Western Kentucky University
TopSCHOLAR®

Masters Theses & Specialist Projects

Graduate School

8-1-2011

Evaluation of a Program to Reduce Bullying in an Elementary School

Jordan Elizabeth Davis
Western Kentucky University, j_e_davis20@hotmail.com

Follow this and additional works at: http://digitalcommons.wku.edu/theses

Part of the School Psychology Commons

EVALUATION OF A PROGRAM TO REDUCE
BULLYING IN AN ELEMENTARY SCHOOL

A Thesis
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Specialist in Education

By
Jordan Elizabeth Davis

August 2011

EVALUATION OF A PROGRAM TO REDUCE
BULLYING IN AN ELEMENTARY SCHOOL

Date Recommended ___7-25-2011___

Elizabeth L Jones
Elizabeth Jones, Director of Thesis

Carl Myers
Carl Myers

Rick Grieve
Rick Grieve

Kinchel C Doerner 4-Aug-2011
Dean, Graduate Studies and Research   Date

ACKNOWLEDGEMENTS

Contents

List of Tables

List of Figures

EVALUATION OF A PROGRAM TO REDUCE
BULLYING IN AN ELEMENTARY SCHOOL

Jordan Elizabeth Davis   August 2011   60 Pages

Directed by: Elizabeth Jones, Carl Myers, and Rick Grieve

Department of Psychology   Western Kentucky University

Bullying is one of the most pervasive challenges in schools across the world. This investigation is an evaluation of a school's attempt to address the large number of incidents of bullying. Materials from the *Bully Free Classroom (BFC)* by Allan Beane (2009) served as the intervention curriculum for 21, fifth grade students and six teachers. A 14-week (with the exception of school breaks), six lesson intervention was implemented with three groups of students: two groups identified as perpetrators and one group of victims. Teachers received training on bullying knowledge and how to appropriately report bullying-related incidents. Pre and post measures of bullying knowledge, frequency ratings of bullying and prosocial behaviors observed, and discipline referrals for bullying served as the dependent measures for the student participants. Results support the use of the intervention as the mean number of discipline referrals for participants of bully status significantly decreased, student ratings for negative behaviors significantly decreased, student knowledge of bullying significantly increased, and teacher's ratings of the frequency of bullying decreased while school climate ratings became more positive. Moderate to large effect sizes are interpreted to provide strong support for a recommendation for school-wide adoption of the program. The scope and nature of the intervention plan is discussed in relation to recommended features of bully prevention and intervention programs and recommendations are made for implementation of this intervention.

Review of the Literature

Bullying is a frequent theme in television, movies, books, as well as many other media sources. It is also considered to be a serious issue as there are multiple negative consequences, including emotional and physical harm to victims and others witnessing bullying acts (Beane, 2009). Bullying is evident in children of school age and is frequently observed in the educational setting. As a result, there is a need for educators to address and manage it (Beane, 2009). The following review provides an understanding of outcomes associated with bullying and methods used to intervene in schools.

Defining Bullying

Olweus (1993) defined bullying 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). Olweus further described bullying as an imbalance of strength or power in a relationship where the victim has difficulty defending him or herself and experiences feelings of helplessness. Bullying can involve a variety of methods and behaviors. Some researchers define bullying by differentiating between direct and indirect methods of bullying (Quiroz, Arnette, & Stephens, 2006). Direct bullying typically includes physical aggression such as shoving, punching, kicking, throwing things, scratching, biting, pinching, poking, stabbing, pulling hair, etc. Indirect bullying includes behaviors that often result in social isolation. Indirect bullying comprises a variety of techniques including, but not limited to, name calling, silent treatment, staring, laughing at or mocking someone, refusing to socialize with the victim, spreading gossip or rumors, or criticizing a victim based on their dress, religion, race,

1

height, weight, race, disability, etc. Other researchers classify bullying behaviors as physical (e.g., hitting, kicking, and biting), verbal (e.g., name calling), or relational bullying (Olweus, 1993). Relational bullying does not involve typical verbally or physically aggressive acts, yet more subtle forms of aggression, which uses relationships to cause harm or manipulate others. An example of relational aggression could be a bully convincing a group of other students to not talk to another student (the victim). Beane (2009) classifies bullying behaviors as either physical, social/relational and motional/psychological (includes verbal and nonverbal), verbal, or cyberbullying. Cyberbullying occurs when electronic devices such as cell phones, internet, social media, and email are used in order to cause harm to another individual. While definitions of bullying may vary based on the nature of the negative actions (direct, indirect) and the type of action (verbal, physical) and the context (electronic media, relationships), the end result is similar. The individual being bullied, the perpetrator, and the bystander(s) have an increased likelihood of experiencing serious consequences or long-term negative effects such as fear of going to school and higher rates of depression (Smokowski & Kopasz, 2005). Thus, it is behavior that should not be tolerated within the educational setting.

Prevalence

Bullying is not only a national concern, but a global problem as well. Rates for bullying incidents vary greatly; however, studies on the prevalence indicate that a large number of students are involved or affected by bullying world-wide. Bullying rates include individuals that are considered to be bullies, individuals who are victimized by bullying, and those who both perpetrate and are victimized by bullying (Weir, 2001).

Weir reports the following prevalence figures: Australia 17%, England 19%, Japan 15%, Norway 14%, Spain 17%, and United States 16%. Bullying is the topic of research in all of these countries. In the United States, numerous studies have investigated the number of students involved or affected by bullying. Researchers report that 15% to 30% of school children are involved as a bully, victim, or both (DeVoe & Kaffenberger, 2005; Nansel, Craig, Overpeck, Saluja, & Ruan, 2004; Nansel et al., 2001; Weir, 2001). Other studies estimate the prevalence rate to be as high as 80% (American Association of University Women, 2001). Gender differences are also associated with bullying. According to Nansel et al. (2001), males are more likely than females to be involved in bullying as either the bully, victim, or bystander. However, other studies indicate that gender rates are similar, but that males are typically involved in direct forms of bullying; whereas, females engage in indirect forms (White, Glenn, & Wimes, 2007). Nonetheless, a significant proportion of American students are associated with bullying as a victim, bystander, or perpetrator.

Impact

Bullying not only affects bullies and victims, but also bystanders and families; therefore, bullying has widespread consequences. In addition, while the obvious consequences are immediate, long-term outcomes are also noted. Further, many individuals believe that bullying has led to the numerous acts of school violence that have occurred across our country (e.g., The U.S. Secret Service Safe Schools Initiative, [Vossekuil, Reddy, Fein, & Modzeleski, 2000]). Those incidents of school violence have caused pain and suffering to entire communities. Students and school staff lost their sense of safety and friends and family of the victims had to deal with the loss of loved

3

ones. Not all bullying occurrences lead to such drastic outcomes, but it illustrates that many individuals are affected negatively and the impact can be long-term.

Outcomes for perpetrators. Bullies often exhibit a general personality of anger and unhappiness (Sheras, 2002). Instead of using words, bullies often act out physically. Typically, bullies display behaviors incompatible with positive and productive school performance such as destruction of property, intimidation of peers, and a short attention span (Sheras, 2002). These harmful behaviors have been linked to potential long-term consequences outside the years spent in school. Beane (2009) noted that 25% of adults that have criminal records by age 30 were described as bullies when they were in school. Particular crimes associated with adults that were considered bullies include vandalism, shoplifting, truancy, and frequent drug use. Another potential outcome is for bullies to become the victim of those individuals they previously tormented as documented in many school shooting incidents (Vossekuil et al., 2000). Smokowski and Kopasz (2005) also indicate the longitudinal effects that perpetrators of bullying are likely to experience including antisocial development in adulthood, low job performance, aggression toward family members, and having children who are considered to be bullies.

Outcomes for victims. Victims are also impacted by the negative behavior they experience. Bullied students are much more likely to have poor attendance, spend more time in the nurses' office, and sometimes refuse to leave their house (Sheras, 2002). As a result, these students may spend less time learning in the classroom, causing a drop in their grades. According to Beane (2009), approximately 22% of students in the fourth through eighth grade struggle academically because of bullying. Unfortunately, bullying can also lead to significant emotional concerns. Victims may become afraid of meeting

new people, frightened when another child approaches, and have more anger and resentment for no clear reason (Sheras, 2002). Victims of bullying may also experience physical effects such as more hunger possibly due to fear of the cafeteria, lack of sleep caused by nightmares, bedwetting, and pain caused by waiting until getting home to use the bathroom. Possible longitudinal effects for victims, according to Smokoski and Kopasz (2005), include low self-esteem, higher rates of depression, and poor interpersonal relationships in adulthood. Individuals that were bullied can also overprotect their children, which can create another generation of bullying targets. All of the potential outcomes for children victimized by bullying could negatively impact schools and the school environment. Children lose their sense of safety and security in the school settings that evidence bullying. School may no longer be enjoyable and attendance and grades decrease.

Outcomes for witnesses. Bystanders are also affected by bullying. One study found that 86% of the children polled have witnessed another child being bullied (Frey, Hirschstein, Edstrom, & Snell, 2009). Frey et al. (2009) indicated that although 90% of children claim to not like watching someone being bullied, less than 20% report they try to stop it. Another alarming statistic is that 85% of bullying occurs in front of others (Frey et al., 2009). Research suggests that a bystander of bullying may likely imitate the behavior especially if they realize the behavior is not punished by adults and is rewarded (Quiroz et al., 2006). For example, many bullies are rewarded by the money, possessions, or sense of power acquired as a result of the behavior. It is estimated that well over half of bullying incidents go unnoticed or unpunished; therefore, bystanders vicariously learn that they may be able to get away with taking part in bullying behaviors.

This reinforcement of the behavior is thought to lead to more bullying-related incidents. Bystanders may also experience fear that they will become the next victim of a bully. This fear may lead to an overall negative impact on school climate. Like victims of bullying, bystanders may chose to not come to school, which typically leads to a decrease in academic performance (Quiroz et al., 2006).

Outcomes for schools and communities. When students experience direct or vicarious bullying, their sense of security is diminished, which may result in negative outcomes result for the entire school community and school climate. The Search Institute and Child Trends with America's Promise Alliance found that over 50% of parents of children between the ages of 6 and 11 report that their children feel unsafe while at school due to bullying (Sidorowicz, Skiba, & Peterson, 1999). A school may develop an environment of fear and disrespect by students. The student population may also feel insecure and believe that teachers and staff have little control or do not care about them (Sidorowicz et al., 1999). A positive school climate creates a learning environment that is vital for students. There is a direct relationship between the school environment and students' success in that students are more motivated to do well and to also realize their full potential when conditions allow students to feel safe (Sidorowicz et al., 1999). Therefore, a more positive school climate is desirable and necessary for student learning and achievement.

Besides the harmful impact on the school community, society as a whole is impacted by bullying. As noted previously, communities in which bullying is evident in schools see an increase in criminal activity, lost productivity on the job, and an increase need for mental health services (Quiroz et al., 2006). These outcomes in turn create the

need for community resources such as the justice system, mental health services, and government assistance programs. Undoubtedly, bullying is a significant problem that needs to be addressed by parents, schools, and communities as it creates personal outcomes that are damaging and societal outcomes that are costly.

Addressing Bullying

Bullying has been addressed in legislation (e.g., Safe Schools Act), policies (e.g., Zero Tolerance), and by several intervention programs designed for implementation in schools to directly address bullying (e.g., Steps to Respect [Committee for Children, 2010] and Bully Free Classroom [Beane, 2009]). Vossekuil et al.'s (2000) report, *The Safe School Initiative*, reviewed the investigational study completed by the Secret Service. The Secret Service gathered and analyzed information related to the thinking and behavior patterns of students who committed acts of violence across the nation. The authors indicated that:

> In over 2/3 of the cases, the attackers felt persecuted, bullied, threatened, attacked, or injured by others prior to the incident. A number of the attackers had experienced bullying and harassment that was longstanding and severe. In those cases, the experience of bullying appeared to play a major role in motivating the attack at school. (p. 7)

Information from this study prompted government officials and educators to revisit and make revisions to several policies such as the Safe Schools Act and the Zero Tolerance policy in order to address bullying behaviors more stringently (Vossekuil et al., 2000). These two policies were designed to make U.S. schools a much safer and positive environment. Currently, a bill is in the initial stage of the federal legislative process,

which addresses the need to prevent bullying and harassment on the basis of sexual orientation and gender identity. This bill is titled Safe Schools Improvement Act of 2011 and if passed will require school districts to report data related to bullying to Congress (Govtrack.us, 2011). The Zero Tolerance policy was designed to prevent drug abuse and violence in schools. This policy, if adopted within a school district, requires automatic punishment for any student that engages in undesirable behavior no matter how minor the infraction. The actual percentage of schools adopting and enforcing this policy is not known and the effectiveness of enforcing this policy is debated. Some research suggests that over 80% of schools require expulsion for drug or violence-related incidents on school property (Sidorowicz et al., 1999). Sidorowicz et al. (1999) further indicated that despite the widespread use of the policy, there is little research regarding effectiveness; however, some data suggests an increase in suspensions, drop outs, and incidents of criminal activity for school districts that report having a Zero Tolerance policy.

Many individuals feel that it is the role of educational institutions to address bullying because children spend a large portion of their day in the school setting (Olweus, 1993). Further, it has been noted that only a small portion of bullying occurs outside of the school day (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003). Nansel et al. (2003) indicate that 9% of males and only 5% of females report experiencing bullying behavior away from school. At this time, research does not support the use of any one approach at the exclusion of others (e.g., Smith, Schneider, Smith, & Ananiadou, 2004). Some researchers feel that a school-wide anti-bullying approach is most effective (e.g., Beane, 2009; Olweus, 1993).

Many schools have implemented school-wide anti-bullying programs. These programs are meant to reduce the bullying that occurs and also serve as a preventative measure. Programs typically involve multiple levels of training and intervention. These multiple components can involve individual students, targeted groups of students, whole grade levels or schools, and training for teachers and administrators. There has been much controversy as to whether or not these programs are beneficial. Some research suggests little to no effect of bullying prevention programs (Smith et al., 2004). However, according to Olweus (1993), many of these programs have demonstrated success, including his intervention program model titled the Olweus Bullying Prevention Program (OBPP). Olweus claims this program, which has been adopted by many European schools, has been successfully shown to reduce indirect and direct bullying, achieve better peer relations, and provides opportunities for bullies and victims to better function in and out of school.

A study published by Frey et al. (2009) reported a 31% decrease in bullying behavior and a 70% decrease in negative bystander behavior over a two-year span when their Steps to Respect school-wide program was implemented. This program, developed by Frey and colleagues, involves school staff, families, and students pre-school through middle school in reducing bullying behavior and creates a safer and more respectful environment. Lesson plans were developed to be used at each level of intervention including primary, secondary, and tertiary. Another school-wide program, *Bullyproof*, was implemented in a mid-sized elementary school in southwestern U.S. over a three-month time period and produced "little change in frequency of observed bullying behaviors, although attitudes changed significantly toward an increased anti-bullying

perspective and greater perceived power to intervene in bullying" (Hallford, Borntrager, & Davis, 2006, p. 91).

There are several issues that arise when comparing programs and their effectiveness. For instance, programs increase bullying awareness, which typically inflates reporting rates for bullying immediately post-intervention (Vreeman & Carroll, 2007). According to Vreeman and Carroll (2007), no particular method has demonstrated adequate efficacy. Therefore, at this point more research is needed specifically related to the effectiveness of anti-bullying programs.

While no one approach to address bullying is advocated or has received overwhelming empirical support, a whole-school approach has been advocated (e.g., Beane, 2009 and Olweus, 1993), as bullying is noted to be a systemic problem in schools necessitating interventions in multiple contexts with multiple targets. Anti-bullying programs typically include strategies for potential victims, victims, bullies, followers, bystanders, parents, school personnel, and community representatives (Beane, Miller, & Spurling, 2008). Prevention/intervention programs contain various elements and methods of implementation. Smith et al. (2004) in their review of whole-school anti-bullying programs identified that the programs reviewed targeted at least three to five of the following program levels: (a) school level, which included policies, supervision, playground reorganization, information, and an anti-bullying committee; (b) parent level, which included staff training, information, involvement in anti-bullying activities, and targeted interventions; (c) classroom level, which included rules, curricular activities, and social skills training; (d) peer level, which included peer-led interventions; and (e) individual level, which included targeted interventions for bullies and victims. These

interventions are implemented simultaneously at the various program levels. Smith et al. (2004) further note that a whole-school approach results in reductions in bullying behavior in many cases. However, there was insufficient evidence to support the whole school approach as superior to other approaches. Additionally, findings indicate that whole school approaches generate results that "reflect a reasonable rate of return on the investment inherent in low-cost, non-stigmatizing primary prevention programs" (Smith et al., 2004, p. 557).

Bully Free Classroom

The *Bully Free Classroom* (Beane, 2009) is a "collection of tips, strategies, and activities designed to address and ameliorate the multifaceted problem of bullying in schools" (p. 1). It is research based and can be used alone or to supplement other programs. The components are consistent with a comprehensive school-wide anti-bullying approach in that the program includes administrative and teacher strategies, lesson plans for each grade level, classroom meetings, student involvement, bystander empowerment, parent involvement, and community involvement. Beane (2009) suggests that the above are "all of the elements and components that must be present in effective anti-bullying programs" (p. 1). The goals of the approach for teachers, students, parents, and the community are: understand that bullying will not be tolerated, provide awareness of the issue, establish and implement rules, decrease existing bullying, create a more positive school climate, help all students feel a sense of belonging or acceptance at school, encourage bystanders to stop bullying, increase adult supervision, help students understand that teachers are authority figures that are caring and respectful, provide immediate intervention for bullies and victims, and teach students nonphysical or

nonaggressive strategies when dealing with conflict. The program provides a series of

lesson plans that can be implemented weekly with students pre-school through high

school and also provides curriculum for administrators, parents, and teachers along with

prevention and intervention strategies. The entire program can be purchased, but

components of the program are provided free of cost online (http://www.bullyfree.com).

The program proposes to meet goals through teacher and student trainings; however,

there are multiple other components such as school-wide awareness, assessments of

perceptions, and tips for parents.

Beane et al. (2008) explain that the *Bully Free Classroom (BFC)* program

"integrates the latest research with proven prevention and intervention strategies" (p. 1).

Results of using the program indicate that, after a 350-day implementation, attendance

improved 4.9%, students who felt bullies existed at their school decreased 24.9%, and

students who had been bullied at school decreased 20.2% (Beane, 2008). Also, students

who felt they had avenues to report bullying at school increased 62.1%, end of grade test

scores increased 13.3%, the number of reported aggressive occurrences decreased from

36 to 5 occurrences, and suspensions as a result of aggressive behavior decreased from 19

to 6.

Spurling (2004) completed a study regarding effectiveness of the *BFC* materials

used in five North Carolina schools. The *BFC* was used at a minimal level, yet evaluated

to impact or be associated with: improved interpersonal relationships, better

communication, decreased rates of aggression and violent behavior, increased school

attendance and test scores, trust in the program and between staff, more interaction

during non-class time, positive teacher role modeling, student understanding of how to

prevent and stop bullying, increased awareness for personnel, lower rates of boy's fighting, improved discipline measures, increased sense of safety, student involvement after school, and lower vandalism incidents. These results were documented through school data and surveys regarding student and teacher perceptions. Seeing that this program was only implemented to a small degree, the investigator predicts that it could have an even greater impact if used more comprehensively (Spurling, 2004). Despite the popular use of the *BFC* materials, research regarding effectiveness is limited.

One School's Need to Address Bullying

A small school district in western Kentucky was experiencing problems with bullying within one of the elementary schools. The school was well aware of the problem based on office referrals and teacher complaints; however, it became an immediate issue to address when several parents of fifth grade students being bullied made contact with school officials. These parents felt very strongly that the school needed to handle to problem. The school psychologist for this particular elementary school also reported a high number of counseling referrals for students that were said to be bullies and the victims of bullies (K. Shiflet, personal communication, May 16, 2011). Instead of meeting with all of these students individually, the school agreed that a group approach targeting the fifth grade would be more effective and efficient seeing that concerns were more predominant at this grade level. The materials from the *BFC* program were used in order to intervene. Selection of this particular program was based on prior experience of the school psychologist with the program and accessibility of materials. Components of the program were selected for use along with an inclusion of methods to evaluate the intervention.

Targeted victims and bullies in the fifth grade along with the fifth grade teachers received a six lesson intervention over a 13 week period of time. Six of the 33 lessons from the *BFC* program were used with the students (see Appendix A). The selected lessons were targeted to increase students' knowledge of bullying, reduce physical and verbal bullying, and increase knowledge of how to report bullying. Teachers were trained on bullying and how to properly report bullying behavior. Pre and post-intervention data were collected on bullying office discipline referrals, bullying knowledge (students), and perceptions of school climate (teachers). Fidelity checks were also implemented by the guidance counselor during each lesson.

Purpose of the Study

It has been established that bullying is evident in U.S. schools and this impacts the individuals involved, the school climate, and society as a whole. A school in western Kentucky was experiencing problems with bullying behaviors and decided to implement an intervention program. After implementation, the present investigator was contacted and asked to evaluate the program implemented in order to determine the impact of the intervention. Administrators within this elementary school questioned whether or not the interventions impacted the number of bullying office discipline referrals, knowledge of bullying, or improved perceptions of the school climate. The purpose of this program review is to provide data for use in determining this intervention program's effectiveness and whether to adopt a school wide implementation. After review of the program implemented, data collected and information sought by the school personnel, specific questions and hypotheses were developed.

The first step in the program review process is to determine the nature of the implemented program. Thus, the research question addressed in this study is how does the implementation compare to the *BFC* total program in terms of number of components implemented and program levels addressed. Next, the implementation fidelity data will be assessed to determine the integrity with which the selected program components were implemented. In addition to the research question, the following hypotheses were developed to guide the investigation.

Hypothesis one: The mean number of discipline referrals for bullying for the participants of bully status will decrease significantly post-intervention in comparison to referrals prior to intervention.

Hypothesis two: The ratings for negative behaviors on the Student Interpersonal Interactions Scale will be significantly less post-intervention as compared to pre-intervention for the participants of bully status.

Hypothesis three: Students who participated in the intervention will have greater knowledge of bullying post-intervention than pre-intervention.

Hypothesis four: Teacher ratings on the School Climate Survey will indicate a more positive environment post-intervention than pre-intervention.

Method

Participants

A group of six fifth grade teachers and a group of fifth grade students constitute the participants for this study. The student participants ($n = 21$) were fifth grade students enrolled in one of the three classrooms in an elementary school with a total enrollment of 386 students. The school is located in a predominantly rural area in the western part of Kentucky. Students were selected based on a high number of discipline referrals for bullying ($n = 13$) or by teacher identification for being the target of multiple incidents of bullying ($n = 8$). The bully group was further divided to form two interventions groups ($n = 7, n = 6$) based on schedule compatibility or convenience. Participants had a mean age of 9.7 years. The bully groups included three females and ten males. Three of the participants of bully status were African American and ten were Caucasian. The victim group included five females and three males, four of which were African American and four were Caucasian.

The teacher participants were the six, fifth grade teachers. Each classroom had a certified teacher and a teacher with alternate certification. All teachers ($n = 31$) at the target elementary school were trained on what bullying looks like and how to properly report bullying incidents as part of the intervention process.

Materials and Measures

Bully Free Classroom (BFC) Materials. School personnel implemented a program using materials and activities from the *Bully Free Classroom (BFC)* curriculum (Beane, 2009). The *BFC* materials were selected for use based on the program's strong research base, which supports a variety of positive outcomes, including an improved

16

school climate and increase in attendance rates (Beane et al., 2008). The intervention project consisted of six out of the 33 possible lessons from the *BFC* curriculum (see Appendix A). The six lessons that were chosen included: What Does Physical Bullying Look Like, What Does Verbal Bullying Look Like, Should I Report Bullying, What Should I Do as a Bystander, What Should I Do When Someone Tries to Bully Me, and What are Some Myths and Facts about Bullying? These lessons were selected by the school psychologist (implementer of intervention) and guidance counselor (consultant to the intervention) as they addressed the major concerns noted by administrators, teachers, and parents. Learner outcomes are listed and needed materials are included for each lesson, which is scripted for the adult leader. Learner activities with explicit steps and directions are included with each lesson. One activity at the end of each lesson consisted of students completing a journaling exercise. Every student received the same set of lessons because the school psychologist and guidance counselor did not want to differentiate between the groups and there was a need for basic information about bullying within the victim group. Information obtained from the *BFC: Over 100 Tips and Strategies for Teachers K-8* (Beane, 2009) was used during the teacher training as well. The training was not scripted; however, it provided teachers with a basic understanding of bullying and how to properly report bullying related incidents.

Bully Free True or False Quiz (BFTFQ). The BFTFQ is an assessment of knowledge about bullying developed for use with the *BFC* curriculum (Beane, 2009). The BFTFQ is a 12-item true or false quiz designed to assess myths and facts about bullying in school age children. While there is no psychometric information available, the BFTFQ appears to assess content covered in the lessons. Although the quiz is

17

designed to use as a teaching tool, it was selected as a pre and post measure because it covers the content of the lessons selected for this intervention (see Appendix B).

Student Interpersonal Interactions Scale (SIIS). The SIIS is a survey developed by Beane (2009) designed to assess student interpersonal experiences within the school setting and is referred to by the title "This Week in School" in the *BFC* materials. The SIIS is a 40-question survey of pleasant, neutral, and unpleasant (bullying) interpersonal experiences over a week's time span. Psychometric information is not provided by the author despite a thorough review of the literature. The response options are *never, once*, and *more than once*. This measure assesses whether students are being bullied or at risk of being bullied and direct and indirect forms of bullying, along with prosocial interactions. There are 25 bullying items and 15 neutral or prosocial items (see Appendix C).

School Climate Survey (SCS). The SCS (WestEd, 2008) is designed to provide information about school staff perceptions regarding the nature of the learning and working environment. A subset of questions was selected from this measure based on relevancy to bullying in order to assess the three areas: positive school climate, perceptions of staff prosocial behaviors with students, and staff perceptions of student bullying. Response styles varied by area assessed. No information regarding psychometric properties is provided by the authors. The school climate items ($n = 14$) had a five response option of the following: *Strongly Agree, Agree, Disagree, Strongly Disagree*, and *Not Applicable*. The perceptions of staff prosocial behaviors had a five response option of the following: *Nearly All Adults, Most Adults, Some Adults, Few Adults*, and *Almost None*. One question regarding the teacher's perception of how well

students behave had the following response options: *Nearly All*, *Most*, *Some*, *Few*, and *Almost None*. The teacher perceptions of student bullying items had the following four response options: *Insignificant Problem*, *Mild Problem*, *Moderate Problem*, and *Severe Problem* (see Appendix D)

Procedures

School personnel obtained written permission from each participant's parent/guardian (see Appendix E). After parental permission was obtained, the student participants signed a contract stating that they chose to participate in the School Climate Committee (see Appendix F). The contract also stated that each student should respect what other group members have to say and that they will contribute their thoughts in a positive and respectful way. By giving assent to participate in the committee, they were told they were making a commitment to make their school a better place for everyone. Assent was obtained after receiving a mini lesson on what bullying is and instructions about what they would be doing. All students selected for the intervention decided to participate in the School Climate Committee. The students participated in a series of eight meetings with the school psychologist and guidance counselor that occurred over 13 weeks (exclusive of school breaks; Table 1). The school psychologist was the leader for the intervention groups and the guidance counselor was a consultant and assessed each session for fidelity. Each meeting lasted approximately one hour.

Table 1

Timeline for Intervention Activities

Week	Activity	Teachers	Students	Fidelity Checks
	Pre-intervention			
1-13	Discipline Data Collection			
	Intervention[a]			
14	Introduction to Group, School Climate Survey, Student Interpersonal Interactions Scale, Bully Free True or False Quiz	•	•	
15	Lesson 1: What Does Physical Bullying Look Like?		•	•
16	Lesson 2: What Does Verbal Bullying Look Like?		•	•
17	Lesson 3: Should I Report Bullying?		•	•
	& Lesson 4: What Should I Do as a Bystander?		•	•
20	Review		•	
22	Lesson 5: What Should I Do When Someone Tries to Bully Me?		•	•
24	Lesson 6: What Are Some Myths and Facts About Bullying?		•	•
27	Review, School Climate Survey, Student Interpersonal Interactions Survey, Bully Free True or False Quiz	•	•	
	Post-intervention			
28-40	Discipline Data Collection			

[a]Discipline data collected throughout intervention.

The majority of teachers (*n* = 31) from this particular elementary school,
including the six fifth grade teachers, received the training on what bullying looks like
and how to properly report bullying incidents. All information was obtained from the
Bully Free Classroom: Over 100 Tips and Strategies for Teachers K-8 (Beane, 2009).
The six fifth grade teachers also completed the School Climate Survey regarding their
perceptions of the school environment after receiving the training.

During the first session with the students, information was provided on bullying. Students completed a BFTFQ to assess their knowledge prior to intervention, as well as the SIIS in order to gain a better understanding of the student's perceptions of their school climate. For the second session with students, the "What Does Physical Bullying Look Like?" lesson was used. The third session used the "What Does Verbal Bullying Look Like?" lesson. During the fourth meeting with students, which was non-scripted, students received a review of all information provided thus far. Session five included two scripted lessons: Should I Report Bullying and What Should I Do as a Bystander? The "What Should I Do When Someone Tries to Bully Me?" lesson was used for session six and the lesson for session seven was "What Are Some Myths and Facts about Bullying?" Session eight consisted of a non-scripted review of the lessons and time for questions and answers. Students completed the BFTFQ and SIIS. Teachers completed the SCS.

Implementation fidelity was ascertained at each lesson. The fidelity checks consisted of using each of the six lesson plans as a checklist for each intervention session. The observer (guidance counselor) assessed the implementer's (school psychologist) completion of each lesson's script and implementation of all activities. Fidelity across sessions was assessed at 100%. All lesson implementation adhered to the script provided and each lesson's activities were executed as written. Fidelity checks indicate the accuracy of adherence to the script; however, they do not imply the quality of the implementation. After implementation of the program, the current program review was requested on the archived data. Approvals for this investigator were obtained from the

Superintendent of the school system and Western Kentucky University's Institutional

Review Board (see Appendix G) prior to the evaluation of the program results.

Results

Research Question 1. How does the implemented plan compare to the advocated

components for bully prevention programs? Although some research indicates that

partial implementation could be effective, full implementation of a program's

components are recommended for optimal results (e.g., Beane, 2009 and Spurling, 2004).

The *Bully Free Classroom* was designed to be incorporated with teacher lesson plans for

all students throughout an entire school year in the general education setting. This

intervention was implemented with select students in one grade with the intervention

implementation outside of their regular classrooms.

Most programs that are implemented to reduce and prevent bullying include

administrative, teacher, student, parent, and community components (Smith et al., 2004).

For this intervention, only teachers and students were involved. Typically, teachers are

responsible for implementing the *BFC* lessons, but teachers within this particular

elementary required training, which could not be completed for timely implementation of

the program. In addition to having a lack of trained personnel, funding for full

implementation was not available.

Evaluation measures for the intervention included measures to assess the content

of the intervention (BFTFQ), the impact of the intervention on student behavior

(discipline referrals), and perceptions of frequency of behaviors (SIIS – Bullying

Behaviors). The content of the lessons implemented were targeted to define verbal and

physical bullying, myths and facts about bullying, how to respond when being bullied,

how to report bullying-related incidents, and also what to do as a bystander. Certain

components were not included for intervention purposes such as lessons on

cyberbullying, reasons why certain people bully, and how to control anger due to either irrelevancy or time constraints. The BFTFQ measured student knowledge of myths and facts about bullying. Within the SIIS, prosocial and bullying items were included; however, none of the lessons implemented addressed prosocial behaviors. In order to measure the number of bullying-related incidents, office referrals for bullying were used, which is one measure of the effectiveness of teacher and student interventions. Evaluation measures for the teacher intervention included the SCS. This survey did directly assess the training content. Teachers were trained on basic knowledge facts and how to report bullying related incidents, but the SCS assessed teacher perceptions of school climate and bullying and prosocial behaviors. From the review of the literature, it is common for other variables to be assessed when evaluating these types of interventions such as attendance, psychosocial factors, sense of safety, academic achievement, and long-term effects (e.g., drop-out rates, criminal records, and need for mental health services).

Regarding the research question, the *BFC* materials are similar to other programs used in the school setting and has produced similar results related to effectiveness. This particular intervention was lacking some recommended components (e.g., administrator/parent/community components, data, and important lessons). Because of this, the intervention implemented is found to fall short.

Hypothesis Testing. Hypothesis one predicted that the mean number of discipline referrals for bullying for the participants of bully status will decrease significantly post-intervention in comparison to referrals prior to intervention. Discipline referral data for three months pre and post-intervention for the participants of bullying

status and the other fifth grade students were used to address this hypothesis (see Figure

1). The number of referrals pre-intervention was compared to the number of referrals

post-intervention using a two-way analysis of variance (Group X Time). The means and

standard deviations for discipline referrals pre and post-intervention by group are

presented in Table 2. The results for the repeated measures analysis of variance

(ANOVA) indicated a significant main effect for time, $F(1, 8) = 33.00$, $p = .000$, partial

$\eta^2 = .81$, and group, $F(1, 8) = 161.49$, $p = .000$, partial $\eta^2 = .95$, along with a significant

interaction between group and time $F(1, 8) = 41.49$, $p = .000$, partial $\eta^2 = .84$. Post-

intervention referrals were significantly less than pre-intervention referrals for

participants in the intervention. Further, the number of referrals for the intervention

participants was greater from pre to post-intervention than nonparticipants. Using

Ferguson's (2009) recommendations for interpretation of effect sizes, the effect size for

this interaction is large. Hypothesis one is supported.
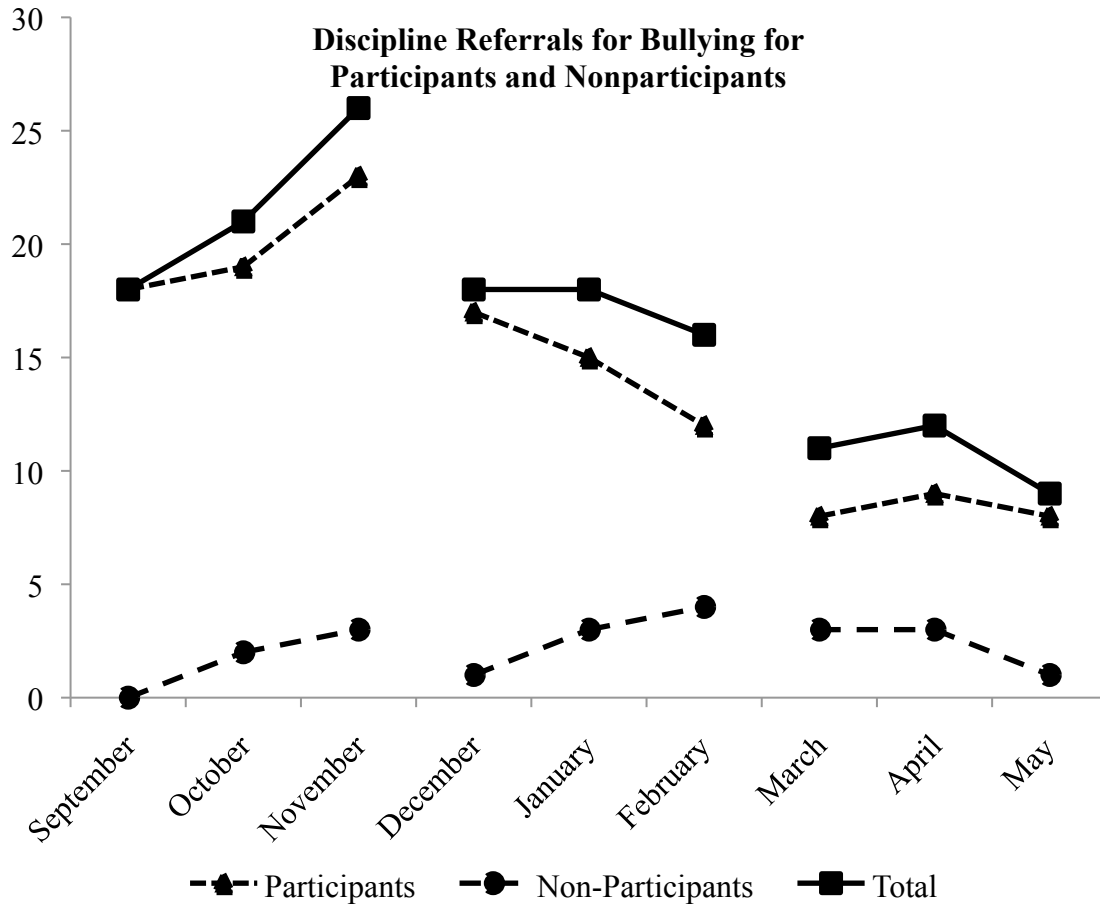
Figure 1. Fifth grade discipline referrals for participants involved in the bullying intervention and non-participants prior, during, and after implementation.

Table 2

Descriptive Statistics for Bullying Discipline Referrals

Group	Time	Mean	Standard Deviation
Participants	Pre-Intervention	20.00	2.65
	Post-Intervention	8.3	0.58
Nonparticipants	Pre-Intervention	1.67	1.52
	Post-Intervention	2.33	1.15

Hypothesis two predicted that the ratings for negative behaviors on the Student Interpersonal Interactions Scale (SIIS) would be significantly less post-intervention as compared to pre-intervention for the participants of bully status. Results for participants of victim status were included as a second group in this analysis. Prior to analysis, items were grouped as either indicating bullying behaviors ($n = 25$) or prosocial behaviors ($n = 15$) and analyzed separately. Ratings are coded so that low scores indicate an improvement for both bullying and prosocial behaviors. Mean scores for the frequency ratings of bullying behaviors pre and post-intervention were compared using a two-way repeated measures ANOVA. The factors being participant status (bully, victim) and time (pre-test and post-test). The ratings of frequency of bullying behaviors experienced served as the dependent measure. The means, medians, and standard deviations for the bullying behaviors are presented in Table 3. Results of the ANOVA indicate a significant main effect for time, Wilks' $\Lambda = .32$, $F(1, 19) = 40.46$, $p = .000$, partial $\eta^2 = .68$, and a significant interaction Wilks' $\Lambda = .59$, $F(1, 19) = 13.00$, $p = .002$, partial $\eta^2 = .41$. All participants rated bullying behaviors significantly less at post-intervention than pre-intervention; however, participants of bully status showed greater differences or improvements in ratings than participants of victim status. A moderate effect size is evident for the interaction (Ferguson, 2009). These findings support Hypothesis two.

Table 3

Descriptive Statistics for Measures by Group

Measure		Group Total (*n* = 21)	Bully (*n* = 13)	Victim (*n* = 8)
Bully Free Quiz [a]	*M*	5.43	5.38	5.50
Pre-test	Median	6.00	6.00	5.50
	SD	1.72	1.66	1.93
Post-test	*M*	7.62	7.31	8.13
	Median	8.00	7.00	8.00
	SD	1.69	1.49	1.96
Student Interpersonal Interactions Scale [b] Bullying Behaviors				
Pre-test	*M*	49.05	41.38	61.50
	Median	54.00	39.00	61.00
	SD	13.29	11.14	2.33
Post-test	*M*	32.76	35.62	40.63
	Median	34.00	34.00	37.50
	SD	7.57	5.38	9.81
Prosocial Behaviors[c]				
Pre-test	*M*	31.71	29.85	34.75
	Median	32.00	31.00	34.50
	SD	5.95	6.66	8.21
Post-test	*M*	27.24	26.15	29.00
	Median	26.00	26.00	27.50
	SD	4.47	3.82	26.29

[a] Bully Free True False Quiz (Beane, 2009)
[b] Student Interpersonal Interactions Scale (Beane, 2009)
[c] Prosocial items are scored so that low values indicate positive change or improvement.

Note. Items on the Student Interpersonal Interactions Scale were divided into bullying behaviors and prosocial behaviors. The following items were classified as bullying behaviors: 1, 3-4, 6, 8, 10-11, 13-14, 17-19, 21, 23, 25, 27, 29-30, 32, and 34-39. The following items were classified as prosocial behaviors: 2, 5, 7, 9, 12, 15-16, 20, 22, 24, 26, 28, 31, 33, and 40.

Analysis of the SIIS prosocial behaviors was conducted using a repeated measures two-way ANOVA (Group Status X Time) to further explore the impact of the intervention. The means, medians, and standard deviations for the prosocial behaviors are presented in Table 3. Results of the ANOVA indicated a significant main effect for time, Wilks' Λ = .49, $F(1, 19)$ = 20.15, p = .000, partial η^2 = .52. All participants rated prosocial behaviors more frequent at post-intervention than pre-intervention. Using Fergusons' criteria (2009), the effect size was moderate in strength.

Hypothesis three predicted that students who participated in the intervention would have greater knowledge of bullying post-intervention than pre-intervention. To address this hypothesis, the scores from the Bully Free True or False Quiz for the participants of bully and victim status were compared pre and post-intervention using a repeated measures two-way ANOVA (Group Status X Time). The means, medians, and standard deviations are presented in Table 3. Results of the repeated measures ANOVA indicated a significant main effect for time, Wilks' Λ = .16, $F(1, 19)$ = 103.54, p = .000, partial η^2 = .85. Regardless of status (bully, victim), scores improved significantly post-intervention indicating greater knowledge of bullying for both groups with a large effect size when using Ferguson's descriptive categories for effect size (2009). Hypothesis three was supported for participants of both bully and victim status.

Hypothesis four predicted that teacher ratings on the School Climate Survey would be more positive post-intervention. Descriptive statistics for the School Climate Survey are provided in Table 4. Because response options differed across the survey, items were grouped into three categories: Positive Climate (n = 14 items), Prosocial Behaviors (n = 6 items), and Bullying Behaviors (n = 5 items). A paired samples t-test

was conducted to evaluate whether teacher ratings differed post-intervention for each of the three categories of items. Results for the Positive Climate items indicated that the mean rating post-intervention was significantly less than the mean pre-intervention, $t(5) = 5.94$, $p = .002$, $\eta^2 = .87$. Teacher perceptions of school climate improved significantly post-intervention. The effect size was large in strength (Ferguson, 2009). A paired samples t-test for the Prosocial Behavior ratings indicated no significant difference between pre and post-intervention ratings, $t(5) = 2.17$, $p = .082$. Results for a paired samples t-test for the Bullying Behaviors ratings indicated a significant difference between pre and post-intervention, $t(5) = 5.97$, $p = .002$, $\eta^2 = .88$. The pre-intervention ratings were significantly higher than post-intervention ratings with a large effect size (Ferguson, 2009). Ratings were coded so that lower ratings, or scores, for all three categories indicate a more desirable rating. These results indicate that teacher perceptions of school climate and bullying behaviors are significantly more positive post-intervention; however, no significant difference between pre and post-intervention ratings were found regarding prosocial behaviors of teachers toward students. The later finding was not included in the hypothesis, but analyzed for informational purposes. Support for Hypothesis four was found in that significant results were found for Positive School Climate and Bullying Behaviors scales with large effect sizes.

Table 4

Descriptive Statistics for Teacher Survey

		Pre-Survey	Post-Survey
School Climate Survey			
Positive Climate	*M*	32.33	26.67
(Items 1-14)	Median	33.50	26.50
	SD	3.20	2.16
	Variance	10.27	4.67
Prosocial Behaviors	*M*	11.00	9.67
(Items 15-20)	Median	11.50	9.50
	SD	1.79	1.37
	Variance	3.20	1.87
Bullying Behaviors	*M*	10.17	6.50
(Items 21-25)	Median	10.00	7.00
	SD	1.72	0.84
	Variance	2.30	0.70
Total	*M*	52.33	44.67
	Median	52.50	43.50
	SD	2.94	3.08
	Variance	8.67	9.47

Note. n = 6; Items were selected from the California School Climate Survey (WestEd, 2008)

Discussion

The purpose of this study was to evaluate the bullying program implemented in one school in order to determine the impact of the intervention. School personnel questioned whether or not the intervention addressed the noted bullying problem, impacted the number of bullying discipline referrals, knowledge of bullying, or improved perceptions of the school climate. Data provided for this program review were limited to that provided by the district. The purpose of the evaluation was to determine the effectiveness of the intervention and provide a recommendation regarding school wide implementation.

Initially, the program implemented was evaluated in comparison to desirable components advocated by experts and researchers and found to lack many components regarded as necessary or appropriate. This intervention was developed and implemented to target an immediate need of the school and was developed to adapt to pragmatic considerations rather than fidelity to the *BFC* curriculum. When the intervention implemented is evaluated against the needs of the district, the evaluation is much more positive. The lessons that were selected for use in this intervention plan provided information regarding bullying and what to do if bullying occurs. School administrators reported physical and verbal bullying to be predominant forms of bullying. Therefore, the six lessons related to those forms of bullying were used for the intervention groups. Given the constraints (e.g., lack of personnel training, need for prompt attention, and lack of funding for full implementation), this combination of intervention lessons and method of implementation (e.g., one grade, select students, small group outside of general education classroom, and lessons provided by support personnel) are reasonable. Most

bulling programs state the full implementation is preferred for more desirable outcomes; however, most program developers realize that this is not always possible in the school setting given a variety of constraints. Some experts believe it is reasonable to modify such programs to best fit the needs of the school (e.g., Beane, 2009 and Olweus, 1993). Aforementioned, Spurling (2004) found positive outcomes after implementing *BFC* materials at a minimal level.

School personnel provided data for analyses that they thought would appropriately evaluate the intervention implemented. It is important to evaluate each measure used and determine if it is an effective assessment tool. Discipline referrals were used to evaluate whether or not bullying related incidents decreased. Discipline data is a common measure used to evaluate bully programs. Yet, it would have been more beneficial if more detailed bully referral data was accessible for analysis. For example, only the total number of bullying discipline referrals for participants and nonparticipants was available. The frequency of referrals each month for each intervention participant would have helped the researcher understand who exactly benefited from the lessons and to what extent. It is possible that only a handful of participants had a dramatic decrease in referrals; alternatively, each student had a small decrease in referrals.

The measure used to assess knowledge of bullying (BFTFQ) and the frequency of bullying and prosocial behaviors (SIIS) evidenced face validity as the items appeared to assess content that was taught during the intervention lessons. On the other hand, the SCS used to assess teacher perceptions of school climate, staff prosocial behaviors, and student bullying behavior did not assess the teacher training. Teachers were instructed on

what bullying looks like and how to handle bullying-related incidents, not how to improve school climate and how to interact better with students. Therefore, there was no assessment of the teacher training. However, the areas assessed by the SCS are an indication of a change in overall atmosphere and perception of prevalence of bullying behaviors, which are areas in which one would expect improvements, given an effective intervention. Additional data not included that would be useful would be SIIS and BFTFQ data collected from the fifth grade students who were nonparticipants. This data would help triangulate the existing data and compare knowledge and perceptions of the frequency of bullying behaviors of the students not included in the intervention.

The lessons did not address prosocial types of behavior that were assessed on the SIIS. It was surprising that significant results were found for mean number of prosocial behaviors post-intervention compared to pre-intervention ratings. The only prosocial behavior that was addressed during the lessons was in regards to apologizing for misbehaving, but none of the items on the SIIS revolved around this behavior. Again, it would have also been helpful to have data on nonparticipants for analysis purposes.

Additional positive features of the intervention include the timing of the implementation of the intervention to allow for equivalent time spans for pre and post-intervention discipline referral data collection. Other positive features include the one lesson per week, one hour per lesson format, and inclusion of two review lessons. The overall intervention plan when evaluated as a program designed to meet an immediate school need and allow for many pragmatic constraints is evaluated to be appropriate to address the school's concern in many ways. The measures evidenced face validity and the lessons selected formed a unit of related and integrated units. In addition, efforts

were made to collect data from the intervention participants as well as other observers (teachers) and direct measures (discipline referrals). This intervention evidences many elements of good intervention design and is evaluated to be a good intervention package.

Hypothesis one was supported as bullying discipline referrals were found to be significantly lower post-intervention for the students of bully status. Further the large effect size provides more confidence in this finding. It is important to note that only group data were available and that student specific data would be desirable to know if the referrals decreased for each participant or for the select participants.   Therefore, results cannot indicate that the intervention worked for all participants. It can only be stated that referrals decreased for the participant group. The current findings are consistent with that of Beane (2009) who reports decreases in referrals with the use of the *BFC* materials.

Hypothesis two stated that the ratings of frequency of occurrence of negative behaviors on the Student Interpersonal Interactions Scale would be significantly less post-intervention as compared to pre-intervention for the participants of bully status and results supported this prediction. The participants of bully status and victim status reported fewer occurrences of bullying behaviors such as name calling, kicking, and hitting at post-intervention. However, there was an interaction between status and time of testing indicating the change from pre-intervention to post-intervention was greater for the participants of bully status. Additionally, results suggest that participants of victim status had more knowledge of bullying pre and post-intervention than participants of bully status even though the bully group made more of an improvement. The mean number of prosocial behaviors on the SIIS increased for both groups post-intervention compared to pre-intervention ratings. Therefore, all intervention participants reported

35

higher frequency of students treating them more positively. For example, they were smiled at, were helped with school work, and shared possessions more often than pre-intervention data suggested. This indicates no significant difference between group ratings of prosocial behaviors at pre-intervention and that both groups improved or gained knowledge at the same rate.

Hypothesis three was also supported in that students who participated in the intervention had greater knowledge of bullying post-intervention than pre-intervention regardless of group status (bully/victim). The true or false questions used to assess this hypothesis were evaluated to have face validity, appearing to measure information that had been taught during the intervention process. Individual data were collected and scores indicate that every participant scored higher on the post-testing. Results indicate that participants had a better understanding of myths and facts related to bullying such as bullying is not just teasing and reporting bullying is not considered "tattling." The researcher was only provided data on how many questions each participant answered correctly on the pre-test and post-test. Therefore, frequencies of individual items could not be determined along with reliability coefficients for each testing.

Hypothesis four was supported. Two of the three categories for the teacher's School Climate Survey indicated significant results. Teachers perceived the overall school climate to be more positive and their perceptions of bullying behavior decreased at post-intervention. For example, teachers felt that harassment and bullying among students decreased and teachers communicated consequences for breaking the rules more often. Teacher perceptions of staff prosocial behaviors did not significantly increase. These prosocial behaviors included positive interactions between staff members and

students. A change was not expected seeing that the intervention was focused on students and not teachers. Although there was not a significant increase, ratings were high for both pre and post-intervention results (Pre-intervention $M = 11.00$; Post-intervention $M = 9.62$; Maximum score of 6 out of a possible 30). For example, teachers felt that the majority of all staff members treated all students fairly at both pre and post-intervention.

Limitations

This intervention is considered to be a quasi-experimental design, meaning random selection was not used. With a quasi-experimental design, internal validity is often compromised and a regression to the mean can occur. Regression to the mean suggests that a nonrandom group sample is more likely to fall closer to the population mean post-intervention than a random group sample. Participants (teachers and students) may have also experienced test sensitization seeing that the same measures were used pre and post-intervention. Subjects were more familiar with the items, which may have skewed ratings. There are also unknown factors that may have occurred at school during the intervention (e.g., absences and faculty changes).

The results obtained have to be interpreted taking into consideration the limitations of a lack of a comparison or control group (with the exception of office discipline referrals). Therefore, it is not certain that these outcomes are directly related to the intervention used because data were not provided for non-participants other than discipline referrals. Participants were also chosen based on referrals and teacher input rather than using a random selection method. This intervention involved a very small number of participants seeing that only 33.3% of fifth grade students were selected. It is

also important to note that the guidance counselor, who was involved in the intervention process, completed the fidelity checks. It would have been desirable to have someone independent of the school and intervention to ensure fidelity implementation to guard against potential bias in the ratings. Again, this fidelity check was only an indication that the script was followed and activities were implemented. The quality of implementation is unknown. During the intervention process, there were school breaks, which disrupted the weekly lesson schedule at two points in time (Thanksgiving and Christmas Break). It is unknown what impact this might have had, although time for review was included before each new lesson and a complete review was held midway through the intervention and for the last session.

Data that were provided for analysis were somewhat limited and lacked some commonly assessed outcome variables for bullying interventions. As previously mentioned, discipline data only indicated the number of referrals for participants and nonparticipants. Individual student data were not collected. For the BFTFQ, more information regarding specific questions would have been beneficial. Based on the totals of pre and post-data, it is known that every participant gained greater knowledge, but it is not known which items were answered correctly. Frequency data for each item would have provided much more information for analysis. Data collected for nonparticipants (students and teachers) regarding perceptions of bullying would have also assisted analysis. Additional data for participants of victim status may have provided insight regarding their sense of safety had improved. As mentioned in the review of the literature, many victims of bullying experience fears associated with coming to school

(Smokoski & Kopasz, 2005). No data were provided that was directly related to being a victim of bullying, even though many lessons addressed this concept.

Attendance is also a variable that is frequently assessed as an outcome when researching bullying, yet this information was not provided to the investigator. Research suggests that attendance rates tend to decrease in schools where bullying is prevalent (Sheras, 2002). It is evident that poor attendance leads to other outcomes such as lower academic achievement and increased dropout rates. Information regarding participant attendance records would have been extremely relevant and beneficial for this study.

Strengths

Although there are many limitations, strengths were noted in this intervention implementation. Implementation fidelity was assessed at 100% meaning the implementers of the intervention followed the scripts provided and carried out the intervention lessons how the developer of the materials intended for them to be implemented. Also, student measures (SIIS and BFTFQ) evidence face validity of the actual content taught during the lessons, with the exception of prosocial behaviors. Attrition and mortality were not factors for this study. The same teacher and student participants began and completed the intervention process and everyone was also present for every session. The design of the intervention including the content, sequence of content, and evaluation measures was evaluated to contain many desirable features for an intervention. Another strength relates to the length of time discipline data were collected. Ample data were collected pre and post-intervention. Even though this intervention was a limited implementation in scope of lessons used and number of participants involved,

the significant findings with moderate to large effect sizes would predict for stronger

effects with a larger implementation.

Recommendations

This evaluation explored the effectiveness of the intervention materials used in

order to determine whether the school district should support full implementation within

their district. Given the elements that they implemented, these findings support that

significant changes were noted in this population and in teacher perceptions.   Ultimately,

the outcomes noted would be beneficial for all grade levels, the school climate, and

community. Full implementation of *BFC* materials, which include administrative,

teacher, students, parent, and community components, is recommended. Significant

results were found after implementing only six of the possible 33 lessons with a small

sample. The strength of the current findings is indicated by the effect sizes. Given the

current findings, it would be highly likely that this pattern would also be evident in a

school-wide implementation.

When considering future research, more assessment is necessary to evaluate the

program more effectively and comprehensively. The current findings are encouraging

and taken with other findings (e.g., Spurling, 2004) add some evidence, although not

overwhelming, for use of the *BFC* materials. In order to present findings that are more

convincing, it is recommended that a control group be used in order to provide

comparison data. Also, other outcomes that are typically measured within bullying

research (e.g., attendance, achievement, and social/emotional status) should be measured.

The school district involved in the current study should consider full implementation of

the *BFC* materials. Although results are strong, improvements in evaluation measures,

components included, and school-wide implementation are encouraged. As discussed in

the review of the literature, there is no approach that has been completely effective at this

point. Even though ample research can be found on defining bullying and statistics

related to frequency and outcomes, little research can be found of effective

intervention/prevention programs.

References

American Association of University Women. (2001). *Hostile hallways: Bullying,*

   teasing, and sexual harassment in school. Washington D.C.: Author.

Beane, A. (2009). *The bully free classroom: Over 100 tips and strategies for teachers K-*

   8. Minneapolis, MN: Free Spirit Publishing.

Beane, A., Miller, T., & Spurling, R. (2008). The bully free program: A profile for

   prevention in the school setting. In T. W. Miller (Ed.), *School violence and*

   primary prevention (pp. 391-405)*.* New York, NY: Springer.

Committee for Children. (2010). *Steps to respect: A bully prevention program.*

   Retrieved from http://www.cfchildren.org/programs/str/overview/

DeVoe, J., & Kaffenberger, S. (2005). Best practices in bullying prevention and

   intervention programs. NASP *Communiqué, 34*(4).

Ferguson, C. (2009). An effect size primer: A guide for clinicians and researchers.

   Professional Psychology: Research and Practice, Advance online publication.

   doi 10.1037/a0015808.

Frey, K., Hirschstein, M., Edstrom, L., & Snell, J. (2009). Observed reductions in

   school bullying, nonbullying aggression, and destructive bystander behavior: A

   longitudinal evaluation. *Journal of Educational Psychology, 101*, 466–481.

Govtrack.us. (2011). *S.506:Safe schools improvement act of 2011.* Retrieved from

   http://www.govtrack.us/congress/bill.xpd?bill=s112-506

Hallford, A., Borntrager, C., & Davis, J. (2006). Evaluation of a bullying prevention

   program. *Journal of Research in Childhood Education, 21*, 91-101.

Nansel, T., Craig, W., Overpeck, M., Saluja, G. & Ruan, W. (2004). Cross

national consistency in the relationship between bullying behaviors and

   psychosocial adjustment. *Archives of Pediatrics & Adolescent Medicine, 158*,

   730-736.

Nansel, T., Overpeck, M., Haynie, D., Ruan, W., & Scheidt, P. (2003).

   Relationships between bullying and violence among US youth. *Archives of*

   Pediatric Adolescent Medicine, 157, 348-353.

Nansel, T., Overpeck, M., Pilla, R., Ruan, W.J., Simons-Morton, B., & Scheidt, P.

   (2001). Bullying behaviors among U.S. youth: Prevalence and association with

   psychosocial adjustment. *Journal of the American Medical Association, 285*,

   2094-2100.

Olweus, D. (1993). *Bullying at school: What we know and what we can do.* Cambridge,

   MA: Blackwell Publishers.

 Quiroz, H., Arnette, J., & Stephens, R. (2006). *Bullying in schools: Fighting the*

   bullying battle. Retrieved from http://www.schoolsafety.us/pubfiles/bullying_

   facts_sheets.pdf

Sheras, P. (2002). *Your child: Bully or victim? Understanding and ending schoolyard*

   tyranny. New York, NY: Skylight Press.

Sidorowicz, K., Skiba, R., & Peterson, R. (1999). The dark side of zero tolerance: Can

   punishment lead to safe schools? *Phi Delta Kappa International.* Retrieved from

   http://cranepsych.edublogs.org/files/2009/07/dark_zero_tolerance.pdf

Smith, J., Schneider, B., Smith, P., & Ananiadou, K. (2004). The effectiveness of

   school-wide anti-bullying programs: A synthesis of evaluation research. *School*

   Psychology Review 33, 547-560.

Smokowski, P., & Kopasz, K. (2005). Bullying in school: An overview of types,

    effects, family characteristics, and intervention strategies. *Children and Schools,*

    27, 101-110.

Spurling, R. (2004). *The bully-free school zone character education program: A study*

    of the impact on five western North Carolina middle schools (Doctoral

    Dissertation). Retrieved from http://bullyfree.com/site/files/

    effectiveness_data_bully_free.pdf

Vossekuil, B., Reddy, M., Fein, R., & Modzeleski, W. (2000). *U.S.S.S. Safe school*

    initiative: An interim report on the prevention of targeted violence in schools.

    Washington DC: U.S. Secret Service, National Threat Assessment Center.

Vreeman, R., & Carroll, A. (2007). A systematic review of school-based

    interventions to prevent bullying. *Archives of Pediatrics and Adolescent*

    Medicine, 161, 77-78.

Weir, E. (2001). The health impact of bullying. *Canadian Medical Journal, 165*, 1249-

    1250.

WestEd. (2008). *California school climate survey.* Retrieved from

    http://cscs.wested.org/

White, D., Glenn, B., & Wimes, A. (2007). *Proceedings of persistently safe*

    schools: The 2007 national conference on safe schools. Washington, DC:

    Hamilton Fish Institute, The George Washington University.

Appendix A

Bully Free Classroom-Core Lesson Plans for Fifth Grade Students

Lesson C1 Are We a Welcoming Class?
Lesson C2 What is Bullying?
Lesson C3 What Does Physical Bullying Look Like? *
Lesson C4 What Does Verbal Bullying Look Like?*
Lesson C5 What Does "Guarding Your Tongue" Mean?
Lesson C6 What Does Social Bullying Look Like?
Lesson C7 What is Cyber Bullying? What Does It Look Like?
Lesson C8 Do You Cyber Bully?
Lesson C9 What Should I Do to Prevent and Stop Cyber Bullying?
Lesson C10 What was My Behavior Like this Past Week?
Lesson C11 Should I Report Bullying?*
Lesson C12 When and Where Does Bullying Occur in Our School?
Lesson C13 What Should I Do When Someone Tries to Bully Me?*
Lesson C14 What Does "Guarding Your Heart" Mean?
Lesson C15 What Should I Do as a Bystander? (Part 1)*
Lesson C16 What Should I Do as a Bystander? (Part 2)
Lesson C17 What are Some Myths and Facts about Bullying?*
Lesson C18 What is a Bully Free Classroom?
Lesson C19 What is a Bully Free Student Pledge?
Lesson C20 Why Do Some Students Bully?
Lesson C21 How was I Bullied this Past Week on School Property?
Lesson C22 What are the Behavioral Expectations in the Bathroom?
Lesson C23 What are the Behavioral Expectations in the Hallway?
Lesson C24 What are the Behavioral Expectations in the Cafeteria?
Lesson C25 Does Bullying Bruise People on the Inside?
Lesson C26 Do Mean Words and Actions Punch Holes in Hearts?
Lesson C27 What is Empathy and Why is it Important?
Lesson C28 How Can We Spread the Golden Rule?
Lesson C29 What Should I Do If I Hurt Someone?
Lesson C30 Would You Rather Be an Onion Person or an Apple Person?
Lesson C31 How Can I Manage My Anger?
Lesson C32 Bully Free Projects: How Do We Go Forward?
Lesson C33 How Are We Doing?

*Lessons implemented during intervention procedures
(Beane, 2009)

Appendix B

Bully Free True or False Quiz (BFTFQ)

Name: _____ **Date:** _____

Instructions: Carefully read each of the following statements about bullying and circle "T" if the statement is true and "F" if the statement is false.

Bully Free True or False Quiz

Item	Circle the Correct Answer	
1. Bullying is just teasing.	T	F
2. Some people deserve to be bullied.	T	F
3. Only boys are bullies.	T	F
4. Boys bully more than girls.	T	F
5. Boys are more aggressive than girls.	T	F
6. Reporting that you are bullied is "tattling" or "ratting" on someone.	T	F
7. Reporting that you have seen someone bullied is "tattling" or "ratting" on someone.	T	F
8. Bullying should not concern adults because it is just a normal part of growing up.	T	F
9. Students who bully feel bad about themselves and that is why they bully others.	T	F
10. The best way for a bullied student to stop a student who bullies her is to ignore him.	T	F
11. When a person is bullied he always becomes a better person.	T	F
12. Students who are bullied will probably remember it for the rest of their lives.	T	F

Appendix C

Student Interpersonal Interactions Survey (SIIS)
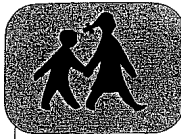
THIS WEEK IN SCHOOL

Read each statement and think about the past week. Put a checkmark in the column that describes how often that happened to you during the week. When you're through with the checklist, give it to the teacher.

Today's date: _____

Check this box if you're a boy ☐   Check this box if you're a girl ☐

This week in school, another student in my class:	Never	Once	More than once
1. called me names			
2. said something nice to me			
3. said something rude or mean about my family			
4. tried to kick me			
5. treated me with kindness and respect			
6. was mean to me because I'm different			
7. gave me a present			
8. said they'd beat me up			
9. gave me some money			
10. tried to make me give them money			
11. tried to scare me			
12. loaned me something I wanted to borrow			
13. stopped me from playing a game			
14. was mean about something I did			
15. talked about clothes with me			
16. told me a joke			
17. told me a lie			
18. got other kids to gang up on me			
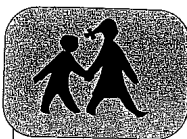
26

This week in school... another student in my class	Never	Once	More than once
19. tried to make me hurt someone else			
20. smiled at me			
21. tried to get me in trouble			
22. helped me carry something			
23. tried to hurt me			
24. helped me with my schoolwork			
25. made me do something I didn't want to do			
26. talked about TV with me			
27. took something away from me			
28. shared something with me			
29. said something rude or mean about the color of my skin			
30. shouted at me			
31. played a game with me			
32. tried to trip me			
33. talked with me about things I like			
34. laughed at me in a way that hurt my feelings			
35. said they would tell on me			
36. tried to break something of mine			
37. told a lie about me			
38. tried to hit me			
39. made me feel bad about myself			
40. made me feel good about myself			

27

Appendix D

School Climate Survey (SCS)

School Climate Survey*
Positive Climate
A = Strongly Agree
B = Agree
C = Disagree
D = Strongly Disagree
E = Not Applicable

This School…
1. is a supportive and inviting place for children to learn.
2. provides adequate counseling and support services for children.
3. is a supportive and inviting place for teachers to work.
4. gives all students equal opportunity to participate in classroom discussions and activities.
5. gives students opportunities to "make a difference" by helping other people, the school, or community.
6. has staff examine own cultural biases through professional development or other processes.
7. fosters an appreciation of student diversity and respect for each other.
8. emphasizes showing respect for all student's cultural beliefs and practices.
9. clearly communicates to students the consequences for breaking the rules.
10. handles discipline problems fairly.
11. effectively handles student discipline and behavior problems.
12. is a safe place for students.
13. is a safe place for staff.
14. is welcoming to and facilitates parent involvement.

Prosocial Behaviors
A = Nearly All Adults
B = Most Adults
C = Some Adults
D = Few Adults
E = Almost None

How many adults at this school…
15. really care about every student?
16. acknowledge and pay attention to students?
17. listen to what students have to say?
18. treat all students fairly?
19. treat every student with respect?
20. Feel a responsibility to improve this school?

A = Nearly All
B = Most
C = Some
D = Few
E = Almost None

Based on your experience, how many students at this school…
    21. are well-behaved?

Bullying Behaviors
A = Insignificant Problem
B = Mild Problem
C = Moderate Problem
D = Severe Problem

How much of a problem AT THIS SCHOOL is…
    22. harassment or bullying among students?
    23. physical fighting between students?
    24. racial/ethnic conflict among student?
    25. lack of respect of staff by students?

*Items were selected from the California School Climate Survey (WestEd, 2008)

Appendix E

Parent/Guardian Consent Form for Student Participation

in the School Climate Committee

October 27, 2010

Dear Parent/Guardian,

       Hello! My name is ████████ and I am the Guidance Counselor at ████████████████. I would like to meet with your child on a weekly basis when possible. I would love if your child could join me. If you agree, please sign and return the bottom portion of this sheet. I look forward to working with your child.
       If you have any questions please feel free to contact me at 389-2611 or email me at ████████████████████.

Thanks,

████████

Guidance Counselor
████████████████

I give my child, _____, permission to meet with ████████ on a weekly basis.

_____   _____
             Parent Signature   Date

Appendix F

Student Consent for Participation in the School Climate Committee

I, _____, would like to participate in the School Climate

Committee. As a member of this committee I will respect other group members and what

they have to say. I will also contribute my thoughts in a positive and respectful way.

This is also considered a commitment to make my school a better place for everyone.

_____   _____
Name   Date

Appendix G

WKU Institutional Review Board Approval Letter

Jordan E. Davis
c/o Dr. Elizabeth Jones
Psychology
WKU

Jordan E. Davis:

Your research project, *Evaluation of a Program to Reduce Bullying in an Elementary School*, was reviewed by the IRB and it has been determined that risks to subjects are: (1) minimized and reasonable; and that (2) research procedures are consistent with a sound research design and do not expose the subjects to unnecessary risk. Reviewers determined that: (1) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (2) selection of subjects is equitable; and (3) the purposes of the research and the research setting is amenable to subjects' welfare and producing desired outcomes; that indications of coercion or prejudice are absent, and that participation is clearly voluntary.

1.   In addition, the IRB found that you need to orient participants as follows: (1) signed informed consent is not required; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data. (3) Appropriate safeguards are included to protect the rights and welfare of the subjects.

This project is therefore approved at the Exempt from Full Board Review Level.

2.   Please note that the institution is not responsible for any actions regarding this protocol before approval. If you expand the project at a later date to use other instruments please re-apply. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office of Sponsored Programs at the above address. Please report any changes to this approved protocol to this office. A Continuing Review protocol will be sent to you in the future to determine the status of the project. Also, please use the stamped approval forms to assure participants of compliance with The Office of Human Research Protections regulations.

Sincerely,

Paul J. Mooney, M.S.T.M.
Compliance Manager
Office of Research
Western Kentucky University

cc: HS file number Davis HS11-297