme in the teacher focus groups that the program was most relevant and effective for students in the sixth grade because they were in the process of transitioning into middle school and were not “hardened” into a culture of middle school in which peer victimization was already accepted. Finally, this result can be interpreted in the context of existing literature demonstrating that rates of peer victimization peak in sixth grade (Nansel et al., 2001). Perhaps the intervention early in the year, as students transition into middle school, helps the “on the fence children,” as one teacher referred to them. These are the children who could serve as bystanders who intervene or bystanders who worsen peer victimization situations by either walking away, joining, or cheering on the aggressor or alternatively, supporting the victim (Salmivalli & Voeten, 2004). Especially interesting was that

one teacher emphasized that bystander attitudes and actions were the factor most likely to change among sixth grade students as a result of the program:

The 6th graders bought into the bystander part of the program, because they didn't realize that the bystander played a part in the conflict at all. They just didn't realize how much they affected the outcome of a situation. As sixth graders, they can relate to doing something in mass. They have a hard time doing things on their own because they're scared to death because their response is to slink away so they don't get sucked into the fight unless they're the aggressor. Most of them can buy into that bystander part real well and they don't realize what kind of effect they can have.

Failure to find changes in students' reports of school culture by treatment condition could be explained by the nature of the measure. The CSCCS (Furlong et al., 2005) measures school climate by asking students about their perceptions regarding fairness of school rules and treatment by teachers. Lack of changes in student responses therefore indicate that students' perceptions of teacher and administration attitudes toward and treatment of students were unaffected by the delivery of the prevention program. However, the measure does not assess students' perceptions of changes in student culture and actions of other students. These constructs may have been affected by the program, though were undetectable with the current school climate measure.

Another group of research questions was directed toward assessing students' and teachers' opinions regarding the AVB prevention program. Overall, students' responses to the program were very positive. Students stated that they enjoyed participating in the program and indicated that they would recommend that the program be implemented again the following year with the incoming sixth grade class. Though students indicated favorable attitudes toward the program, this subjective information should be interpreted with caution, as some of the students (especially those in the sixth grade group) exhibited a tendency toward social desirability bias. In addition, the positive attitudes toward the curriculum, especially role plays, may have been because the program provided students with a desirable and enjoyable alternative to silent reading (which

students were traditionally directed to do during the time that the program was delivered at the Model Implementation condition school).

In contrast to the predominantly positive attitudes toward the program that the students expressed, teachers' attitudes exhibited greater variability. The majority of teachers endorsed their approval of the use of role plays because they engaged the students in the lessons. In contrast, the teachers asserted a strong disapproval of the use of homework in the curriculum, citing that it required an excess of paper and was not likely to be completed or returned.

Teachers' attitudes toward the program appeared to be affected by their level of buy-in and beliefs regarding their ability to alter peer victimization at their school. The teachers that indicated highest levels of buy-in were from the Model Implementation condition school, whereas teachers indicating a strong lack of buy-in were from Traditional Implementation schools. It would be interesting for future research to explore whether providing consultative support affects teacher buy-in to programs. Perhaps they see the buy-in from the researcher or feel that they are more supported. Alternatively, it could be that teacher buy-in was only experienced by those at the Model Implementation condition school who agreed to participate in teacher focus groups. It is possible that those who dissented to the groups chose to because of negative perceptions regarding implementing the program. Alternatively, the positive attitudes could have resulted from greater perceptions of researcher support or that all teachers in the school delivered the curriculum instead of only the social studies teachers. Finally, program delivery at the Model Implementation condition school was not held during regular class time—instead the teachers used their daily “extra” 30 minute period usually reserved for silent reading—and so the program was less intrusive into their daily lesson plans. Consistent with this proposed explanation, relationships between implementation integrity and degree of teacher time

needed to prepare and deliver lessons and perceived level of consultative support have been proposed (Whitted & Dupper, 2005).

Of note, the teachers from School 3, who indicated the strongest lack of buy-in, were the only teachers to note negative student behaviors resulting from the program, including an increase in bullying and an increase in number of student fights. Several factors could explain this. First, due to the teachers' negative attitudes regarding program implementation, they may have purposefully searched for evidence that the program would not work to be able to say that it failed. Going one step further, these teachers may have purposely manipulated aspects of the program to demonstrate negative outcomes. If this is the case, more positive teacher observations (and changes in attitudes and behavior at the Model Implementation condition school) may have resulted because the researchers' presence could have led to more teacher buy-in or because the researchers were able to identify teachers likely to manipulate program outcomes and specifically target them to increase buy-in. In a review of the common errors in leading change initiatives, Kotter (1996) cited failure to identify people who may serve as potential outcome manipulators and to closely work with them with the goal of communicating the urgency and necessity for the change initiative as a key error that professionals commonly commit.

Another research question that the current study addressed was related to identification of the barriers to implementation integrity. Throughout the focus groups, teachers identified several factors that interfered both with their ability to implement the program, as well as the students' responsiveness to the program. These included administrative barriers, classroom-level barriers, and student-level barriers. Each will be discussed in greater detail below in the context of past research.

Administrative Barriers to Program Success

Several teachers expressed frustration and lack of buy-in to the prevention program due to failure of the administration to provide them with adequate notice and time to prepare for curriculum implementation. Despite agreeing to implement the program in January of the prior school year, none of the principals shared their intention to implement the prevention program with their teachers until planning period in August. Thus, as many of the teachers in the focus group indicated, they were allotted little time to plan to integrate the program into their planned curriculum and prepare for implementation. The teachers conveyed strong feelings of helplessness regarding their ability to prepare for implementation. Indeed, low organizational capacity (as evidenced in this case by lack of informing teachers of the plan for the program) was the first of four variables that Gottfredson and Gottfredson (2002) indicated as contributors to low implementation integrity. Though integrity was promoted at the Model Implementation condition school through consultative support, teachers at the Traditional Implementation condition school did not receive this support and therefore their implementation integrity was likely affected by this administrative barrier.

Teacher-Level Barriers to Implementation

A general theme that emerged during the teacher focus groups was that the teachers endorsing the most negative attitudes toward the program also indicated strong beliefs about their lack of ability to prevent peer victimization. This lack of belief in personal efficacy at effecting change has been previously identified as the largest explanation for variation in integrity of implementation (Kallestad & Olweus, 2003). Qualitative information collected from the teacher focus groups also was consistent with barriers to implementation identified by Kincaid and colleagues (2007) in their examination of barriers to implementation of Positive Behavior Support programs. Teachers in the current study consistently generated statements

identifying that lack of belief in the lessons in the program and their willingness to implement the program served as barriers to program delivery.

Child-Level Barriers to Program Success

A recurring focus group theme was that middle school is too late to reach students with a prevention program because students are already set in their ways and attitudes. That is, they have well-established attitudes toward the utility of peer aggression. Smith and colleagues (2004) found that in studies conducted prior to 2002, prevention programs only demonstrated effectiveness in elementary and middle schools. Teachers in the focus groups repeatedly emphasized that today's generation of middle school students are more mature and set in their ways than in earlier generations. It is possible that the results of this study can be interpreted in the context of generational cohort changes. That is, though the program may have been effective for student in middle school in 1994 when it was designed, middle school students in 2008 are qualitatively different and more mature and "hardened" group of students. Consistent with this, several teachers commented that students' behaviors have changed over the past decade and that they are becoming more aggressive and less respectful of authority than students they taught in past years.

Limitations

The results described in the section above must be interpreted within the context of the limitations of the current study. These limitations include threats to internal and external validity due to flaws in the study design, composition of the sample population and problems with measurement and analyses used in the study.

Study Design and Sample Population

The foremost flaw in the study design was the lack of random assignment to treatment condition. Participants were already housed in schools and so random assignment to condition

was not possible. In addition, school placement into treatment condition was non-random—School 4 served as the control condition school because the principal requested to implement the prevention program later in the school year. Though students' responses to measures at pre-implementation were controlled through statistical analyses, it is possible that outside variables, such as experiences shared by students at a particular school during the year, may have affected post-implementation scores. The lack of random assignment leads to an inability to draw causal conclusions about differences (or lack thereof) among treatment conditions.

Furthermore, student participants in the study sample were likely not representative of the entire school populations. Survey responses were only analyzed from students who returned consent forms and provided assent for their answers to be used in the study at both pre and post implementation time points because the IRB for this institution does not allow the use of passive consent for survey research. Therefore, participation in the study relied on several factors, including school and teacher encouragement for the return of student consent forms, as well as responsibility of the students to remember to provide the consent form to their parents and return it to school. Therefore, participating students may represent the most responsible students or teachers and schools with the highest degree of buy-in to the program. In addition, though steps were taken at each school to encourage the return of consent/assent slips, a disproportionate amount of students at the various schools returned slips, leading to unequal sample size among treatment groups.

A final limitation associated with the student sample was the high rate of missing surveys or surveys in which students did not provide assent to participate at both time points. A large number of participants at the Control condition school who had parental consent to participate did not have post-implementation surveys that could be identified, despite several notifications to

school officials that these had not been turned in. The researchers speculated that one or more teachers neglected to allow students the opportunity to complete post-implementation surveys, despite the district's and administration's request to do so.

Participants in the teacher and student focus groups may also be unrepresentative of the entire sample. The teachers electing to participate in the focus groups may also have been unrepresentative of the population of teachers delivering the curriculum at the treatment condition schools. All teachers at School 3 agreed to participate in the groups, but only four out of the six agreed to participate at School 2 and only eight of the 22 participated in School 1. Therefore, the samples may have represented those who felt most strongly about the program (either positive or negative). For the student focus groups, it was extremely challenging to recruit students to participate in the groups, despite offering an incentive (pizza lunch) and even more difficult to receive signed parental consent forms. Students agreeing to participate are therefore likely to be qualitatively different than the majority of the student body that did not express an interest in participating or take the necessary steps to obtain parental consent for participation. One student group in particular (sixth grade girls) also demonstrated a response bias in which they appeared to desire to please the moderators with their responses and therefore the validity of their responses is questionable.

A final limitation related to the generalizability of the study findings is related to the representativeness of the participants in this community to the population of the greater United States. This community may have more cemented attitudes than other populations, especially in their attitudes toward the utility of violence. This was repeatedly expressed in the focus groups, as teachers explained that children learn to adopt violent attitudes at home. Several of the teachers in the focus groups provided statements indicating their endorsement of corporal

punishment for aggressive behavior and the futility of adopting non-violent solutions to cope with problems. As teacher beliefs in their efficacy to affect change in peer victimization is a strong factor contributing to poor implementation integrity (Kallestad & Olweus, 2003; Kincaid et al., 2007), it is possible that teachers in the current study held more negative attitudes toward the program and higher likelihood to exhibit resistance to implementation than would teachers from other communities.

Measurement and Analyses

As was previously described in the key findings section, a potential limitation was that the instruments—especially those to assess school climate and bystander empathy—did not adequately measure the dependent variables of interest. The study relied upon the assumption that the measure of bystander empathy served as a predictor of bystander actions. The measure was used because it had been previously employed in other studies and had adequate psychometric qualities. However, a measure of bystander actions would have been a more appropriate assessment tool. In addition, the school climate measure was used because of its well-established psychometric qualities. Regardless, a measure of school climate that specifically examined student variables that compose school climate may have been more sensitive to detecting changes in school atmosphere.

Another key limitation associated with measurement in the present study is that only student responses were examined to evaluate program effectiveness. Student responses to rating scales were used as the primary form of measurement because the goal of the study was to assess student-level changes across a variety of constructs. However, it would have been helpful to verify the accuracy of students' self reports via review of student discipline referrals and teacher and/or parent surveys. A second limitation related to measurement is that only student attitudes, not bystander actions were assessed. Perhaps students already had positive attitudes toward

victims and the program changed their willingness to act, not their attitudes. Indeed, two teachers in the focus groups cited specific examples in which they observed students intervene in bullying situations and attributed these actions to the program.

Another limitation related to measurement was that the surveys were too long (109 questions) for the time allotted to students to complete them. Several teachers only allowed students approximately 20-30 minutes to complete the surveys, and so students with difficulties reading struggled with completion, according to teacher reports. Therefore, several students did not complete the final measure (the CES-D) due to time constraints.

Finally, there were several limitations related to the statistics in the study. First, to increase power and the likelihood that small differences in student changes would be detected, a larger sample size of students with both pre and post implementation survey responses was needed. In addition, it would have been beneficial to consider the proportion of variability in post-implementation responses due to between student variability (level one) and between school variability (level two) using multilevel models. Unfortunately, the use of multilevel models is reliant on the statistical power of the level two sample size, in this case, the number of schools in the design. A large sample of schools—at least 20—was needed in order to conduct the more advanced analysis.

Implications for Policy and Practice

Despite these limitations, this study adds to the literature because it provides further support for the hypothesis that school wide prevention program curricula may not change the rates of peer victimization, nor might they effect even moderate size changes in victim and bystander attitudes, as they were examined in the current study. That is, given the enormous expenditure of time, money, and teacher resources required to implement the AVB program and other similar curricula, the programs do not affect the desired changes in students and may

therefore be an inappropriate use of resources. Although prevention program curricula have been demonstrated to change students' knowledge of curriculum components, changes in knowledge do not necessarily translate to changes in attitudes and actions. As Teacher 12 pointed out, "I was especially disheartened when one of the students told me this, 'We know the right choice. We can tell you what's right, but do you really think we will choose to do what's right...? Many of the kids agreed with the speaker."

These results, though discouraging, imply that a shift in focus is needed for addressing peer victimization in middle schools. Though prevention programs may be effective at the elementary school level, as was suggested by the teachers in the focus groups and supported by various research—elementary school programs more consistently produce small effect sizes (Merrell et al., 2008)—they should not be considered part of best practices in peer victimization prevention in middle school. In contrast, programs that promote the use of positive reinforcement for appropriate, non-aggressive behavior (and bystander interventions) and immediate and consistent consequences for perpetrators and bystanders that negatively contribute to peer victimization (i.e., joining or cheering the aggressor) will likely produce more desirable results, as is evidenced by the success of PBS programs at reducing overall disruptive behavior (Oswald et al., 2005).

The majority of states in the United States have legislation that address the problem of peer victimization in schools and that encourage or mandate implementation of prevention programs (Srabstein et al., 2008). However, studies evaluating school wide prevention programs consistently demonstrate a lack of responsiveness to student reports of involvement in peer victimization in American middle schools (Merrell et al., 2008; Smith et al., 2004). The results of the current study further support these null findings in changes in involvement in victimization,

and extend them to demonstrate a lack of changes in student attitudes toward victimization, perceptions of school culture, and victim resiliency. Such results bring into question the utility of mandated/encouraged implementation of programs that have yet to demonstrate even moderate effect sizes.

Though some scholars have speculated that lack of program responsiveness to program goals may be a function of poor implementation integrity (e.g., Elliott & Mihalic, 2004; Gottfredson et al., 2000; Mihalic, 2002), this study eliminated this possibility. The teachers' implementation fidelity, as measured by direct observations and consultation, indicated that the program was implemented as directed at the Model Implementation condition school. In addition, steps needed to ensure implementation integrity (Gresham et al., 1993) were taken to increase the likelihood of teacher buy-in and generalization of the lessons outside of the curriculum delivery sessions by training all teachers in the curriculum and allowing them to vote on the method and timeline of delivery. Both forms of treatment fidelity described by Hirschstein and colleagues (2007)—“walking the walk” and “talking the talk”—were monitored and encouraged in the Model Implementation condition. Despite these steps to ensure both forms of implementation integrity, there were no differences in the majority of constructs between the Model Implementation and Traditional Implementation and Control condition schools, except for the small difference among sixth grades students by condition on the bystander empathy variable.

Finally, the study also contributes to existing literature because the information gathered from the teacher and focus groups provided further information regarding possible barriers to achieving changes in students' attitudes and behaviors and provided suggestions for future directions in peer victimization prevention and intervention research. Information collected

during the focus groups, especially those with teachers from the Traditional Implementation condition schools, identified several factors that may have adversely affected teacher buy-in and enthusiasm of delivery of program components. One potential solution to this is to reduce these variables by using computers to deliver lessons. Some promising new research indicates that this may be a future direction to pursue. Using computers, students can complete electronic assessments of their current beliefs about and involvement in peer victimization. The computer programs can then adjust the prevention program and skill delivery level to the students' readiness level and categorization (aggressor, victim, or bystander) and repeatedly use questionnaires to evaluate whether students' attitudes and skill level change as they progress through the modules (formative assessment). Initial investigations in this area appear promising (Evers, Prochaska, Van Marter, Johnson, & Prochaska, 2007; Prochaska et al., 2007).

Another potential solution to overcoming barriers to quality implementation that are associated with teachers' beliefs about their ability to effect change is through the development of consultee-centered consultation models to directly address teacher beliefs. At the Model Implementation condition school, the Program Adherence Rating Scale scores indicated that teachers delivered the prevention program curriculum with high integrity. That is, they delivered the knowledge to the students through the suggested activities (i.e., lectures, role plays, discussions). Additionally, the teachers participating in the focus groups at the Traditional Implementation condition schools indicated that they delivered the knowledge, as requested, during class time, though the researchers did not take steps to verify this through observations. During the focus groups, however, the majority of teachers did not comment upon generalizing the lessons to settings outside of the classroom sessions—the “walking the walk” portion of prevention activities (Hirschstein et al., 2007). Furthermore, several teacher comments indicated

low buy-in to curriculum delivery and low teacher beliefs regarding ability to effect change in school peer victimization. In addition, the students commented that peer victimization was most likely to occur when teachers were not present, though none mentioned that teacher supervision had been increased during or after program implementation, indicating that teachers did not act to reduce peer victimization outside of the 50-minute lesson period. Therefore, a future direction for research and practice may be to develop strategies that target teacher beliefs and priorities regarding ability and willingness to prevent peer victimization. Beliefs and priorities are factors hypothesized to affect implementation integrity and may be targeted with teacher training (Pajares, 1992; Rimm-Kaufman, Storm, Sawyer, Pianta, & LaParo, 2006). Similar strategies have been used to increase teachers' perceived self-efficacy to effect academic behavior changes among their students (Joram & Gabriele, 1998). Additionally, a more accurate measure of implementation integrity should be used in future studies that also encompasses teacher generalization of program lessons to other settings.

Furthermore, instead of expending the majority of empirical focus on interventions at the primary, universal-level, it will be important for researchers to shift their sights to develop interventions at the secondary and tertiary levels of peer victimization prevention. Specifically, it will be important to develop a further understanding of the cognitive and social factors that place students at risk for becoming victims and to implement interventions before the peer victimization occurs. This may involve teaching at-risk students assertiveness and friendship-making skills (Hanish & Guerra, 2000).

Finally, at the tertiary level, interventions need to be developed and investigated to promote resiliency in children who are repeated victims. Specifically, the development of individual intervention programs for repeated victims of peer victimization with the goals of

promoting resiliency, assertiveness, and coping skills are needed that can be implemented in the school setting (Lodge & Feldman, 2007; Varjas et al., 2006). In order to develop such programs it will be essential for continued investigation of the mediating factors between peer victimization experiences and the development of internalizing and externalizing disorders.

Working within a cognitive-behavioral framework, mental health professionals can then work with chronic victims to alter cognitions that contribute to poor resiliency (Reivich et al., 2005).

Also at the tertiary level, schools need to continue to develop strong discipline plans for perpetrators of peer victimization that involve immediate and consistent consequences and positive reinforcement for appropriate behavior of students (Luiselli, Putnam, Handler, & Feinberg, 2005). This need for positive reinforcement and consistent consequences was also a continuous theme throughout the student focus groups. Though many teachers also communicated their frustration that immediate consequences were not implemented by all teachers or administrators, it was interesting that no teacher commented on the need for positive reinforcement. This illustrates a disconnect between students' perceptions of need and teachers' perceptions and highlights the need for students and teachers to collaborate with one another when designing and implementing prevention initiatives.

The current study contributed to the field of investigation by providing further information regarding the effectiveness of peer victimization programs at the primary level of prevention. It also contributed to the identification of factors influencing program implementation and effectiveness, thus indicating directions for future research at all levels of prevention. Of critical importance at the primary, secondary, and tertiary levels, is strong professional development programs for school staff, especially school mental health workers, to ensure their knowledge of

and competence in implementing interventions at each tier of the prevention initiative (Kratochwill, Volpiansky, Clements, & Ball, 2007).

APPENDIX A
PROGRAM ADHERENCE RATING SCALE AND GUIDELINES FOR SCORING

Program Adherence Rating Scale

Teacher:_____

Observer:_____

Grade:_____

Lesson #:_____

Date:_____

Time:_____ to _____

Program Adherence Rating Scale

<i>No Implementation</i>	<i>Some Implementation</i>	<i>Moderate Implementation</i>	<i>Minor Deviation</i>	<i>No Deviation</i>
1	2	3	4	5

Each component was delivered according to the specified time range:

1 2 3 4 5

Group participation was used, as specified, and encouraged by the teacher:

1 2 3 4 5

Student products (e.g., homework) were assigned and collected as designated:

1 2 3 4 5

Focus was directed and maintained toward appropriate lesson objectives:

1 2 3 4 5

Comments:

Teacher's enthusiasm for subject was:

Teacher's knowledge about background material was:

Student interest and engagement was:

Any additional comments:

Objective Guidelines for Completing the Program Adherence Rating Scale (PARS)

Time Range:

- 1 – was not implemented at all/was skipped
- 2 – about 25-50% of time range was used (for example: 1-2 minutes for a 5 minute portion)
- 3 – approximately 50-75% was delivered (for example: 3 minutes of a 5 minute section)
- 4 – most, but not all time was spent (4 minutes of a 5 minute session)
- 5 – met or exceeded designated time limit

Group Participation:

- 1 – teacher only lectured and no group participation was used, though it was indicated
- 2 – teacher led one part of group discussion or role-play, but left out an entire required activity, and did not encourage student responses and ideas
- 3 – teacher led all required components, but did not encourage student responses and ideas
- 4 – teacher led most required components, and encouraged student responses and ideas
- 5 – teacher engaged the class in all specified group participation activities and encouraged student responses and ideas

Student Products:

- 1 – Student homework not handed out or turned in as prescribed
- 2 – Students remind teacher about homework
- 3 – Homework handed out or turned in with no explanation or discussion – teacher's initiative
- 4 – Teacher hands out homework and answers questions
- 5 – Homework collected and discussed/homework distributed and instruction read/questions answered or no homework was needed for this session

Focus on Lesson Objectives:

- 1 – lesson was not delivered and time was spent on a different topic or activity
- 2 – teacher introduced topic, but spent majority of time on a different topic
- 3 – teacher spent some time on topic, but approximately half time on a different topic
- 4 – teacher spent majority of time on topic, but allowed students to spend some time on a different topic
- 5 – teacher spent all of lesson on designated topic

APPENDIX B
SAMPLE CONSENT FORMS

Parental Consent for Student Assessment

Dear Parent/Guardian,

I am a graduate student in the Department of Educational Psychology at the University of Florida. Under the supervision of Dr. Nancy Waldron, I am conducting research on the evaluation of a bullying prevention program that will be implemented in your child's middle school this year. The purpose of this study is to determine the effectiveness of the program curriculum at producing changes in students' social and emotional functioning. The results of the study may help teachers and administrators better understand the process and effectiveness of bullying prevention programs. These results may not directly help your child today, but may benefit future students. With your permission, I would like to ask your child to volunteer for this research.

Your child's school will be administering surveys to all students that assess peer aggression and victimization, perceptions of school climate, symptoms of depression and anxiety, tendency to blame oneself for being bullied, and attitude toward victims of bullying. Students that agree to participate will complete two packets of questionnaires during the fall semester. Students will be given the whole packet of questionnaires, but they will not have to answer any question they do not wish to answer. Your child's teacher will hand out the survey packets during class time and will allow students approximately 30 minutes to complete them. Students who do not participate in the research will be asked to work or read quietly at their seat during this time. Each survey will then be sealed in an envelope and turned in to the teacher to return to the research team.

Teachers and school administrators will not look at individual children's responses. Although the children will be asked to write their names on a piece of paper to be inserted in the envelope with the survey, their names will only be used for matching purposes, their identity will be kept confidential to the extent provided by law. We will replace their names with code numbers. With your permission, I would like to use your child's confidential responses for my research. Results will only be reported in the form of group data. Participation or non-participation in this study will not affect the children's grades or placement in any programs.

You and your child have the right to withdraw consent for your child's participation at any time without consequence. While we do not anticipate any risks associated with study participation, some people may feel uncomfortable answering questions about emotions and social experiences. Students who participate in the surveys will be entered into a drawing for a \$25 gift certificate to a local store. If you have any questions about this research protocol, please contact me at abudzyn@ufl.edu or my faculty supervisor, Dr. Waldron, waldron@coe.ufl.edu or 392-0723 x232. Questions or concerns about your child's rights as research participant may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Allison Dempsey, MA

I have read the procedure described above. I voluntarily give my consent for Allison Dempsey to use my child's _____ confidential survey responses for her research on the effectiveness of a bullying prevention program. I have received a copy of this description.

Parent / Guardian

Date

2nd Parent / Witness (optional)

Date

Parental Consent for Student Focus Group Participation

Dear Parent/Guardian,

I am a graduate student in the Department of Educational Psychology at the University of Florida. Under the supervision of Dr. Nancy Waldron, I am conducting research on the evaluation of a bullying prevention program that will be implemented in your child's middle school this year. The purpose of this study is to gather students' perceptions of the prevention program through conversations in small focus groups. The results of the study may help teachers and administrators better understand the process of implementing bullying prevention programs. These results may not directly help your child today, but may benefit future students. With your permission, I would like to ask your child to volunteer for this research.

Students that agree to participate will be part of a focus group consisting of three to seven fellow students from the same grade. The focus group will be held during a maximum of two days in November during the students' lunch time so that they will not miss any class time. A pizza lunch will be provided to participating students. Students in focus groups will be asked questions related to their reactions to the prevention program curriculum and their opinions about bullying prevention. A graduate student from the University of Florida will conduct the focus groups.

With your permission, your child will be videotaped during the focus group so that a transcript of the session can be completed. Your child's name will not be listed on the transcript. The video will be accessible only to the research team and the tape will be erased at the end of the study.

Results will only be reported in the form of group data. Your child's identity will be kept confidential to the extent provided by law and will not be revealed in any manuscripts reporting the results of the project. Participation or non-participation in this study will not affect the children's grades or placement in any programs.

You and your child have the right to withdraw consent for your child's participation at any time without consequence. There are no known risks or immediate benefits to the participants. No compensation is offered for participation. If you have any questions about this research protocol, please contact me at abudzyn@ufl.edu or my faculty supervisor, Dr. Waldron, waldron@coe.ufl.edu or 392-0723 x232. Questions or concerns about your child's rights as research participant may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Allison Dempsey, MA

I have read the procedure described above. I voluntarily give my consent for my child,
_____, to participate in a videotaped focus group for Allison Dempsey's study of
the process of implementing a bullying prevention program. I have received a copy of this
description.

Parent / Guardian

Date

2nd Parent / Witness

Date

Teacher Consent for Focus Group Participation

Dear Educator:

I am a graduate student in the Department of Educational Psychology at the University of Florida. Under the supervision of Dr. Nancy Waldron, I am conducting research on the process of implementing a bullying prevention program that will be implemented in your middle school this year. The purpose of this study is to gather teachers' perceptions regarding the program and potential barriers to its implementation and effectiveness. The results of the study may help teachers and administrators better understand the process of implementing bullying prevention programs.

I would like to invite you to participate in this focus group, which will be held during two, 60-minute after-school sessions this semester. One will be held in September and the other in December. You do not have to answer any questions in the focus group that you do not want to. With your permission, I would like to videotape this focus group. Only members of the research team will have access to this tape and will create a transcript from the sessions, removing any identifying information on the transcripts. The tape will then be erased. Your identity will be kept confidential to the extent provided by law and your identity will not be revealed in any manuscripts reporting the results of this project.

There are no anticipated risks, compensation or other direct benefits to you as a participant in this focus group. You are free to withdraw your consent to participate and may discontinue your participation in the focus groups at any time without consequence.

If you have any questions about this research protocol, please contact me at abudzyn@ufl.edu or my faculty supervisor, Dr. Waldron, waldron@coe.ufl.edu or 392-0723 x232. Questions or concerns about your as research participant may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Please sign and return this copy of the letter in the enclosed envelope. A second copy is provided for your records. By signing this letter, you give me permission to report your responses anonymously in manuscripts detailing the results of this study.

Allison Dempsey, MA

I have read the procedure described above for the Prevention Program Focus Group. I voluntarily agree to participate in the focus group and give my permission to be videotaped during this group. I have received a copy of this description.

Signature of participant

Date

Teacher Consent for Observation

Dear Educator:

I am a graduate student in the Department of Educational Psychology at the University of Florida. Under the supervision of Dr. Nancy Waldron, I am conducting research on the evaluation of a bullying prevention program that will be implemented in your middle school this year. The purpose of this study is to determine the effectiveness of the program curriculum in producing changes in students' social and emotional functioning. As part of this study, I plan to monitor teacher implementation of the program curriculum by conducting periodic observations over the course of the semester during curriculum delivery sessions. The results of the study may help teachers and administrators better understand the process of bullying prevention programs. There are no anticipated risks, compensation or other direct benefits to you for being observed in your classroom. You are free to withdraw your consent to participate and may discontinue your participation in the observation at any time without consequence. The results of a brief measure conducted during your evaluation on your adherence to the guidelines of the program curriculum will be kept confidential from school administrators. Your identity will be kept confidential to the extent provided by law and your identity will not be revealed in any manuscripts reporting the results of this project.

If you have any questions about this research protocol, please contact me at abudzyn@ufl.edu or my faculty supervisor, Dr. Waldron, waldron@coe.ufl.edu or 392-0723 x232. Questions or concerns about your rights as research participant may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433. Please sign and return this copy of the letter in the enclosed envelope. A second copy is provided for your records. By signing this letter, you give me permission to report your responses anonymously in manuscripts reporting the results of this project.

Allison Dempsey, MA

I have read the procedure described above for the observations of adherence to program guidelines. I voluntarily agree to participate in the observations and I have received a copy of this description.

Signature of participant

Date

APPENDIX C SAMPLE FOCUS GROUP QUESTIONS

Teacher Focus Groups

What did you think of the prevention program?
How did your students respond to the curriculum?
What changes in student and teacher behavior did you notice?
What components of the program did you feel were most successful?
What were some things that made it difficult to implement the program?
Please share your perceptions about the level of support you received from the staff.
What would you suggest doing differently next time?

Student Focus Groups

What did you think of the prevention program?
What did you like about the curriculum?
What did you dislike about the curriculum?
What changes in student and teacher behavior did you see this year?
Why do you think some changes were not seen in student behavior?
What else could be done to deal with bullying at your school?

APPENDIX D
ASSIGNMENT OF FOCUS GROUP PARTICIPANT NUMBERS

Teacher Focus Groups

School 1, Group 1: Teachers 1-4

School 1, Group 2: Teacher 5-8

School 2, Group 3: Teachers 9-12

School 3, Group 4: Teachers 13-15

Student Focus Groups

Grade 6, Group 1: Students 1-4

Grades 7-8, Group 2: Students 5-6

Grade 7, Group 3: Students 7-10

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BIOGRAPHICAL SKETCH

Allison Dempsey (née Allison Budzynski) was born in 1980 in Denver, Colorado. She grew up in Littleton, Colorado with her parents, Tim and Vilma, and brother Alex and graduated from Columbine High School in 1998. Allison earned a B.S. degree in psychology with cumulative honors from the University of Wisconsin-Madison in 2002. After graduation, she moved to Baltimore where she was awarded a two-year post-baccalaureate research fellowship at the National Institute on Drug Abuse and simultaneously earned an M.A. in experimental psychology from Towson University.

In 2004, Allison began her doctoral degree in the school psychology program at the University of Florida. While at the University of Florida, Allison conducted research related to peer victimization and engaged in practicum work in school and pediatric settings. Allison lives with her husband, Jack, who is also a doctoral student in school psychology; and two dogs, Brian and Baxter. The couple will temporarily move to Detroit, Michigan in July, 2008 so that Allison may complete a full-year pre-doctoral internship at the Children's Hospital of Michigan. After receiving her doctoral degree, Allison plans to attain a position conducting research and engaging in clinical work at a university or academic hospital setting.