THE EFFECTS OF A BULLYING PREVENTION PROGRAM ON BULLYING EXPRESSION AND OVERALL SCHOOL CLIMATE

by

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ABSTRACT

The purpose of this study was to determine whether a bullying prevention program would decrease student reports of victimization, perpetrating of bullying acts, and witnessing bullying behavior, as well as increase student-reported feelings of safety. Teacher reports of school climate and witnessing bullying were also assessed. Participants in this study were third-, fourth-, and fifth-grade students and their classroom teachers, from two suburban K-8 schools in the southwestern part of the United States. Bullying Prevention – Positive Behavior Supports (BP-PBS) was used at the experimental school as the intervention. The control group received no intervention. Students completed a researcher-created questionnaire pre- and postintervention, which assessed student-reported victimization, witnessing of bullying behavior, self-reported bullying behavior, and feelings of overall safety. Teachers at both schools completed the School Climate Inventory – Revised (SCI-R), as well as a teacher-version of the bullying questionnaire. An analysis of covariance (ANCOVA) was conducted to statistically adjust for baseline differences in three variables. A two-way ANOVA was used for the remaining variable (perpetrator) to determine if significant changes occurred following the intervention. Results from the ANCOVA indicate significant effect at post-intervention for the victim variable (F (1, 434) = 4.450, p = .035) and the witness variable (F (1, 434) = 15.063, p = .000). ANCOVA results were not significant for the safety variable (F (1, 434) = .359, p = .549). Two-way ANOVA results were not significant for

the perpetrator variable (F (1, 434) = 2.701, p = .101). ANCOVA results were not significant for the teacher bullying questionnaire for school (F (1,20) = .846, p = .377) or the SCI-R for school (F (1, 20) = .054, p = .830) or grade (F (2,20) = .932, p = .423). ANCOVA results were significant for the teacher bullying questionnaire for grade (F (2, 20) = .4663, p = .034). Analysis of the ODRs indicate no difference in reports of bullying from the 2015-2016 to 2016-2017 school years.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

In the last several years, bullying has become an important topic in school-based research. As of 2015, all 50 states have adopted antibullying legislation, most of which require schools to take necessary and appropriate actions to put an end to bullying behavior (Temkin, 2015). With the heightened attention to bullying behavior in the schools, the educational community has responded by expanding the existing research base to include more information on the negative effects of bullying behavior on students (Bradshaw, 2015; Cross, Lester, & Barnes, 2015). Studies have shown that bullying in schools has been linked to increased aggression (Holt & Espelage, 2007; Newman, Carlson, & Horne, 2004), depression (Klomek, Marrocco, Kleinman, Schonfeld, & Gould 2007), and suicidal ideation among victims (Espelage & Holt, 2013). In an effort to remediate these issues, prevention programs that target bullying behavior in schools have shown positive effects in supporting student social competence and self-esteem (Merrell, Gueldner, Ross, & Isava, 2008); however, there has been little research involving prevention programs that work in the existing school framework of behavior supports. The purpose of the current study is to investigate the effectiveness of the Bullying Prevention – Positive Behavior Supports (BP-PBS) program for bullying behavior in schools and extend previous research on this topic (Ross, Horner, & Stiller, 2011).

Defining Bullying Behavior

The BP-PBS program addresses precursors to bullying behavior by teaching students to identify characteristics of bullying and properly intervene with bullying behavior. The program was designed to align with existing definitions of bullying and address the full scope of bullying behavior that may exist in schools. While the concept of bullying may vary, efforts have been made to create a unified concept of bullying in school. The American Psychological Association (APA) published the APA Resolution on Bullying Among Children and Youth in 2004 in an attempt to define and better understand what bullying is and the impact it has on the nation's youth (APA, 2004). Bullying, as defined by APA, can be identified by its three main components: (1) an act intended to cause harm, (2) an imbalance of power between the bully and the victim, and (3) repetition – the bullying occurs multiple times (APA, 2004; Farmer et al., 2010), or as it is sometimes referred to in the literature, the "double I" – Intentional acts, Imbalance of power and repeated over time (Orpinas & Horne, 2006).

The APA resolution helps to explicitly define bullying. An essential part of this definition of bullying is that the perpetrator, or the "bully," knows that he/she is hurting his/her victim, whether emotionally or physically – it is an intentional act, not an accident. It is important to make this distinction in order to accurately identify true bullying. Bullies also understand on some level that they have more power, be it physical, social, or intellectual power, than their victim. The imbalance of power can exist when there is a difference in height, weight, intelligence, or even physical stamina (Orpinas & Horne, 2006); however, it is not always a physical characteristic that sets the bully apart from the victim. Bullies can also hold more social power than their victim, meaning that

they have a higher or more powerful social status than that of their victim (e.g., a popular football player who picks on a less popular student). Finally, bullying occurs repeatedly over time. Victims are "targeted" by the bullies, who seek them out time and time again in order to cause harm.

While definitions of bullying have traditionally focused on characteristics of the individual, the activities related to bullying are an important consideration. At present, the definition of bullying has expanded to include not only physical aggression, but covert behavior such as spreading lies or rumors, negative facial expressions, socially excluding someone, and/or using social media or technology to bully, also known as cyberbullying (Centers for Disease Control [CDC], 2015). This can make it more difficult for school personnel to accurately identify when students are being bullied, as the nonphysical tactics can be hidden easily.

Bullying is an issue in schools that may affect children at any grade level. Results from the 2013 Crime Supplement to the National Crime Victimization Survey, published in April of 2015, reveal that 21.5% of students aged 12 through 18 reported being bullied at school (National Center for Education Statistics [NCES], 2015). Students were asked to identify if they had (a) been made fun of, called names, or insulted (13.6%); (b) been the subject of rumors (13.2%); (c) been threatened with harm (3.9%); (d) been pushed, shoved, tripped, or spit on (6.0%); (e) someone tried to make them do things they did not want to do (2.2%); (f) been excluded from activities on purpose (4.5%); or (g) had their property destroyed on purpose (1.6%). These results further support that present-day bullying behavior is mostly comprised of covert acts (NCES, 2015). Overall, the National Crime Victimization Survey sets a clear precedence for what types of bullying behavior

should be addressed by interventions. While the term "bullying" may call to mind physical aggression, results from this survey indicate that the most highly reported acts of bullying behavior do not include any form of physical aggression, but rather psychological or covert acts such as gossip, spreading of rumors, and insults.

Apart from physical and covert acts of bullying, another form of bullying has emerged in recent years. Cyberbullying has become a concern for children and adolescents alike, as they gain more and more exposure to electronics and the "cyber-world." Cyberbullying often involves behavior such as pretending to be someone else online to hurt and/or embarrass the victim, sending threatening or nasty messages via social media or emails/texts, sharing another person's images or messages without permission, and even exclusion online (Cross, Lester, & Barnes, 2015). The aforementioned Crime Supplement to the National Crime Victimization Survey included a section on cyberbullying. Of the students surveyed for cyberbullying, which for the purposes of this study was identified as occurring anywhere (meaning it could have occurred outside of school grounds), 6.9% reported they had been cyberbullied. The overarching label of cyberbullying was broken down into the following actions: (a) someone posted hurtful information on the internet (2.8%), (b) someone purposely shared private information (.9%), (c) they received unwanted contact via email (.9%), (d) they received unwanted contact via instant messaging (2.1%), (e) they received unwanted contact via text messaging (3.2%), (f) they received unwanted contact via online gaming (1.5%), or (g) they were purposely excluded from an online community (.9%) (NCES, 2015). Overall, the most frequent forms of cyberbullying reported in this survey were related to text messaging, hurtful posts on the Internet, and unwanted contact via gaming.

These forms are all likely to occur over social media, which may increase students' exposure to cyberbullying over time, as social media usage becomes more prevalent for younger students.

Bullying consists of intentional, repeated acts where there exists an imbalance of power between the bully and the victim. This basic definition applies to all forms of bullying: overt physical acts, covert acts such as gossip or rumors, and cyberbullying. Given the variety of bullying forms, and the number of students reporting victimization, outcomes for children affected by bullying warrants further research.

Characteristics of Bullying Groups

Literature indicates that students may fall into one of three categories: bullies, victims, or bully-victims (i.e., both bullies and victims). Each subgroup has both unique and overlapping characteristics, as identified in the research. The characteristics of victims include being physically weak (Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011), insecure (Aluede, Adelke, Omoike, & Afen-Akpaida, 2008; Glew, Rivara, & Feudtner, 2000; Hawker & Boulton, 2000) shy, and silent. Victims of bullying are often fearful, have low self-esteem (Guerra, Williams, & Sadek, 2011), and are viewed as different than other children, often due to a physical characteristic, such as being overweight (Aluede et al., 2008), or due to a learning deficit or a condition such as stuttering (Meltzer et al., 2011). Victims have also been identified as being anxious (Aluede et al., 2008; Glew et al., 2000; Guerra et al., 2011). Bullies are often characterized as being confident, impulsive, aggressive (Baldry & Farrington, 2000; Farmer et al., 2010), and lacking in empathy (Baldry & Farrington, 2000; Feldman et al., 2014). Bully-victims are children who are both bullies and victims. They display

aggression towards other children and retaliate against bullies, but are simultaneously victims of bullying themselves (Pouwels, Scholte, van Noorden, & Cillessen, 2015). Bully-victims are identified as being more aggressive; they tend to have more leadership skills and are members of larger social clusters (Farmer et al., 2010)

The Pacer's National Bullying Prevention Center states that nearly one in four students report being bullied during the school year (NCES, 2015), and that students who experience bullying are at increased risk for depression, anxiety, sleep difficulties, and poor school adjustment (CDC, 2015). The research is clear regarding the negative and long-lasting effects of bullying. Victims of bullying show lower academic achievement, report feeling unsafe, feeling sad, and feeling like they do not belong at school (Glew et al., 2005). Victims also engage in school avoidance behavior, meaning they skip school or stay home to avoid being bullied, and many repeated victims end up dropping out of school (Merrell et al., 2008).

In a meta-analytic study conducted in 2000, 23 articles analyzing peer victimization and psychosocial maladjustment were analyzed (Hawker & Boulton, 2000). Psychosocial maladjustment was broken down into five categories: depression, loneliness, anxiety, low self-esteem, and negative social self-esteem or self-concept. Mean Pearson *r* correlation coefficients were calculated for the association between the five categories of psychosocial maladjustment and peer victimization; the associations reflect those studies that avoided shared method variance, and for those studies with shared method variance. Results from this meta-analysis are as follows: depression (.29, .45), loneliness (.25, .32), global self-esteem (.21, .39), social self-concept (.23, .35), social anxiety (.14, .25), generalized anxiety (.21, .25), anxiety overall (.19, .25). Results

indicate that victimization was positively associated with depression, loneliness, anxiety, low self-esteem, and negative self-concept; however, the biggest association found was for the relationship between victimization and depression.

Victims are not the only group at risk for serious long-term side effects. Research shows that children who bully also have negative, long-term outcomes. Students who bully others are at an increased risk for substance use (Haynie et al., 2001), violence later in adolescence and adulthood (CDC, 2015), and academic problems (CDC, 2015; Feldman et al., 2014). Previous cross-sectional studies have found that substance use has been found to be more common among bullies. Recently, bullying was found to be associated with smoking, alcohol use, and substance use disorder (Niemela et al., 2011; Smith, Schneider, Smith, & Apaniadou, 2004). In addition, students identified as bullies show more externalizing problems, such as aggression or conduct problems, but also internalizing problems such as anxiety or depression and are more likely to be referred for mental health services (Espelage & Swearer, 2010).

Research shows that typically, boys have the highest likelihood of being bully-victims (Glew, Fan, Katon, Rivara, & Kernie, 2005). Based on findings from the Finnish Epidemiologic Child Psychiatric Study (2007), children who displayed bullying behavior at 8 years of age showed significantly increased odds of psychiatric disorder later on in life, when screened for the military 10 to 15 years later. In fact, identification as a bully predicted antisocial personality disorder, identification of victim status predicted anxiety disorder, and being identified as a bully-victim predicted both antisocial personality disorder and anxiety disorder (Espelage & Swearer, 2010). This evidence shows that involvement in bullying can heighten symptoms of both externalizing and internalizing

disorders.

Given the long-term negative consequences of bullying, action is needed in schools and the community. Teachers, administrators, staff, and parents alike need to intervene to support students regarding how to stand up to bullies and how to report bullying behavior. Furthermore, at the school-level, schools should consider bullying-prevention curricula to help curb bullying in younger students in an effort to deter bullying behaviors at a young age.

> Research shows that the most important program elements associated with a decrease in bullying were parent training/meetings, improved playground supervision, disciplinary methods, classroom management, teacher training, classroom rules, a whole-school anti-bullying policy, school conferences, information for parents, and cooperative group work. (Ttofi & Farrington, 2011, p. 41)

These elements not only target bullying behavior, but also contribute to overall school climate, and should be considered by administrators when attempting to find a program that suits the needs of their schools. Again, Ttofi and Farrington (2011) highlight the point that improvement of bullying behavior includes all members of the school community – students, parents, teachers, and staff. Bullying intervention should be a group effort, and the community as a whole needs to work together to create the understanding that bullying is not tolerated, and to set the tone and the overall culture of the school (Olweus, 1993).

Social-Ecological Theoretical Perspective

As evidenced in previous research, bullying is a complex problem that broadly affects student relationships with other students, teachers, and the community. As such, several factors must be considered in order to understand and appropriately intervene

with bullying behavior in schools. The social-ecological theoretical framework provides a structure for understanding bullying behavior and areas to target for interventions (Swearer et al., 2006).

The social-ecological model of prevention considers several factors including the individual's own behavior, relationships with others in the environment, and community factors. Within this model, each of these factors are emphasized to better understand the overall system that supports bullying behavior. In addition, intervention efforts are constructed across multiple levels in an effort to address bullying behavior at each level (Espelage, 2004).

The first level of the social-ecological model is the individual. This level identifies personal attributes that can protect the individual from victimization or from perpetrating bullying on others. At this level, skill building is emphasized to promote specific attitudes and behaviors that can counteract bullying.

The second level of this model emphasizes relationships that may increase the risk of experiencing bullying. Within the school setting, relationships are a key factor to consider due to the profound effect that social relationships play in supporting positive character development. For example, a student's social group may actively promote bullying behaviors or may passively accept bullying by not intervening when instances of bullying occur. Intervention efforts at the relationship level should target problem-solving skills and explicitly teach aspects of healthy relationships.

The influence of the community is the third level of the social-ecological model. At this level, factors associated with the setting are considered. Specifically, prevention efforts are targeted at changing the social and physical environment where bullying

occurs. At this level, school climate, processes, and policies for intervening with bullying behavior are targeted.

In sum, the social-ecological model provides a comprehensive approach to bullying behavior in schools that considers multiple levels of intervention within the school system. While each level is unique, comprehensive intervention efforts must target each level specifically and integrate these levels of support to create a positive social and learning environment (Espelage, 2004; Espelage & Swearer, 2008, 2010). As the social-ecological model provides a framework to structure bullying prevention efforts, the next step to address bullying behavior is to select an appropriate intervention strategy.

Bullying Intervention

As with most maladaptive behavior, it is important to begin intervention as soon as possible and bullying behavior is no exception. The long-term outcomes reported in the research for students identified as bullies, victims, or bully-victims paint a concerning future for these students. Unfortunately, the literature offers mixed results regarding effect sizes for school-based intervention programs (Merrell et al., 2008).

School-Wide Intervention

Due to the complexity of bullying behavior, there are multiple approaches that exist. The first approach is labeled the whole-school approach, and is based on the assumption that bullying is a systematic problem and should therefore be addressed on a school-wide level rather than just targeting individual students who are identified as bullies or victims (Richard, Schneider & Mallet, 2011; Smith et. al., 2004). Of the existing bullying prevention programs, Olweus' Bullying Prevention Program, a program

developed in Norway, is likely the most well known, and pioneered the whole-school approach. Olweus' program included training for teachers and personnel, materials for parents, videotaped curriculum, and an evaluation component based on a bullying questionnaire. While initial evidence found positive effects for this intervention, such effects have yet to be consistently replicated (Pugh & Chitiyo, 2012; Vreeman & Carroll, 2007).

A meta-analysis conducted by Merrell et al. (2008) analyzed the effects of 16 whole-school intervention studies, which included 15,386 Kindergarten through 12th-grade students from both the United States and some European countries. Interventions included in the meta-analysis include: an 8-week social skills program, *Bully Busters*, Olweus' program, teacher training, the *BEST* program, among others. Most of the studies had a quasi-experimental research design; however, several also had a mixed design, and three had an experimental design. Results from the meta-analysis indicate that few of the 28 variables studied had positive, or even significant effect sizes. Effect sizes for this meta-analysis are presented in Table 1.

It is important to note that 8 of the 28 variables had negative effect sizes, meaning the behavior or skill measured worsened after the intervention, and that only 10 out of the 28 (36%) had a meaningful effect size, as categorized by the authors (Merrell et al., 2008).

Another meta-analysis conducted by Vreeman and Carroll (2007) reviewed the literature and analyzed results based on the type of bullying intervention utilized. Ten studies were found that used a multidisciplinary whole-school approach, and they included some combination of school-wide rules, teacher training, classroom curriculum,

Table 1

Merrell et al. (2008) Meta-Analysis Effect Sizes

Scale	Effect Size
Student Self Report	
Bullying others	.04
Positive attitude towards bullying	.15
Being bullied	.27
Witnessing bullying	.35
Intervening to stop bullying	.17
Bullies were talked to by an adult	-.04
Teacher action/response	.06
Ignore/refuse to join bullying	.06
Reported bullying, or likely to	.07
Feeling safe at school	-.13
Feelings of anxiety/depression	-.06
Global self-esteem	1.08
Social skills	.06
Sympathy for victims	-.10
Positive interactions with peers	-.10
Teacher Self-Report	
Witnessed students being bullied	-.16
Knowledge of bullying prevention	1.52
Staff appropriate responses to bullying	.30
Efficacy of intervention skills	.99
Attitude about school safety	-.16
Teacher Report of Child Behavior	
Student behavior/emotional problems	-3.81
Student social competence	3.31
Peer Report	
Participation in bullying roles	.32
Identified victims	-.03
Identified aggressors	.04
Peer acceptance	.61
Social skills problems	.16
Osiris teacher discipline referrals	.79

individual counseling, and/or conflict resolution training; 8 of the 10 studies evaluated interventions among elementary school students, and the other two evaluated interventions among secondary school students. Two of the 10 studies evaluated the Olweus Bullying Prevention Program, one of which found decreased bullying, victimization, and antisocial behavior, and improved school climate. The other study that evaluated Olweus' program found very different results, and reported increased victimization and bullying. Of the remaining studies included in this portion of the meta-analysis, seven revealed positive outcomes. Five of the 10 studies reported decreases in bullying or victimization. A breakdown of the studies indicates that some showed a decrease in discipline referrals, decreased suspension rates, and increased achievement test scores (Vreeman & Carroll, 2007), although results from this meta-analysis are also mixed.

Skill-Based Interventions

A second approach for bullying intervention and/or prevention programs are social or behavioral skills group training interventions. These interventions target students who are bullies, victims, or bully-victims, and attempt to teach skills that can help combat bulling behavior. Vreeman and Carroll's meta-analyses found four studies that examined targeted skills groups, yet again, results from these interventions were mixed. Of the four studies, three were targeted towards older students. Only one of the studies showed decreases in bullying behavior attributed to intervention, and it was the only study implemented with younger children. The three studies implemented with older students did not show any clear changes in bullying behavior (Vreeman & Carroll, 2007). While this does not bode well for those attempting to implement a bullying intervention

or prevention effort, what it does indicate is that the largest effects have been shown when working with younger students.

It is possible that past studies examining bully prevention have lacked intensity in their implementation, as Ttofi and Farrington's (2011) meta-analysis is the only one to show positive effects from bullying interventions. This meta-analysis reviewed 44 studies, which showed that on average, bullying decreased by 20 to 23% and that victimization decreased by 17 to 20%. Ttofi and Farrington also identified crucial program elements from these studies, which were associated with the decreases reported in both bullying and victimization. Those studies that were deemed as more intensive showed higher effect sizes, as were multidisciplinary programs that included parent meetings, firmer disciplinary methods, and better supervision on the playground. This meta-analysis is an important part of the literature as it highlights program elements that may help develop effective interventions.

While the literature provides inconclusive results regarding bullying interventions, the existing studies serve as a baseline from which to expand the research base. Program elements that have been identified as effective in the meta-analyses warrant further investigation, including possible replication of the specific study elements. It is crucial that the research base continue to expand, as the need for effective intervention continues to rise. While results were insignificant for most of the studies included in the meta-analyses, those that were effective included components that targeted not only students, but those individuals who directly impact students – parents and teachers. It is clear that involving the adults who are most impactful in a child's life often incite more positive results.

Role of Parents and Teachers in Intervention

Parents and teachers are crucial members of the overall school climate and/or school community who can either foster or discourage bullying behavior. In fact, one study found that "teacher behaviors are instrumental in the fight against bullying," and that "student-teacher relationships are important predictors of bullying behavior" (Richard et al., 2011). This warrants further investigation into how a child's community impacts bullying behavior, and whether a top-down approach to an intervention (meaning all levels of a school community are on board with the intervention), as was originally implemented in Olweus' study, may be what is needed to show significant results.

While specific bullying intervention and/or prevention programs have resulted in varying outcomes for bullying and victimization rates, school climate and the overall school structure have been linked to reductions in bullying-related attitudes and behavior (Low & Van Ryzin, 2014). Perhaps future interventions should also account for the existing school climate / structure and its potential impact on bullying behavior. In many schools, the school structure refers to a School-Wide Positive Behavioral Interventions and Supports (SWPBIS) model, which guides how teachers and administrators approach both the academic and behavioral needs of the students.

What Is SWPBIS?

In order to understand how the overall school structure may possibly interact with bullying, the overall framework and crucial components must be defined. Schools across the nation are adopting an SWPBIS structure in order to help motivate students to display prosocial behavior. SWPBIS, or PBIS for short, aims to streamline the processes in which an individual school attempts to address serious behavioral concerns by creating a tiered

framework of interventions. As defined by pbis.org, “PBIS is a framework or approach for assisting school personnel in adopting and organizing evidence-based behavioral interventions into an integrated continuum that enhances academic and social behavior outcomes for all students” (PBIS FAQ, 2010, p. 1).

SWPBIS is a set framework for schools to follow, and can be customized or tailored to a specific school or community, as it is not a packaged curriculum. The general expectations of SWPBIS are as follows: (a) team-based leadership – SWPBIS requires that a behavioral team be put into place, (b) data-based decision making – data from office referrals, or from the reinforcement system should be analyzed continuously in order for the school to make informed changes, (c) continued monitoring of student behavior, (d) regular universal screening, and (e) effective on-going professional development (PBIS FAQ, 2010).

Currently in the United States, over 30 states have reported the formation of state-wide SWPBIS leadership teams (Spaulding, Horner, May, & Vincent, 2008), and over 16,000 schools in the United States have opted to incorporate SWPBIS into their school structure (Bradshaw, Waasdorp, & Leaf, 2014). The spread of PBIS indicates that schools across the nation are following the same guidelines to set up interventions for both academics and behavior. SWPBIS includes a component of universal screening, both for academic and behavioral support. Behavioral screening includes the use of ODRs, which give specific information to administrators regarding students’ behavior, and is used as a tool to identify “repeat offenders,” or students who are often reported to administrators for repeated behavioral issues. Not only does this help identify students who need more intensive support, but ODRs can also be used for the purposes of identifying students

who engage in specific bullying behaviors.

Role of Office Disciplinary Referrals

ODRs are often cited in the literature as a true measurement of student behavior problems and the impact of interventions on student behavior (Martella et al., 2010). An ODR indicates that a rule violation has occurred, and requires more serious and immediate attention than the referring teachers can provide, which results in filing a referral form (Clonan, McDougal, Clark, & Davison, 2007). A growing body of literature suggests that ODRs are related to poor outcomes such as school failure and juvenile delinquency (Nelson, Benner, Reid, Epstein, & Currin, 2002).

One of the benefits of using ODRs as a form of data is the inclusion of a standardized form to be used by teachers. ODR forms typically include important information such as date, time, location, and specific type of behavior, as well as other students or individuals involved, and the administrative action taken (Predy, McIntosh, & Frank, 2014).

A study by Pas, Bradshaw, and Mitchell (2011) sought to validate ODRs as a measurement of student behavior since limited research existed examining their validity. Results from their study indicated that ODRs were correlated with disruptive behavior, and not with concentration problems or prosocial problems, indicating that ODRs are moderately valid measurements of students with disruptive behavior patterns. Results further indicated that ODRs may be used as a screening measure to help identify students in need of further intervention and supports, and even follow-up for their behavior issues. A similar study found strong correlations between rates of teacher-endorsed externalizing behaviors, and ODRs (McIntosh, Campbell, Carter, & Zumbo, 2009). Since ODRs have

been linked to students who exhibit externalizing behaviors, including aggression, which can be a type of bullying, it stands to reason then that ODRs can be a measurement indicator of bullying behavior as well.

ODRs are one potential measure with which to observe potential increases or decreases in bullying behavior. They are integral to an SWPBIS system, which attempts to analyze behavior based on data, so as to make systematic approaches to changing behavior within the school setting.

Bullying and SWPBIS

The research on integrating bullying interventions within the SWPBIS framework is not expansive; however, multiple studies published within the last few years seek to understand how targeting bullying behavior in the school settings may tie into the existing framework (Bradshaw, 2015; Ross & Horner, 2014). In a recent study, by Ross and Horner (2014), the BP-PBS program was implemented in conjunction with PBIS for third-, fourth-, and fifth-grade students. Pre- and postintervention surveys were collected to assess student perceptions of bullying. Results from the surveys indicated that the intervention had the strongest impact on students' willingness to stand up to bullying behavior, student perceptions of bystander support, and the overall use of the "stop" signal. Results from this study also indicate that fifth graders were more tolerant or accepting of bullying behaviors such as gossip, and were less likely to stand up to bullies, or use the "stop" signal they had been taught to use to combat bullying behavior. While this result is certainly concerning, the existing literature base on bullying behavior clearly indicates that bullying increases as students transition into the middle school setting (Cook et al., 2010; Ross & Horner, 2014; Williams & Guerra, 2007). Therefore, it stands

to reason that earlier intervention is best, in order to target long-term bullying behaviors in students.

If early intervention is best to target bullying behavior in students, understanding what levels of support need to be offered for students is a crucial next step that can dictate what interventions should be selected. In an article for the American Psychologist's special issue on School Bullying and Victimization, Bradshaw (2015) states that a three-tiered public health model is recommended for bullying prevention efforts, as this model is used to address a multitude of issues in education, behavior, and public health alike. Three-tiered SWPBIS models indicate that 80% of students respond to primary prevention strategies, 15% need more scaffolding and support, known as secondary prevention strategies, and 5% of students need tertiary prevention strategies, which often means individualized intensive supports. When applied to bullying, primary prevention strategies aim to reduce new occurrences of bullying, by utilizing whole-school and classroom-wide interventions to curtail new incidents of bullying (Espelage & Swearer, 2008). Primary prevention strategies, or Tier One, are aimed at the student body as a whole – most students, typically 80%, benefit from primary prevention efforts alone, which are the least intensive. Secondary prevention strategies, or Tier Two, target about 15% of students who need slightly more intensive interventions. Often, in academic settings, Tier One interventions are delivered in small pullout groups that focus on a specific skill deficit. Tertiary prevention strategies, or Tier Three, target the remaining 5% of students who need the most intensive interventions. Typically, this involves individual support and/or specialized instruction. The purpose of multiple levels of support is to ensure that needs of all students are met and so that instruction is

differentiated in order to meet those needs.

This three-tiered approach to intervention can also apply to bullying prevention efforts. Primary prevention efforts, which target the school as a whole, would help in reducing overall bullying behavior at a school. Most students would benefit from that level of support. Secondary prevention efforts would likely consist of targeting specific classrooms or groups that display higher instances of bullying, and would offer more intensive strategies than those offered in Tier One. Tertiary prevention efforts would target those individual students who are identified as perpetual bullies, victims, and/or bully-victims, in order to offer them the most intensive support.

Three-Level Model for School-Wide Bullying Intervention

As Bradshaw (2015) suggested, a three-level model for bullying prevention should be considered when using a whole school approach. The social-ecological model provides a three-level framework from which to guide intervention. Students are nested within their social groups, which are nested within the overall school community (Swearer-Napolitano, Espelage, Vaillancourt, & Hymel, 2010) – intervention should target each specific level so as to ensure maximum intensity. The BP-PBS program, developed Ross et al. (2011), was used for the purposes of this study. The BP-PBS program was created to work in conjunction with a school's existing SWPBIS system, by incorporating the already existing school rules into lessons that identify bullying behaviors, and model steps for students to use to combat bullying behavior.

The first level focuses on teaching individual skills to all students. At this level, personal attributes that can protect the individual from victimization or from perpetrating bullying on others should be taught and encouraged. These traits would include

identifying bullying, standing up for oneself, and/or getting help. Skill building at this level will help promote specific attitudes and behaviors that can counteract bullying. The BP-PBS program trains students on a three-step response to bullying. It consists of hand signals for the "Stop" portion of the intervention, so that students are able to communicate clearly that they want the bullying behavior to stop. Lessons from the program teach students how to advocate for themselves and report the occurrence of a bullying act to an authority figure that can help them resolve the issue. Lessons also teach students how to identify different types of bullying. This empowers students by helping them understand when bullying is occurring and by giving them a ready response to use when they encounter bullying (Ross et al., 2011).

The second level of this model targets social groups. Research has shown that within the school setting, relationships are a key factor to consider due to their profound effect in supporting positive character development (Gifford-Smith & Brownell, 2003; Naylor & Cowie, 1999; Perren & Alsaker, 2006). The BP-PBS program targets social groups by teaching students to "upstand," or stand-up, to the perpetrator when bullying is witnessed. The curriculum teaches about social responsibility, and how students should help one another when they encounter bullying. The BP-PBS program explicitly teaches the definition of a bystander (someone who stands by and fails to intervene when bullying occurs) and how this behavior has negative impacts on those who experience bullying.

The influence of the community is the third level of the social ecological model, and is considered a Tier Three prevention effort. At this level, school climate and the school community are incorporated into the intervention, specifically into aiding

individual students experiencing bullying. Not only are the social and physical environments targeted, but also adults are trained on how to respond when individual students report instances of bullying. The BP-PBS program works in conjunction with the existing SWPBIS model to give universal language for combating bullying behavior to all members of the school community, as well as an overall method to report and combat bullying behavior. It is crucial that all members of the school structure and community are engaged in the intervention to help increase overall school climate.

School Climate

School climate is a subject that is also on the rise in the field of education. The current body of research identifies multiple definitions of school climate; however, for the purposes of this study, the National School Climate Center's definition will be used. The definition is as follows:

> A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe. People are engaged and respected. Students, families and educators work together to develop, live, and contribute to a shared school vision. Educators model and nurture an attitude that emphasizes the benefits of, and satisfaction from, learning. Each person contributes to the operations of the school as well as the care of the physical environment. (Cohen, McCabe, Michelli, & Pickeral, 2009, p. 182)

This definition highlights several key components of school climate: that the school community – which includes teachers, students, and family members alike – must work together to foster a positive environment in which students feel safe and supported. As outlined in the social-ecological model, this is a key component in bullying prevention efforts. When the school community is involved, it creates a wrap-around model that supports students in a variety of ways, and from a variety of adults in their lives.

The article by Resnick et al. (1997) summarized findings from the National Longitudinal Study on Adolescent Health, which surveyed 12,118 adolescents in grades seven through 12. This study found that parent-family connectedness and perceived school connectedness were protective against emotional distress, suicidal thoughts and behaviors, violence, use of cigarettes, alcohol, marijuana, and the age of sexual debut.

When a positive school climate exists, students, parents, and staff feel safe and supported, thereby producing their best work. This is a goal that is at the forefront of most school district's minds, and a reason that school climate is being studied so prevalently, although there seems to be a disconnect between research and practice. As Cohen et al. (2009) state,

> There is a glaring gap between school climate research findings and policy, school improvement practice, and teacher educator efforts. This gap undermines K-12 students' ability to learn and develop in healthy ways. As more and more articles link school climate to higher academic achievement and lower adverse behavior, it stands to reason that school districts across the nation should invest in training their teachers and personnel in how to foster and promote a positive environment for the benefit of students and staff alike. (p. 181)

Bullying and School Climate

Research has shown links between a positive school climate and decreases in bullying behavior. School climate, which includes members of the community, teachers, parents and staff, can be targeted in bullying prevention efforts. The social-ecological model is explicit, in that it identifies members of the community as a crucial component to intervention efforts. To this end, Swearer, Espelage, and Napolitano (2009) found, "the factors that contribute to a healthy school climate are vital to preventing bullying problems in schools" (p. 23). A 2011 study found that increases in bullying behavior

were linked to increases in approving beliefs about bullying and decreases in self-esteem and positive school climate (Guerra et al., 2011). When there is physical disorder in a school, social disorder follows (Plank, Bradshaw, & Young, 2009). This means that when the physical safety of students is at risk, feelings of safety and positive perceptions of the environment decline. When students perceive that there is structure and support in their school environment, bullying and victimization decline (Gregory et al., 2010). Key elements that contribute to a positive school climate, such as support and cooperation, have been found to relate to improved psychosocial skills and self-esteem in students. Negative aspects, such as ineffective disciplinary practices and low levels of school spirit, have been linked to higher levels of externalizing problems (Espelage & Swearer, 2010), which often lead to instances of bullying. Interestingly, studies have found that bullies hold negative perceptions of school climate (Nansel et al., 2001).

While it is known that a positive school climate can lead to decreases in bullying behavior, the inverse is true as well: increases in bullying can lead to a decrease in perceptions of positive school climate. Meyer-Adams and Conner (2008) found that bullying behaviors were significant negative predictors of school climate, meaning that the presence of bullying negatively impacted overall school climate.

Students, however, are not the only ones affected by school climate. Staff members' sense of connectedness with each other and with the school is expected to positively impact one's likelihood of intervening when acts of bullying occur (O'Brennan, Waasdorp, & Bradshaw, 2014). Addressing bullying on a school-wide level creates a culture that does not tolerate bullying and/or aggressive behaviors. When teachers and staff support a prosocial climate, they are more likely to address issues

related to bullying, as it goes against the prosocial climate they have bought-into and support (O'Brennan et al., 2014). Furthermore, when teachers/staff are more connected to their students, that student-teacher connectedness has been found to serve as a protective factor against the negative effects that bullying can have on a students' academic achievement (Konishi, Hymel, Zumbo, & Li, 2010).

A 2014 study conducted by researchers at Harvard University sought to understand how students' perceptions of school climate influence their reactions to bullying, i.e., whether they choose to upstand (e.g., stand up to the bullying behavior), bystand (e.g., stand by as the bullying occurs) or join in with the perpetrators of bullying (Ferrans & Selman, 2014). Results indicated three student-perceived school climates. The first student-perceived school climate was labeled "negligent" and reflected feelings of low safety, low order, low care, and low empowerment. The second student-perceived school climate was labeled "authoritarian" and indicated perceptions of moderate safety, high order, low care, and low empowerment. Lastly, the third student-perceived school climate was labeled "cohesive" and reflected perceptions of high safety, moderate order, high care, and moderate empowerment. Findings from this study indicate that in schools where adolescents identified the school climate as negligent, the prevalence for peer aggression was high, and students were more likely to use violence to fight violence. When students identified their school climate as authoritarian, results indicated that low levels of aggression exist but mostly in supervised environments where students know adults are watching, but aggression continues in unsupervised settings and outside of school. Data from student interviews in the authoritarian environment also suggested that a sense of distrust between students and teachers was likely to occur when teachers

depend heavily on punitive strategies to control misbehavior. To take it a step further, in this environment, teachers and students relate to each other as members of opposite groups who compete for control and do not trust each other. Finally, students who identified their school climate as cohesive exhibited a low prevalence of aggressive behaviors. These students often described their teachers as being caring and actively involved with students.

Data from the study suggest that students in the cohesive climate were apt to interpret school rules as prescribing that everyone belongs to the same community and that they should care for each other. Student reports indicated that incidences of bullying and aggression were rare, and that students were more likely to stand up to perpetrators as a result of disapproval for the bullying act. This article is an excellent example of how school climate and bullying are linked. Furthermore, it demonstrates how teacher behavior can impact the prevalence of and culture surrounding bullying. Fewer bullying episodes have been shown to occur among students who attend schools that are identified as having higher levels of positive student-teacher relationships (Richard et al., 2011). These results provided more reason to target not only individual students or social groups, but also the overall school community when implementing a bullying prevention program.

In summary, research has provided a three-pronged definition of bullying, which includes (1) intentional acts, (2) an imbalance of power, and (3) repetition of the bullying acts. Those students identified as bullies are often characterized as confident, impulsive, and aggressive, whereas victims are often characterized in the literature as physically weak, insecure, and shy. Students in the third category, bully-victims, are identified as

being aggressive, and as having leadership skills. Long-term outcomes are negative for all three groups (bullies, victims, and bully-victims), which include increased risk for substance abuse, increased risk for both internalizing and externalizing issues, and academic struggles. The social-ecological theoretical framework offers an appropriate framework from which to base bully prevention efforts. It highlights individual, relational, and community factors that play crucial roles in targeting bullying behavior. While the research on bullying interventions have produced mixed results, those interventions found to be effective have targeted younger students, and have included members of the community such as parents and teachers (Vreeman & Carroll, 2007). In fact, research has indicated that student-teacher relationships can predict bullying behavior, which is why it is crucial that teachers are included in prevention efforts.

Overall, research on bullying is increasing as educators continue to look at the relationships that exist between student behavior, academic performance, and overall school climate (Ferrans & Selman, 2014; Konishi et al., 2010). Research has shown that interventions that incorporate elements of the existing school structure, including involvement of teachers, show positive results in decreasing bullying behavior (Vreeman & Carroll, 2007). School structures, such as SWPBIS programs, allow for school-wide implementation of interventions, and can help target and identify those students who need more intensive supports. Analysis of ODR data, which often accompanies the implementation of an SWPBIS program, may also help target students who are in need of more individualized intervention for their bullying behavior. The purpose of this study is to determine if decreases to student-reported victimization, witnessing of bullying behavior, and perpetration will occur following the BP-PBS intervention. Student-

reported overall feelings of safety were assessed to determine if an increase would occur following the intervention. Teacher-reports of school climate and witnessing of bullying behavior within their classrooms were also measured to determine if any change would occur following the intervention. Finally, ODRs were collected from both schools to track overall trends prior to and post the BP-PBS intervention.

Research Questions

The research questions for this study were as follows:

1. Will ODRs decrease from the 2015-2016 school year to the 2016-2017 school year?
2. Will students' self-reports of victimization, as measured by researcher-developed questionnaire, decrease following the intervention?
3. Will students' reports of witnessing bullying, as measured by researcher-developed questionnaire, decrease following the intervention?
4. Will students' reports of feelings of overall safety as school, as measured by researcher-developed questionnaire, increase following the intervention?
5. Will students' self-report of perpetrating bullying behavior, as measured by researcher-developed questionnaire, decrease following the intervention?
6. Will the implementation of a school-wide bullying prevention program increase overall teacher perceptions of school climate, as measured by the SCI-R?
7. Will the teacher reports of bullying, as measured by the researcher-developed questionnaire, decrease following the intervention?

CHAPTER 2

METHODS

Research Site

Prior to the initiation of this study, written institutional review board approval was obtained from both the University of Utah and the school district where the study was conducted. The study was conducted at two suburban elementary schools in the Western United States that serve students in grades kindergarten through eighth grade. The two participating schools were identified by the researcher, in cooperation with school district personnel, based on their implementation of SWPBIS.

Demographic information for the experimental school was as follows: There were 809 students enrolled, 9.02 % (73) of whom received special education services. Ethnic breakdown of the experimental school was as follows: 45.24 % (366) of students identified as White, 39.93% (323) of students identified as Hispanic/Latino, 1.35% (11) students identified as Asian, 1.35 % (11) students identified as Native American, 8.90 % (72) identified as African American/Black, .98% (8) identified as Pacific-Islander, and 2.22 % (18) identified as Multiracial. Of the 809 students enrolled at the experimental school, 60% (485) receive free and reduced lunch.

Demographic information for the control school was as follows: There were 761 students enrolled, 10.51 % (80) of which received Special Education services. Ethnic

breakdown of the control school was as follows: 53.75 % (409) students identified as White; 28.52 % (217) identified as Hispanic/Latino, 2.23 % (17) identified as Native American, 1.44% (11) identified as Asian, 10.9% (83) identified as African American/Black, 1.05 % (8) identified as Pacific-Islander, and 2.10 % (16) identified as Multiracial. Of the 761 students enrolled at the experimental school, 57% (433) receive free and reduced lunch.

Both schools were found within the same school district. Demographics from both the experimental school and the control school were fairly similar. A chi-square analysis was conducted on all of the above demographic variables to determine homogeneity across the experimental and control study sites χ^2 (8, N = 2641) = 25.40, p =.001. These results show significant difference in between schools in demographic variables. Examination of descriptive demographic data indicates a large difference in the school's ethnic population. Specifically, differences were detected in the in the number of Hispanic students between schools.

Participants

Student's selected for participation in the study were in grades 3 through 5. Of the 809 total students at the experimental school, 287 (grades 3 through 5) were identified for participation in the study. Each grade level at the experimental school contained four individual classes; therefore, 12 teachers total were recruited for the study. All 12 of the targeted teachers consented to participate. Of the 761 students at the control school, 239 (grades 3 through 5) were identified for completion of the outcome measures. Each grade level at the control school contained three individual classes; therefore, nine teachers total were recruited for the study. Of the nine, eight chose to participate. Both the control and

experimental schools employ approximately 40 teachers and staff; however, for the purposes of this study, only those teachers who taught third, fourth, and fifth grade as main classroom teachers (meaning not elective teachers) were asked to complete questionnaires at both the pre- and postintervention data collection waves.

Prior to the implementation of the intervention, a passive consent form was sent home to the parents of all students involved, both at the experimental and control schools. This form allowed for parents to opt their child out of the study (see Appendix A). Twenty parents chose to opt out their child at the experimental school, and 28 opted out of participation at the control school.

Students were also given a Student Assent Form (see Appendix B) prior to being administered the researcher-created questionnaires. There were no reported refusals to participate in the study. Two hundred and fifty assents were obtained at the experimental school, and 183 were obtained at the control school, both at the preintervention data collection wave. Teachers who chose to participate in the study signed a consent form (see Appendix C). By signing the consent form, those teachers involved signed that they understood the purposes of the study and were willingly choosing to participate. All but one teacher chose to participate in the study.

Procedures

In both the experimental and the control group, students and teachers were asked to complete a researcher-created bullying questionnaire in February of 2017, prior to the implementation of the intervention. Student responses on the questionnaires were later disaggregated into four constructs, which were analyzed at both data collection waves to determine possible effects of the intervention. Teachers were also asked to complete a

measure of school climate. Teachers attended a staff meeting where the researcher presented the study, and answered questions about the study. If teachers were willing to participate, they were allotted time at the staff meeting to complete the questionnaires on school climate and bullying. Preintervention teacher surveys were administered and collected within 1 day of each other at each school. Teachers at both schools were given the researcher's contact information should any questions arise throughout the study. Both students and teachers were informed that participation was not mandatory. Teachers signed consent forms prior to completion of surveys. Students who opted in to the study signed an assent form prior to the completion of surveys; those students who opted out did not complete surveys at either data collection wave.

The students were administered the researcher-developed questionnaires by their classroom teachers. Teachers were all given the same narrative to read to their students (see Appendix D). The intervention began at the experimental school the 2nd week of February 2017, and spanned 4 weeks. Student and teacher questionnaires were completed and collected prior to the implementation of the intervention. PowerPoint presentations based on the BP-PBS program created by the researcher were presented to students. An administrator was present during each presentation to assist with management of students. The instructional component of the BP-PBS intervention was presented to each grade level in separate assemblies. These assemblies took place in an empty classroom. In cooperation with the principal at the experimental school, a schedule was created for the presentations. Grade levels were separated into two groups, with two classes in each group. A total of six assemblies were held each week.

In cooperation with administrator requests at the experimental school, the presentations were held during one elective period per week, so as not to take away from core-content instructional time. Each group of two classes was assigned a weekly day and time, during which they were slotted to attend the presentations.

Upon the completion of the intervention at the experimental school, students at both schools completed postintervention bullying questionnaires. This postintervention data collection wave occurred the 2nd week of March 2017. Student survey responses were collected within the classroom setting, and were administered by the grade level teacher, at both pre- and postintervention data collection points.

Teachers were administered the same SCI-R questionnaire, as well as the teacher version of the researcher-created bullying questionnaire, both pre- and post- (see Appendices G & H). Teachers at the experimental school were administered an additional questionnaire: the Modified BIRS (see Appendix I) to determine overall satisfaction with the intervention.

ODR data were obtained through the School-wide Information Systems (SWIS) database on www.pbisapps.org. Both the experimental and controls schools require entry of ODRs into the SWIS database, for use as part of SWPBIS data collection and analysis. The database then catalogs and categorizes ODRs based on a variety of different variables such as type of referral, grade of student, location of incident, etc. For the purposes of this study, those ODRs coded as "bullying" and "harassment" were included in the analysis. Based on the code of conduct outlined by the participating district, bullying and harassment are grouped together, and defined as:

> Physical of psychological abuse of another person by means of verbal or physical threats, intimidation, insults or other aggressive behavior in any

> form including electronically, and include abuse based on race, ethnicity, gender, religion or disability. Harassment may include, but is not limited to, sexual, sexual with contact or non-sexual.

Because the code of conduct does not differentiate more specifically between bullying and harassment, ODRs coded as either were included in the analysis.

Psychoeducational Intervention

The BP-PBS program, developed by Ross et al. (2011), was created to teach students how to identify and combat bullying behavior. BP-PBS was created to work in conjunction with a school's existing SWPBIS system. The intervention trains students on a three-step response to bullying. The three-step response provides students with concrete steps to combat bullying behavior. The first step consists of a hand signal for the "stop" portion of the intervention, where students hold up their hand, palm facing the perpetrator, and say "stop" in a firm and clear voice. This allows for students to communicate clearly that they want the bullying behavior to stop. All students are taught that this is the first prompt to stop behavior. The second step involves walking away from the perpetrator, should the bullying behavior continue to occur. All students are taught that when another child walks away, that is the second and last prompt to stop behavior before an adult gets involved. The final step involves talking to an adult about the problem behavior. Adults were instructed to ask two follow-up questions when approached by a student reporting bullying behavior: Did you say stop? Did you walk away? This response is taught to teachers to ensure that when bullying behavior is reported to a teacher, the student has gone through the necessary steps to handle the situation on their own before adult involvement.

Lessons from the program teach students how to advocate for themselves and

report the occurrence of a bullying act to an authority figure who can help them resolve the issue. For overall synopses of the lessons, please refer to Table 2.

Lessons one and two will be combined due to time constraints in the academic schedule. In these lessons, students will review school objectives and procedures, and help establish the Stop/Walk/Talk response. First, the initial lesson will establish the school rules and expectations of what behavior is appropriate and inappropriate in all school settings. Students will be given examples of what both appropriate behavior and inappropriate behavior looks like in different settings within the school (e.g., in the lunchroom, at recess, in the library, in the classroom, etc.). Students will participate in a discussion regarding why some students choose to engage in problem behavior, and what motivates students to continue engaging in problem behavior even when they have received a consequence for their behavior.

Lesson one will review the Stop/Walk/Talk three-step response to problem behavior. The first step, the "Stop Signal," will be decided upon, modeled, and practiced as a whole group, and between partners. The second step taught will be when to walk

Table 2

BP-PBS Lesson Breakdown

Lessons	Content
Lessons 1 & 2 (combined)	Objectives & Procedures, teaching about social responsibility, responding to Stop/Walk/Talk practice
Lesson 3	Gossip – how Stop/Walk/Talk can be used to deal with gossiping, practice
Lesson 4	Inappropriate Remarks – how Stop/Walk/Talk can be used to deal with inappropriate remarks, practice
Lesson 5	Cyber Bullying – how Stop/Walk/Talk can be used to deal with cyber bullying, practice

away. Students will be taught that during the times when the first step doesn't work, it is crucial to move to step two and walk from the child exhibiting the problem behavior. Walking away is beneficial because it removes the reinforcement for the problem behavior, and because it removes the child from a situation that may cause them further consequence or punishment. The third and final step is the "Talk" component. Students will be encouraged to report problems to an adult when the "Stop" and "Walk" steps do not put a stop to the problem behavior. Students will be given specific examples of how to report a problem to an adult, and differences between reporting and tattling will be explicitly defined. It is important to note that students will be taught that when they are in physical danger (i.e., another student is threatening to, or at the point of become physically aggressive with them), steps one and two should be skipped, and the incident should be reported to an adult immediately. Lesson two will be a complete review of Lesson one, and will include group practice. During this portion of the lesson, teachers will be asked to monitor the groups to ensure that they are practicing the Stop/Walk/Talk steps. Adult reactions will be reviewed during this lesson – specifically, that adults will verify with the children when they've reached the "Talk" step, whether they used the first two steps prior to reporting the incident. The remainder of the lessons will follow the same format: (a) review of school rules, (b) review of a specific form of bullying, (c) opportunities for group practice and role-play, and (d) review.

Lesson three will focus on gossip, and how gossip is a form of bullying, which is in direct violation of the school rules. A clear definition and examples of gossip will be given to the students to clear up any potential confusion that students may have on the subject. Students will be broken up into groups to practice how to use the Stop/Walk/Talk

method when confronted with gossip. Different scenarios will be reviewed with students, and each student will have the opportunity to role-play both roles – the person exhibiting the problem behavior, and the person using the Stop/Walk/Talk steps. This will help students gain perspective regarding what the three-step process looks like from both sides, and how they should react given whichever side they find themselves on in the given situation.

Lesson four will focus mainly on inappropriate remarks, or verbal bullying. Students will be given examples of inappropriate remarks and will role-play scenarios in which inappropriate remarks may be made. This lesson will follow the same structure as previous lessons, where school rules will be reviewed at the start of the lesson, the Stop/Walk/Talk method will be reviewed, including opportunities for students to practice the three-step response, and students will have a chance to roleplay the correct response to a verbal bullying act.

Finally, lesson five will cover and review what cyberbullying is, and how students should respond to this form of bullying. This lesson will cover how school- and district-wide rules apply to cyberbullying, and how teachers and administrators will respond to cyberbullying when it occurs on the school's campus. This final lesson will follow the same overall structure of previous lessons: review of school rules, review of Stop/Walk/Talk method, opportunities for students to practice the three-step response, and role-play of correct responses to cyberbullying.

Dependent Variables

The primary dependent measures for this study were a bullying questionnaire administered to both students and teachers, and the School Climate Inventory – Revised

(SCI-R; Butler & Alberg, 1991) administered to teachers at both the experimental and control schools. In addition, ODR data were collected from both schools to determine if decreases in reported bullying behavior occurred following the intervention.

Third- through fifth-grade students who assented to participate in the study were surveyed, at both the control and experimental school locations. Data were also collected on the frequency and nature of ODRs to gauge whether physical acts of aggression decrease across the school year after consistent implementation of the school-wide bullying prevention program. Specific measures are as follows.

Measures

Bullying Questionnaire

A researcher-developed bullying questionnaire was administered to students. The student bullying questionnaire (see Appendices G & H) was categorized into four sub-categories. The category of victimization was derived from questions 2, 15, 16, 17, and 18 of the bullying questionnaire. Responses to this variable were measured to determine if victimization decreased following the intervention. The category of safety was derived from questions 3, 5, 6, 7, 8, and 9 of the questionnaire. Safety responses were measured to determine if overall feelings of safety increased following the BP-PBS intervention. The category of witness was derived from questions 1, 10, 11, 12, 13, and 14 of the questionnaire. Student responses for witnessing bullying behavior were measured to determine if witnessing decreased following the intervention. Lastly, the category of perpetrator was derived from questions 4, 22, 23, and 24 of the questionnaire. Responses of perpetration were measured to determine if students reported less perpetrating behavior following the intervention.

Reliability estimates of the measure, determined through Cronbach's Alpha, indicated that two of the four constructs had acceptable reliability. Reliability estimates are as follows: victim (.749), witness (.759), safety (.559), and perpetrator (.64). Cronbach's Alpha scores should fall between .7 and .8 to be considered acceptable (Klein, 2000); therefore, the variables of safety and perpetrator are not considered reliable measures of the construct.

Teacher Measures

Teachers were administered the SCI-R and a researcher-created bullying questionnaire. The SCI-R, revised in 2002, provides formative feedback on perceptions of school climate based on personnel reports. The survey is administered to the faculty as a group, and lasts approximately 20 minutes. Constructs measured by the SCI-R include "order, leadership, environment, involvement, instruction, expectations, and collaboration" (American Institutes for Research, 2012, p. 10). Each of the aforementioned constructs contains seven items, rated on a 1 to 5, Likert scale, with 1 indicating a strong disagreement, and 5 indicating a strong agreement. The SCI-R includes 49 total questions (Center for Research in Educational Policy, 2008). Internal reliability coefficients for the 7 measured constructs, as measured by Cronbach's alpha, are as follows order (.84), leadership (.83), environment (.81), involvement (.76), instruction (.75), expectations (.73), and collaboration (.74) (Butler & Alberg, 1991).

The researcher-created bullying questionnaire measures teacher reported knowledge of instances of bullying behavior within their classroom, and the school. A total score from the teacher questionnaire was used for the analysis. The teacher pre- and postintervention questionnaires can be found in both Appendices F and G.

Office Disciplinary Referrals

The ODRs included for analysis are from the fall semester to the beginning of the intervention (July - January) and the month spanning the intervention (February). In addition, students completed a researcher-developed questionnaire regarding the student experience of bullying in the following areas: (a) student self-reports of victimization preintervention; (b) student self-reports regarding victimization postintervention; (c) student self-reports of missing school due to feeling unsafe, uncomfortable, or nervous at school or on the way to or from school preintervention; (d) student self-reports of missing school due to feeling unsafe, uncomfortable, or nervous at school or on the way to or from school postintervention; (e) student self-reports of witnessing occurrences of bullying preintervention; (f) student self-reports of witnessing occurrences postintervention; (g) student self-reports of perpetrating bullying preintervention; and (h) student self-reports of perpetrating bullying postintervention. Data from ODRs coded as "bullying" and "harassment" are included in this analysis.

Implementation of SWPBIS

As the intervention builds on the existing SWPBIS framework, it is crucial that both schools meet district standards in terms of SWPBIS implementation. The Tiered Fidelity Inventory (TFI) seeks to identify that key components of the SWPBIS are currently in place (McIntosh et al., 2017). Examples of these components include: staff handbook, discipline policy, code of conduct, established school schedule, progress monitoring, data, etc. Both the experimental school and the control school were administered the TFI during the 2016-2017 school year to ensure correct implementation of SWPBIS procedures.

Treatment Integrity

A treatment integrity checklist was developed and used for the purposes of this study to determine that implementation of the intervention was standard across grade-level presentations. The administrator present during the grade-level presentations checked that each component was reviewed during the presentation: school-wide expectations, BP-PBS procedures, and exceptions to the BP-PBS program, which were identified in the manual as being crucial components to the delivery of the intervention.

Treatment Acceptability

Treatment acceptability will be measured by a modified version of the Behavior Intervention Rating Scale (BIRS), a measure developed by Elliott and Von Brock Treuting (1991). The BIRS measures teachers' perceptions of treatment acceptability and treatment effectiveness. The BIRS has shown in research, to be a valid measure of both acceptability and effectiveness. The modified BIRS used for this study can be found in Appendix I.

Data Collection

Data collection occurred in two waves: pre- and postintervention. All participants underwent identical data collection procedures. All third,- fourth-, and fifth-grade teachers received the same instructions from the researcher, and were handed the same script to read to the students prior to the administration of the questionnaires. Preintervention data collection occurred prior to the implementation of the BP-PBS program in the experimental school. Preintervention data collection also included looking at fall and early spring (July 2016 – January 2017) ODRs as well as collecting teacher-

reported school climate data. Postintervention data collection mirrored preintervention data collection, in that it included ODR data thorough the intervention timeline (February – beginning of April), school climate, and bullying measures. Both pre- and postintervention school climate and bullying assessments had a paper/pencil-based administration.

Design and Data Analysis

A nonrandomized group design was used to evaluate the effectiveness of the BP-PBS program on decreases in student reports of victimization, witnessing of bullying, perpetration, and increase in feelings of safety. In this study, outcome variables were measured on two separate occasions, pre- and postintervention. This study sought to analyze differences between groups in outcome scores.

Baseline equivalence was calculated for each of the four variables assessed (e.g., victim, witness, safety, and perpetrator). The assessment of baseline equivalence was conducted in accordance with What Works Clearinghouse (WWC) standards for research rigor (version 3.0; U.S. Department of Education, 2014). Specifically, these variables were assessed to determine if the experimental and control samples were equivalent prior to intervention. Baseline equivalence outcomes were calculated, and are reported as Hedge's g (see Table 3).

According to WWC standards, Hedge's g scores that fall within .05 to .25 require that statistical adjustments be made to account for differences at baseline. Statistical adjustment of this nature will assure that posttest difference detected are due to differences at posttest rather than differences prior to the onset of the intervention.

Baseline equivalence was also calculated for the researcher-created teacher

Table 3

Hedge's G Scores for Baseline Equivalence, Student Questionnaire

Measure	Variables	Hedge's G
Student Questionnaire	Victim	-0.169*
Student Questionnaire	Witness	-0.238*
Student Questionnaire	Safety	0.205*
Student Questionnaire	Perpetrator	-.048
Teacher Questionnaire	Total Bully score	-0.132*
Teacher SCI-R	Total Climate Score	-1.937*

Note. * requires statistical adjustment for baseline differences.

questionnaire on bullying, and for the SCI-R (see Table 3). These analyses found unacceptable differences between groups at baseline according to WWC standards. Due to the differences between conditions on several pretest variables, a two-way Analysis of Covariance (ANCOVA) will be used to assess statistical significance for variables that fail to meet WWC criteria for equivalence. Separate analyses will be conducted on each outcome variable. ANCOVA analyses will assess differences between experimental condition and grade on each of the student and teacher outcomes while controlling for pretest scores. The lone exception is the "Perpetrator" variable, which was found to be equivalent at baseline. For this variable, a two-way Analysis of Variance (ANOVA) will be conducted to determine statistical significance between experimental condition and grade on the perpetrator outcome.

Attrition

Attrition rates were calculated for both the experimental and control schools, in order to ensure unbiased estimates of the intervention's effectiveness. Assessment of attrition is also a key consideration for evaluating group research standards according to the What Works Clearinghouse (WWC) (U.S. Department of Education, 2014). At preintervention data collection, $N = 250$ for the experimental school, and $N = 183$ for the control school. At postintervention data collection, $N = 253$ for the experimental school, and $N = 181$ for the control school. Overall attrition for the study was .0046%. Due to absences, three students assented and participated in the postintervention data collection wave at the experimental school; however, for the purposes of calculating overall attrition from the initial population sampled, those three students were not included in the calculation. Differential attrition was 1.01% at the control school, as two students were not present at postintervention data collection.

Attrition rates were also calculated for teachers who participated in the study. At preintervention data collection, $N = 11$ for the experimental school, and $N = 8$ for the control school. At postintervention data collection, $N = 12$ for the control school, where an additional teacher consented and completed the questionnaire (the teacher was absent during preintervention data collection), and $N = 11$ for the control school. Overall and differential attrition was 0%.

In order to assess acceptable attrition rates according to WWC standards, overall attrition must be compared to differential attrition. If overall attrition is 0, to fall within the conservative boundary of acceptable attrition, the differential attrition must not exceed 5.7. Based on this scale, the attrition rates of this study fell within the acceptable

range (U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse, 2016).

CHAPTER 3

RESULTS

The purpose of the study was to determine whether the BP-PBS program would decrease student reports of victimization, witnessing, and perpetration of bullying, as well as increase feelings of safety. Students at the experimental school received weekly lessons, in which they were taught to identify bullying behavior, and were taught explicit instructions for how to combat bullying behavior. Survey responses were collected from students both pre- and postintervention. Teacher responses were also collected to determine if positive feelings of school climate as well as teacher perceptions of bullying would be impacted by the intervention. An ANCOVA was used to determine effectiveness of the intervention, based on student-reports for the witness, victim, and safety variables. A two-way ANOVA was used to determine effectiveness of the intervention, based on student reports for the perpetrator variable. In addition, an ANCOVA was used to determine effectiveness of the intervention, based on teacher-reports on both the bullying questionnaire and the SCI-R; the following data were obtained for each research question.

Research Question 1

The first research question addressed whether ODRs would decrease from the 2015-16 school year to the 2016-17 school year. Data obtained from the experimental

school's PBIS team indicate that in the 2015-2016 school year, 316 ODRs were collected between the months of July and mid-April. Of the 316 ODRs, there were 3 reported incidences of bullying, and 14 reported incidences of harassment. Of the 3 reported incidences of bullying, 2 pertained to students in third, fourth, or fifth grade; of the 14 reported incidences of harassment, 3 pertained to students in third, fourth, or fifth grade. ODR data obtained from the 2016-2017 school year indicates that between the months of July and mid-April, 301 ODRs were collected, 3 of which were specifically coded as bullying, and 20 of which were coded as harassment. Of the 3 reported incidences of bullying, 1 pertained to students in third, fourth, or fifth grade; of the 20 reported incidences of harassment, 6 pertained to students in third, fourth, or fifth grade. Overall, ODRs decreased by 15 between the 2015-2016 and 2016-2017 school years. See the following figures for a breakdown of referrals by month. Administrator reports indicate that teachers often code bullying behaviors as harassment; therefore, ODRs coded as harassment were also included in Figure 1. Data obtained from the control school's PBIS

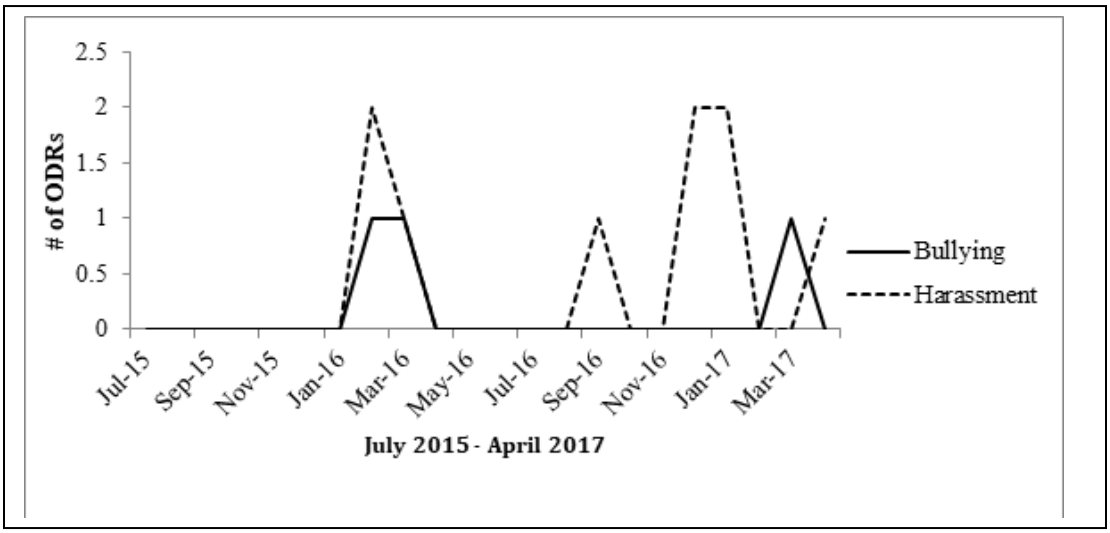

Figure 1. Experimental ODR Data for Harassment and Bullying, 2015–2016 and 2016–2017 School Years.

team indicate that in the 2015-2016 school year, 384 ODR were collected between the months of July and mid-April. Of the 384 ODR, there were no reported incidences of bullying, and 12 reported incidences of harassment. Of the 12 reported incidences of harassment, 3 pertained to third-, fourth-, or fifth-grade students.

ODR data obtained from the 2016-2017 school year indicate that between the months of July and mid-April, 357 ODRs were collected, 10 of which were specifically coded as bullying, and 7 of which were coded as harassment. Of the 10 coded as bullying, 5 pertained to third-, fourth-, or fifth-grade students; of the 7 coded as harassment, zero pertained to third-, fourth-, or fifth-grade students. Overall, ODRs decreased by 27 between the 2015-2016 and 2016-2017 school years; however, ODRs related to bullying increased by 10, and ODRs related to harassment decreased by 4. See charts below for breakdown of referrals by month. Though there is a subcategory for bullying, administrator reports indicate that teachers often code bullying behaviors as harassment; therefore, ODRs coded as harassment were also included in Figure 2.

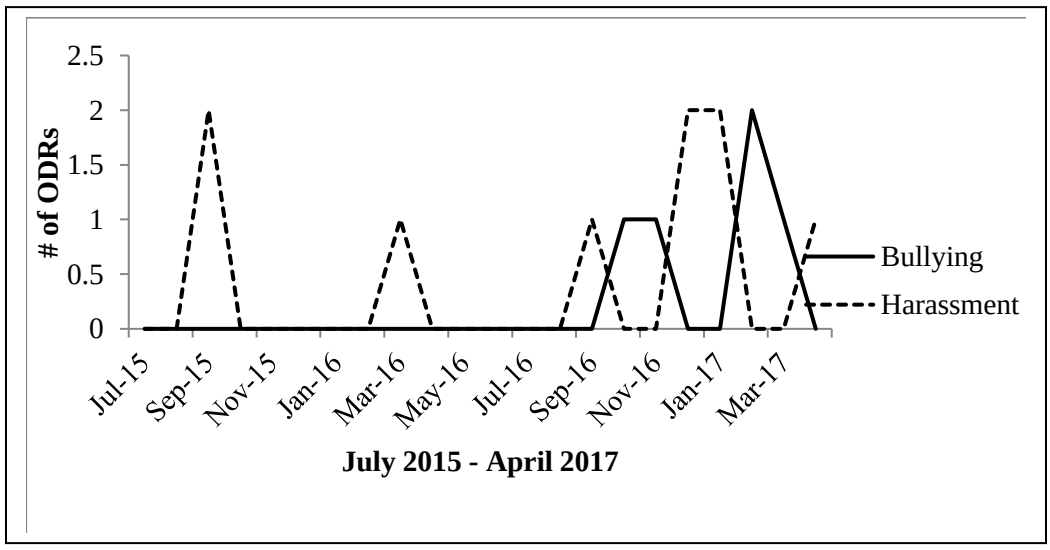

Figure 2. Control ODR Data for Harassment and Bullying, 2015–2016 and 2016–2017 School Years.

Research Question 2

The second research question addressed whether students' self-reports of victimization would decrease from pre- to postintervention. An ANCOVA tested self-reports of victimization at pre- and postintervention data collection waves, at both the control and experimental schools. Students who received the intervention reported significantly less victimization at the postintervention data collection wave (F (1, 434) = 4.450, p = .035) than did the students who did not receive the intervention. Mean victimization scores decreased from preintervention (M = 2.992) to postintervention (M = 2.921) at the experimental school, and increased from preintervention (M = 3.508) to postintervention (M = 3.530) at the control school. See Figure 3.

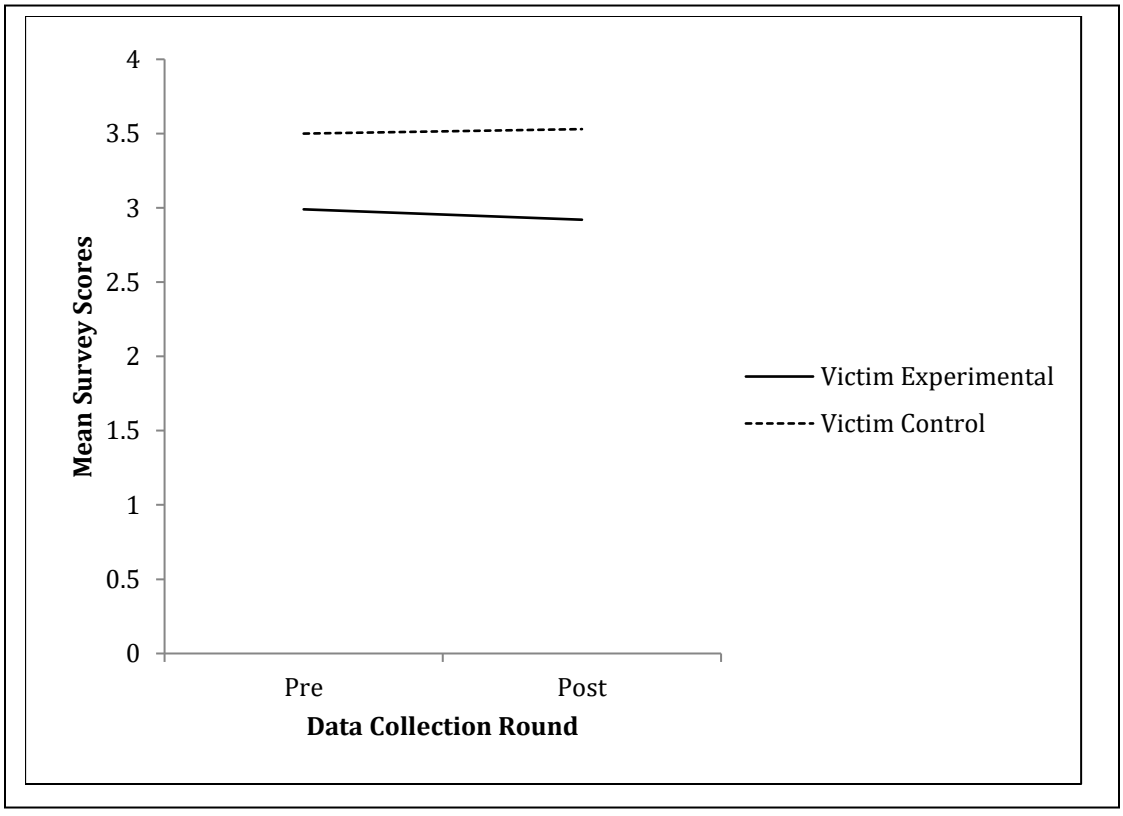

Figure 3. Total Mean Score Pre- and Post- for Victimization.

Research Question 3

Research Question 3 focused on whether students' reports of witnessing bullying would decrease from pre- to postintervention. Results from ANCOVA indicate that students who received the intervention reported significantly less witnessing of bullying acts at the postintervention data collection wave (F (1, 434) = 15.063, p = .000) than did the students who did not receive the intervention. Mean witness scores decreased from preintervention (M = 3.35) to postintervention (M = 2.79) at the experimental school, and increased from preintervention (M = 3.92) to postintervention (M = 3.93) at the control school. See Figure 4.

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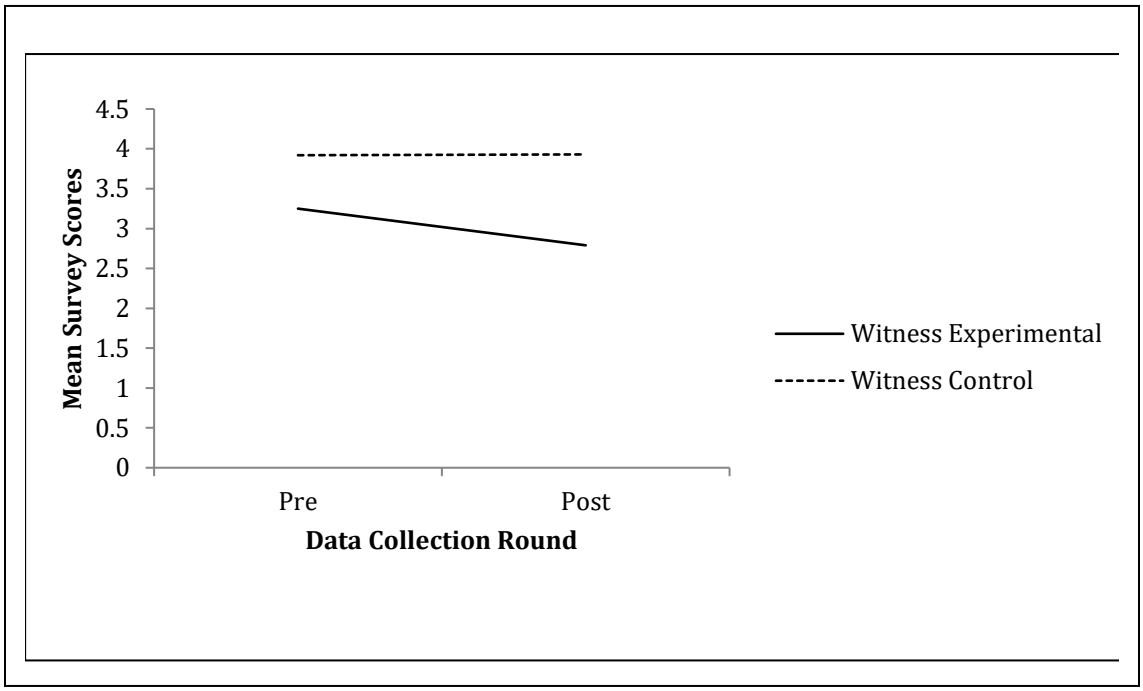

Figure 4. Total Mean Score Pre- and Post- for Witnessing Bullying Behavior.

Research Question 4

For Research Question 4, results were analyzed to determine if students' reports of overall safety at school would increase from pre- to postintervention. Results from the ANCOVA did not indicate significant effects at the postintervention data collection wave (F (1, 434) = .359, p = .549) for overall feelings of safety, as reported by students. Mean safety scores decreased by .08 from preintervention (M = 7.88) to postintervention (M = 7.80) at the experimental school, and increased from preintervention (M = 7.42) to postintervention (M = 7.66) at the control school. See Figure 5.

Research Question 5

Research Question 5 focused on whether students' self-reports of bullying behavior would decrease from pre- to postintervention. Results from the two-way

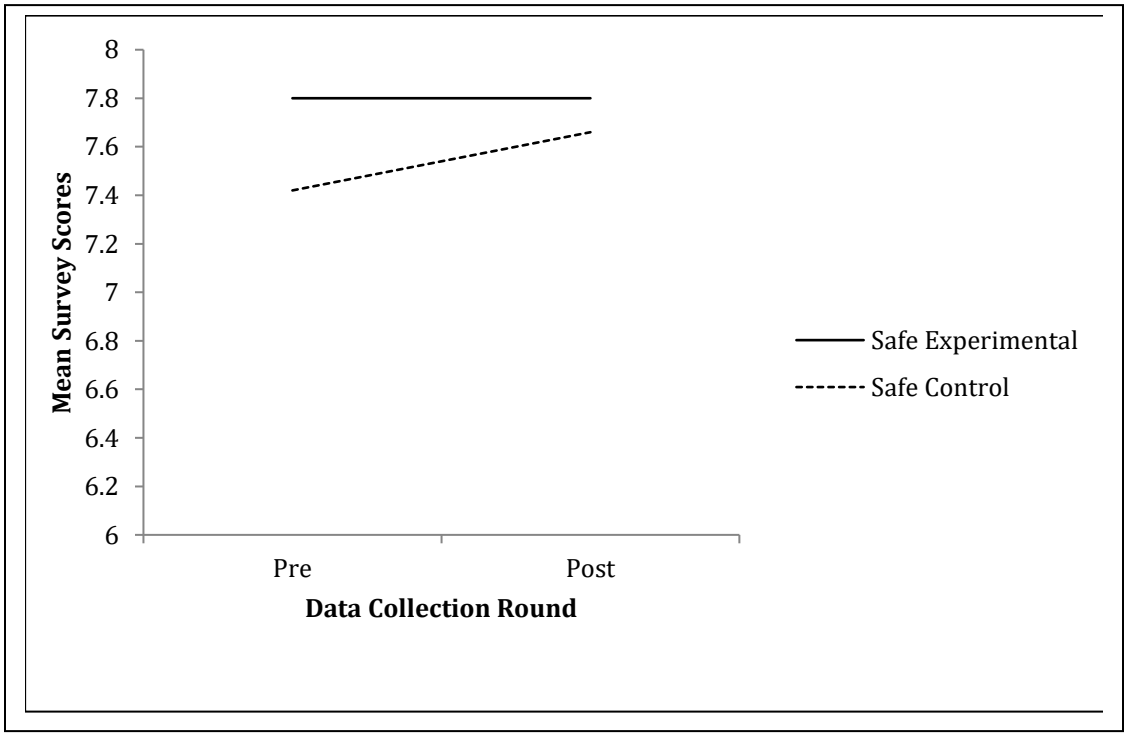

Figure 5. Total Mean Score Pre- and Post- for Feelings of Safety.

ANOVA did not indicate significant effects at the postintervention data collection wave (F (1, 434) = 2.701, p = .101) for self-reports of perpetrating behavior. Mean perpetrator scores decreased by .05 from preintervention (M = .75) to postintervention (M = .70) at the experimental school, and increased from preintervention (M = .82) to postintervention (M = .93) at the control school. See Figure 6.

Research Question 6

Research Question 6 addressed whether teacher perceptions of school climate would increase from pre- to postintervention. Teachers at both the experimental and control schools were administered the SCI-R, a measure of overall perceptions of school climate. Answers on the SCI-R are reported on a Likert scale, ranging from strongly disagree to strongly agree. For the purposes of analysis, the scale was coded as follows: 5

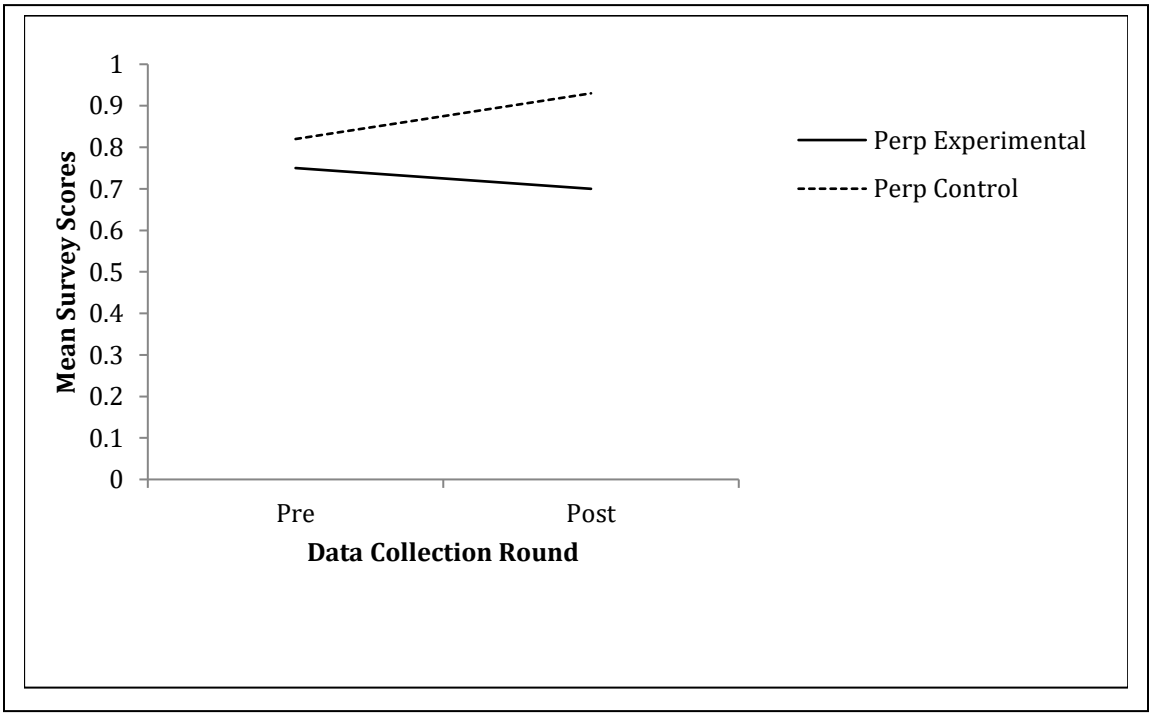

Figure 6. Total Mean Score Pre- and Post- for Perpetrator Self- Report.

= strongly agree, 4 = agree, neutral = 3, disagree = 2, strongly disagree = 1. A total score was created for each individual survey. An ANCOVA was conducted to determine effects from pre- to postintervention survey results on the SCI-R total score. Results from the ANCOVA did not yield significant results at postintervention for teacher reported feelings of overall school climate at the school level (F = (1, 20) = .054, p = .830), or at the grade level (F = (1, 20) = .932, p = .423). Potential total scores for the SCI-R range from 49 to 245. Descriptive statistics indicate that mean survey response declined from preintervention (M = 202.64) to postintervention (M = 198.83) at the experimental school, and increased from preintervention (M = 166.88) to post-intervention (M = 192.5) at the control school. See Figure 7.

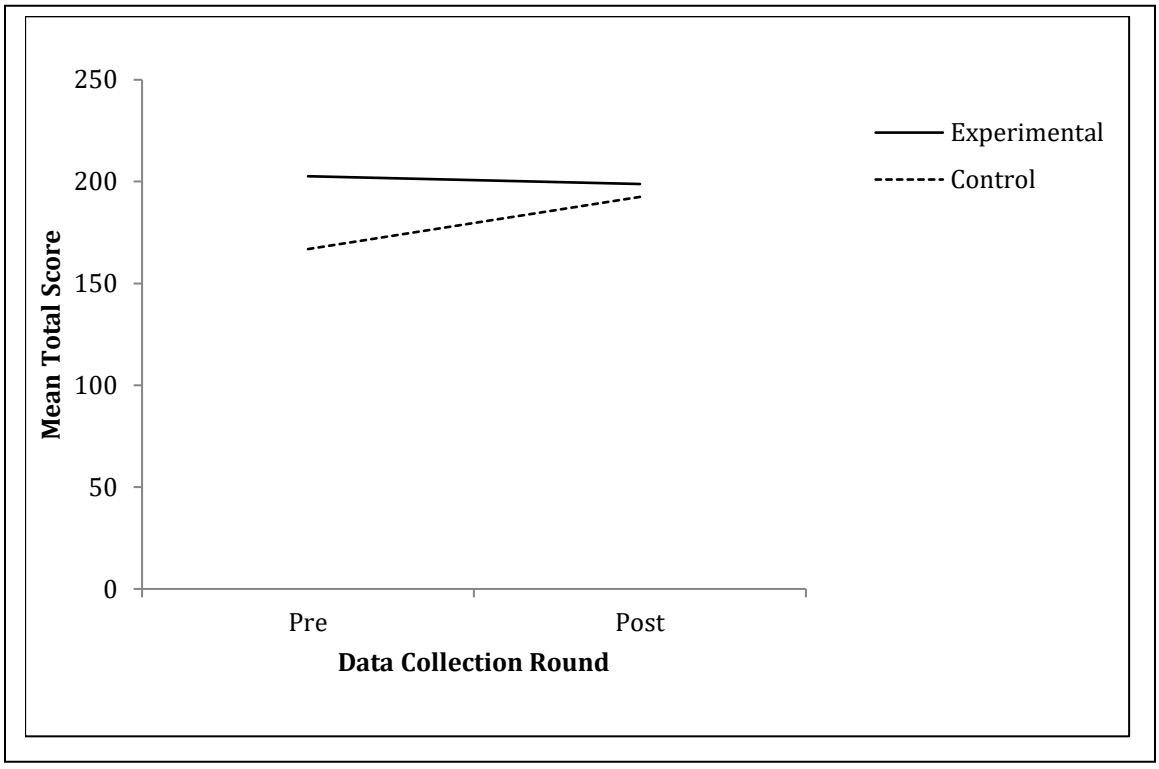

Figure 7. Total Mean Score Pre- and Post- for SCI-R.

Research Question 7

A focus on whether teacher-rated reports of bullying behavior would decrease from pre- to postintervention was addressed in Research Question 7. Results from the ANCOVA indicate no significance for bullying behavior based on teacher report for school (F (1, 20) = .846, p = .377); however, results at the postintervention data collection wave were significant for grade (F (2, 20) = 4.663, p = .034). The interaction of grade was moderated by pre/post. At the postdata collection wave, changes for grade were found to be significant. Descriptive statistics indicate that mean response scores decreased for both third and fourth grade, but increased for fifth grade. See Figure 8.

Treatment Acceptability

A modified BIRS was completed by the teachers at the experimental school to assess overall satisfaction with the BP-PBS bullying prevention program. Of the 12

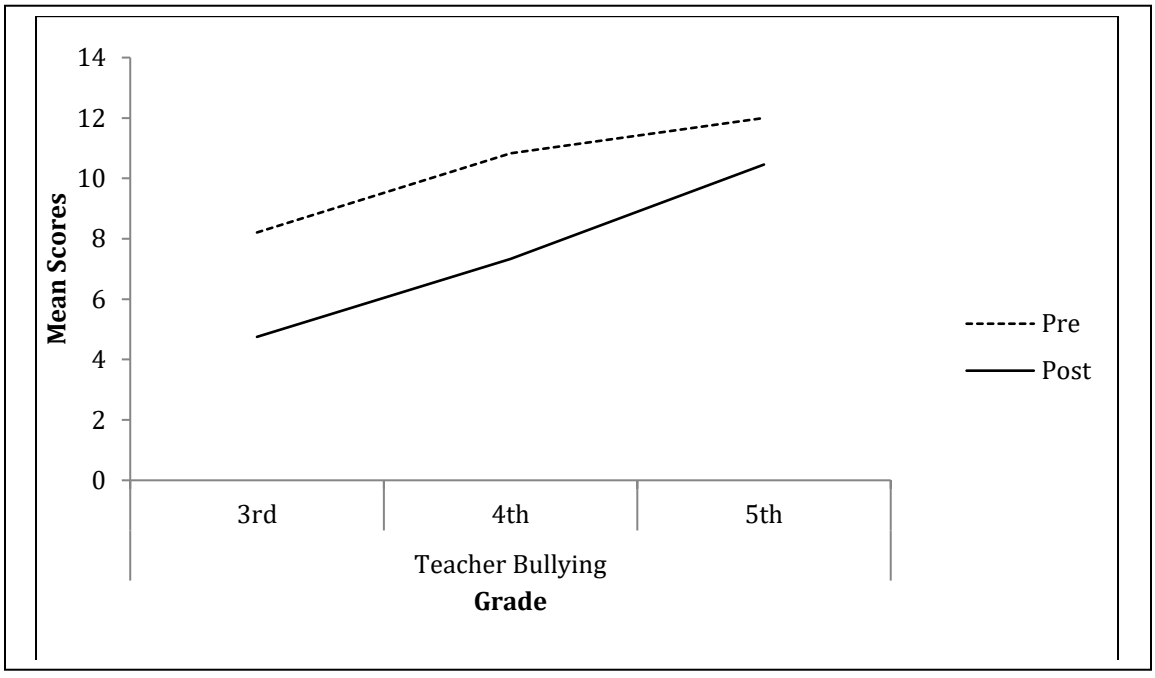

Figure 8. Total Mean Teacher Reports for Bullying, Per Grade.

teachers (4 teachers per grade), 11 completed and submitted the survey. Descriptive Statistics were run on the survey to determine mean scores per question. See Table 4.

Table 4

Mean Scores, Teacher Satisfaction Results on BIRS

#	Modified BIRS Questions	Mean	*SD*
1	The BP-PBS program has been an acceptable intervention for our school's problem behavior.	4.45	1.036
2	Most teachers have found this intervention to be appropriate for addressing bullying behaviors.	4.27	0.905
3	The intervention has proved effective in changing problem behaviors at our school.	3.55	1.293
4	I would suggest or recommend the use of this program to other schools.	4.36	0.809
5	I would be willing to continue using this intervention in the future.	4.36	0.924
6	The intervention would not result in negative side-effects for students.	4.55	0.522
7	The intervention is appropriate for a variety of students.	4.64	0.505
8	The intervention is consistent with how behavior is addressed in the classroom setting.	4.32	0.7167
9	The intervention is a fair way to handle the bullying behavior.	4.45	0.688
10	The intervention is reasonable for the behavior problem described.	4.45	0.522
11	I like the procedures used in the intervention.	4.45	0.934
12	This intervention was a good way to handle the bullying behavior.	4.05	0.9606
13	Overall, this intervention would be beneficial for our students.	4.45	0.82
14	The intervention would quickly improve bullying behavior.	3.59	1.114
15	The intervention would produce a lasting improvement in bullying behavior.	3.68	1.2703
16	The intervention would improve bullying behavior to the point that it would not noticeably deviate from other classmates' behavior.	3.55	1.214
17	Soon after using the intervention, the teacher would notice a positive change in the problem behavior.	3.41	1.2004
18	The child's bullying behavior will remain at an improved level even after the intervention is discontinued.	3.55	1.2572
19	Using the intervention should not only improve the child's behavior in the classroom, but also in other settings (e.g., other classrooms, home).	3.86	0.9511

Table 4 (Continued)

#	Modified BIRS Questions	Mean	*SD*
20	When comparing this child with a well-behaved peer before and after use of the intervention, the child's and the peer's behavior would be more alike after using the intervention.	3.75	0.7906
21	The intervention should produce enough improvement in the child's behavior so the behavior no longer is a problem in the classroom.	3.86	0.9511
22	Other behaviors related to the problem behavior are also likely to be improved by the intervention.	4.05	0.9606
	Total:	89	16.63

CHAPTER 4

DISCUSSION

The purpose of this research study was to contribute to and extend the existing literature and knowledge base on bullying prevention programs as part of the PBIS framework. In the current study, I attempted to (a) demonstrate the effectiveness of a bullying prevention program to decrease student-reported incidences of bullying (both victimization and witnessing), as well as decrease student self-reports of bullying perpetration, (b) investigate whether decreases in ODRs would occur following the implementation of the intervention, and (c) whether teacher-rated perceptions of school climate and student-reported feelings of overall safety would increase following the intervention. The study was conducted in two suburban schools, where third-, fourth-, and fifth-grade students and their teachers were administered pre- and postintervention surveys. Grade-level presentations were held for all third-, fourth-, and fifth-grade students at the experimental school, where the BP-PBS program was taught to students, in order to teach students how to identify and combat bullying behavior. Teacher feedback was solicited from the experimental school, regarding overall satisfaction with the intervention.

Results from the surveys collected indicate that the experimental school showed decreased victimization reports from the pre- to postintervention survey collection

waves, meaning that students at the experimental school reported less victimization occurred following the intervention. Mean scores for victimization at the experimental school decreased from pre- (*M*: 2.992) to post- (*M*: 2.921). Survey results from the control school indicate increased reports of victimization from pre- (*M*: 3.508) to post- (*M*: 3.530) survey collection waves.

Results from the survey data also yielded significant scores for decreased reports of witnessing bullying behavior at the experimental school. The total mean score reported decreased from 3.29 at pre- to 2.79 at postintervention survey report, indicating less reports of students witnessing bullying behavior. Results for witnessing bullying behavior were also significant at the grade level, and analysis of mean scores indicates decreases for both fourth- and fifth-grade students, whereby third-grade students' scores were relatively stable, with 2.54 mean score at preintervention, and 2.57 mean score at postintervention collection wave. Significant results were not obtained for measures of perpetrator self-reports, as mean scores decreased by .05 at the experimental school, and increased by .11 at the control school.

Significance was not obtained for feelings of overall safety for students or teachers. Analysis of the SCI-R data, obtained from third-, fourth-, and fifth-grade teachers at both the experimental and control schools, did not yield significant results. Mean scores remained relatively stable between data collection waves at the experimental school, with preintervention mean score of 202.64 declining slightly at postintervention data collection to 198.83. While increased mean scores were obtained for the control school, as preintervention mean score of 166.88 rose to 192.5 at postintervention data collection, results from the two-way ANOVA did not yield significance to this change.

Student reports of overall feelings of safety did not yield significant results for grade or for school. Mean scores reported from the experimental school remained relatively stables, with a mean score of 7.88 at the preintervention data collection wave, and a mean score of 7.80 at the postintervention data collection wave. Scores increased for the control school, with a mean score of 7.42 at preintervention, and a score of 7.66 at postintervention.

While students did not report significant differences in their feelings of overall safety, results from the surveys collected do indicate fewer reports of both experiencing and witnessing of bullying behavior. This did not tie in to ODR data received from either school. Both the experimental and control schools experienced overall decreases in ODRs between July 2015 and mid-April 2016 to July 2016 and mid-April 2017. Number of bullying referrals remained constant between each year. A total of 3 referrals were reported at the experimental school, which represents a small increase. Similar findings were evident at the control school that increased from 0 to 10 during the measurement period.

Analysis of ODRs included for both bullying and harassment, which indicated that the majority of the referrals were made for middle school students, grades 6-8, as both the control and experimental schools are both K-8 schools. Of the 3 bullying referrals obtained from the 2015-2016 school year at the experimental school, only 2 were for elementary-aged students. Of the 14 harassment referrals obtained from the experimental school for the 2015-2016 year, only 3 were for elementary-aged students. Of the 3 reported incidences of bullying during the 2016-2017 school year at the experimental school, only 1 pertained to elementary-aged students, and of the 20 reported

incidences of harassment, only 6 pertained to elementary-aged students. Of the 12 harassment referrals obtained in the 2015-2016 school year at the control school, only 3 were for elementary-aged students. Of the 10 bullying referrals obtained at the control school in the 2016-2017 school year, only 5 were from elementary-aged students, while 0 of the 7 harassment referrals obtained were from elementary-aged students. For the purposes of this study, only those ODRs obtained for third-, fourth-, and fifth-grade students were used for analysis.

Relation to Previous Research

The results of this study contribute to and extend the current research on the effects of bullying prevention programs implemented in conjunction with an SWPBIS program, and their effects on student reports of both experiencing and witnessing bullying behaviors. Results from the ANCOVA indicate decreases in student reports of both witnessing bullying and experiencing bullying at the postintervention data collection wave, at the experimental school. Results from this study are comparable to results found in a 2014 study by Ross and Horner, which implemented the BP-PBS program at three schools, and obtained pre- and postintervention student reports on bullying behavior. In the Ross and Horner study, a multivariate analysis of variance (MANOVA) was conducted on survey data, and resulted in a significant effect, meaning of the 13 variables assessed on the student questionnaire, 12 were significantly different at postintervention data collection. The 2014 study did not include a control school, as all three schools chosen for the study received the intervention, nor were ODRs included as potential indicators of intervention effects.

The BP-PBS program in the aforementioned study is meant for use with younger,

elementary-aged students, and teaches students how to recognize precursors to bullying behavior, as well as how to stand up for themselves, and for their peers, by using the "stop" signal (Ross & Horner, 2014; Ross et al., 2011).

The program itself is best used in conjunction with an existing PBIS system, as school rules and consequences tie in to the lessons taught. As the research shows, Tier 1 PBIS strategies, aimed at an entire student body, have shown reductions in bullying behavior in and of themselves (Ross & Horner, 2014; Waasdorp, Bradshaw, & Leaf, 2012). However, when behavior escalates past the scope of Tier 1 strategies, a Tier 2, more individualized strategy, which typically involves some sort of check-in with an adult, supports students with behavioral difficulties (Hawken & Horner, 2003; Hawken, Adolphson, MacLeod, & Schumann, 2009). While Tier 2 support typically involves more adult attention, research has shown that peers play a critical role in the perpetration of bullying behavior (Keelan, Schenk, McNally, & Fremouw, 2014; Murphy, Laible & Augustine, 2017; Sentse, Kuru, Veenstra, & Salmivalli, 2014). For this reason, BP-PBIS involves all students, not only those identified as bullies, and helps teach students how to react not only if they experience bullying behavior, but if they witness it as well (Ross & Horner, 2014).

The current study extends Ross and Horner's (2014) findings by using a non-randomized group design to implement the BP-PBS program and determine if differences in student reports of victimization and witnessing of bullying behavior decrease, as a result of the intervention. Results from the current study indicate that less victimization and witnessing of bullying behavior was reported at the experimental school, but not at the control school, which further supports results that the BP-PBS is an appropriate

prevention program for targeting bullying behavior.

The BP-PBS program includes elements originally found in Olweus' (1993) intervention, which yielded significant positive effects. Like Olweus' Bullying Prevention Program, the current study attempted to offer a more holistic approach to bullying intervention, rather than intervention targeted at those students identified as bullies. Olweus' approach included the involvement of parents, and teachers, as well as a videotaped curriculum (Pugh & Chitiyo, 2012; Vreeman & Carroll, 2007), whereas BP-PBIS did not.

A meta-analysis conducted in 2007 by Vreeman and Carroll identified 10 studies that used a multidisciplinary whole-school approach, and included some combination of school-wide rules, teacher training, classroom curriculum, individual counseling, and/or conflict resolution training; 2 of the 10 studies evaluated the Olweus Bullying Prevention Program, one of which found decreased bullying, victimization, and antisocial behavior, and improved school climate. This further supports that a whole-school approach to addressing bullying can have positive results for students. While there were various studies that resulted in conflicting results, this meta-analysis gives a baseline for future research to attempt to supplement the existing knowledge base, and provide more support for effective bullying interventions (Vreeman & Carroll, 2007).

Study Limitations

The current research study had multiple limitations, which should be considered for future research. First, the time between preintervention and postintervention data collection waves were not identical between the control and experimental schools. Whereas there were 4 weeks between pre- and postintervention data collection waves at

the experimental school, there were only 2 ½ weeks between pre- and post- intervention data collection waves at the control school. A shorter span between data collection waves may have contributed to fewer differences in scores at the control school; thus, the results for the control school may have been impacted by a shortened timeline.

A second limitation involves change in administration at both the experimental and control schools. One month prior to the implementation of the study, a school district-mandated reassignment occurred between the schools. The principal at the control school became the vice-principal at the experimental school, and the vice-principal at the experimental school then became the principal at the control school. It is difficult to determine if these administrative changes had any effect on teacher-reported levels of satisfaction and overall school climate measures, assessed by the SCI-R. Similarly, there was administrative turnover at the control school between the 2015-2016 and 2016-2017 academic years. Both the principal and vice principal at the control school were newly appointed at the start of the 2016-2017 academic year. This may have impacted the ODRs reported between academic years, as administrators can choose to enforce referrals differently.

A third limitation of the study involves the condensed implementation of the BP-PBS program. The program itself was designed to have five sessions, the first two of which occur across 2 successive days. Due to time restraints caused by the impending spring break recess, as well as, constraints due to state-wide testing set to be administered upon the students' return from the spring break recess, a shortened version of the intervention was presented to students at the experimental school. The condensed version contained four sessions; lessons one and two from the original BP-PBS program were

combined into one session with extended opportunities to practice the BP-PBS intervention steps. It is possible that the altering of the intervention may have impacted student-reported results. Furthermore, though school climate was assessed, the brevity of the intervention is unlikely to have any impact on overall school climate, as school climate is a global measure that is impacted over a longer period of time.

A fourth limitation of the study pertains to consistency and reliability of ODR data. Per the Student Code of Conduct, Harassment and Bullying are grouped together, under the same definition; therefore, ODRs coded as either bullying or harassment were included in this study; however, the lack of differentiation between bullying and harassment may have skewed the data. For this reason, the ODR data included in this study may not be an accurate representation of all bullying behavior that has occurred at both the experimental or control schools during the 2015-2016 and 2016-2017 academic years.

A fifth limitation of the study also pertains to the consistency and reliability of ODR data. It is difficult to say whether teachers involved in the study consistently reported instances of bullying prior to, during, and following the intervention. Analysis of the obtained ODR data indicate that most of the referrals obtained for both bullying and harassment at the experimental school pertained to students in sixth, seventh, and eighth grades. While this may indicate that fewer instances of bullying occur at the elementary-aged level, it is difficult to determine if fewer reports of bullying from third-, fourth-, and fifth-grade students and teachers is a result of teachers handling the bullying behavior within their classrooms, or from students not reporting bullying behavior at that young age to their teachers. Regardless, ODR data are likely impacted by this as well.

The sixth limitation of the study is the researcher created questionnaire used to determine differences in the four variables identified (victim, witness, safety, and perpetrator) between pre- and postintervention data collection waves. The constructs were analyzed, and Cronbach's alpha scores indicate that the constructs of safety and perpetrator were not reliable measures.

The seventh limitation involves results from the chi-square analysis, which indicate that ethnicity breakdown at both the control and experimental school are significantly different. This significant difference can primarily be contributed to the difference in the Hispanic population between the two schools, with the experimental school having $N = 323$ Hispanic students, and the control school having $N = 217$ Hispanic students. This could be a confounding variable, as potentially, one might expect greater bullying among a group of minority students; however, this does not seem to be a credible alternative explanation in this specific study, as results point in the opposite direction. It is difficult to interpret what, if any, impact this significant difference in ethnic breakdown may have had on the study.

The eighth limitation of the study involves awareness of bullying behavior. While the BP-PBS is designed to help students identify different types of bullying behavior, and teach students how to combat said bullying behavior, it also increases student awareness. Whereas some students may not have been as aware of the existence of bullying behavior prior to the intervention, it is possible that following the intervention, they noticed bullying behavior more, and therefore, results on the bullying questionnaire may have been impacted by this increased awareness.

Future Research

Findings from the current study contribute to and expand the current research base regarding bullying prevention programs implemented in conjunction with an existing PBIS program. The limitations and results reported from this study should be taken into account for future research studies, and may provide a starting point for expansion on bullying prevention programs.

Overall, when implemented within the context of an existing PBIS program, this intervention provides another level of support for students to learn how to combat bullying behavior, and gives clear-cut steps for students to take when experiencing or witnessing bullying behavior. While the language used in the BP-PBIS program lends itself for use with older elementary-aged students, future research might evaluate how a bullying prevention program can be used with younger elementary-aged students, grades kindergarten through second grade.

Elementary-aged students comprise most of the research in relation to bullying prevention programs. There is a lack of longitudinal research in the literature base that follows students who received bullying intervention at a young age, into middle school and high school, to determine if early intervention for bullying has long-term positive effects for bullies, victims, and bully-victims. While the literature shows that bullying behavior increases once students enter middle school (Cook et al., 2010, Ross & Horner, 2014, Williams & Guerra, 2007), there is a lack of research that shows if a relationship exists between early interventions and decreased bullying behavior in upper-grade students.

Additionally, future studies may target teacher awareness of bullying, and training

of teachers in how to handle bullying behavior in their students. It is possible that lack of ODR data related to bullying behavior in the elementary-aged students included in this study at the experimental school is related to teachers' handling of bullying behavior within their classroom.

APPENDIX A

STUDENT PASSIVE CONSENT

Dear Parent/Guardian(s):

[SCHOOL NAME] will be participating in a research study with the University of Utah that involves a survey of students during the 2016-17 school year. The purpose of the survey is to collect school-wide data about how students feel about their level of safety, as well as their ability to identify and respond to bullying, which past research has shown is important for student achievement, and decreased rates of bullying. Survey results will help [SCHOOL NAME] identify areas needing improvement for students' sense of safety.

The survey will be administered two times during the school year - once the first week of [month], and again at the end of [month]. Students will complete the survey during school hours. It should take approximately 20 minutes to complete.

To protect your child's confidentiality, there will be no identifying information on the survey itself. Results will only be examined in a group format (e.g. third graders as a whole); no individual student's responses or records will be studied.

The survey is completely voluntary. Your child can choose not to finish the survey or to omit any question that he/she prefers not to answer without penalty. Your child may benefit from this survey to the extent that we can identify needed supports for students to feel safer and more connected to their school.

If you have any questions about this research study or if you feel your child has been harmed by this research please contact Dania Allen, M.Ed., School Psychologist at San Tan Heights K-8 and University of Utah Doctoral Candidate, at (480) 888-7555 ext 7761.

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

If for any reason you **DO NOT** wish your son or daughter to participate in this survey, please sign this form and return it to the [SCHOOL NAME] School front office by xxx, otherwise your child will be included in the study. Thank you for your time and consideration.

Student's Name (please print): _____

Parent signature: _____

Date: _____

APPENDIX B

STUDENT ASSENT

STUDENT ASSENT

The Effects of a Bullying Prevention Program on Bullying Identification, Expression, and Overall School Climate

For students grades 3 - 5

Writing my name and signing this page means that the information about the study was read (by me/to me) and that I agree to be in the study. I know what will happen to me in the study. If I decide to quit the study, all I have to do is tell the person in charge.

_____

Student Name (print)

_____ _____

Student Signature Date

<office use only> <office use only>

Signature of Researcher Date

APPENDIX C

TEACHER CONSENT

You are being asked to take part in a research study. Before you decide whether or not to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you want to volunteer to take part in this study.

The purpose of the study is to identify if students can increase their identification and expression of bullying behavior, and how that relates to overall school climate.

As part of this study, you will be asked to complete a questionnaire. It will take you approximately 20 minutes to complete this questionnaire; there are 49 questions total. This questionnaire will assess overall school climate at this school. You will be given the same questionnaire twice, once at the beginning of April, and again at the end of the month.

The risks of this study are minimal. You may feel upset thinking about or talking about personal information related to school climate These risks are similar to those you experience when discussing personal information with others. Please note that your personal information will not be attached to you responses, meaning that your responses are anonymous. If you feel upset from this experience, you can tell the researcher, and he/she will tell you about resources available to help.

We cannot promise any direct benefit for taking part in this study. However, possible benefits include more awareness of school climate, and potential areas to improve within your school setting.

All of your answers will be reported anonymously, no identifying information will be included with your submitted questionnaires. All questionnaires will be kept in a locked filing cabinet. Only those who work with this study or are performing their job duties for the University of Utah will be allowed access your responses.

If you have questions, complaints or concerns about this study, you can contact Dania Allen, M.Ed. at 801-826-7605.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.
Research studies include only people who choose to take part. You can tell us that you don't want to be in this study. You can start the study and then choose to stop the study later. This will not affect your relationship with the investigator.

By signing this consent form, I confirm I have read the information in this consent form and have had the opportunity to ask questions. I will be given a signed copy of this consent form. I voluntarily agree to take part in this study.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

_____
Printed Name of Person Obtaining Consent

_____ _____
Signature of Person Obtaining Consent Date

APPENDIX D

STUDENT SURVEY NARRATIVE

Students, you are being asked to participate in a study. The purpose of the study is to determine if students at [SCHOOL NAME] see or experience bullying, how often it occurs, and whether students feel safe. You will be asked to complete one questionnaire that has 25 questions. PLEASE DO NOT WRITE YOUR NAME AT THE TOP. All information you give in this questionnaire will be kept confidential, and anonymous. It is important that you are honest. If you have questions, or you feel like you cannot complete the questionnaire, please tell your teacher. Thank you for your participation.

APPENDIX E

PREINTERVENTION STUDENT

BULLYING QUESTIONNAIRE

Preintervention Bullying Questionnaire

1. During this school year (so far) how often have you witnessed someone being bullied?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

2. During this school year (so far) how often have you experienced bullying at school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

3. During this school year (so far) have you missed school because you felt unsafe, uncomfortable or nervous at school or on your way to or from school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

4. How many times so far this year have you bullied, teased or made fun of someone?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

	Very safe	Kind of safe	Scared and unsafe
5. In my classroom I feel	□	□	□
6. On the playground I feel:	□	□	□
7. In the cafeteria I feel:	□	□	□
8. Going to and from school I feel:	□	□	□

	Often	Sometimes	Never
9. In my classroom I see bullying	□	□	□
10. On the playground I see bullying:	□	□	□
11. In the cafeteria I see bullying:	□	□	□
12 Going to and from school I see bullying:	□	□	□

13 Other kids hit, kick or push me:

□ every day
□ once or twice a week
□ once or twice a month
□ never

14. Other kids say mean things to me:
□ every day
□ once or twice a week
□ once or twice a year
□ never

15. Who has bullied you, said mean things to you, teased you, called you names, or tried to hurt you at school?
□ boys and girls
□ several boys
□ a single boy
□ several girls
□ a single girl
□ nobody

16. In what grade is the student or students who bully you?
□ I haven't been bullied
□ in my class
□ in the same grade as me, but in a different class
□ in a lower grade
□ in a higher grade

17. If you have been bullied this year, who have you told? (CHECK ALL THAT APPLY)
□ my mother or father
□ my sister or brother
□ a teacher or other adult at school
□ another kid at school
□ nobody

18. If you have been bullied this year, who has tried to help you? (CHECK ALL THAT APPLY)
□ my mother or father
□ my sister or brother
□ a teacher or other adult at school
□ another kid at school
□ nobody

19. How often do you hit, kick or push other kids?
□ every day
□ once or twice a week

□ once or twice a month
□ never

20. How often do you say mean things, tease or call other kids names?
□ every day
□ once or twice a week
□ once or twice a month
□ Not very often

21. How often do you spend recess alone because nobody wants to play with you?
□ every day
□ once or twice a week
□ once or twice a month
□ Not very often

APPENDIX F

POSTINTERVENTION STUDENT

BULLYING QUESTIONNAIRE

Postintervention Bullying Questionnaire

1. In the past 2 months, how often have you seen someone being bullied?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

2 In the past 2 months, how often have you been bullied at school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

3. In the past 2 months, have you missed school because you felt unsafe, uncomfortable or nervous at school or on your way to or from school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

4. How many times in the past 2 months have you bullied, teased or made fun of someone?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR EXPERIENCES FROM THE PAST TWO MONTHS (month – month)

	Very safe	Kind of safe	Scared and unsafe
5. In my classroom I feel	□	□	□
6. On the playground I feel:	□	□	□
7. In the cafeteria I feel:	□	□	□
8. Going to and from school I feel:	□	□	□

	Often	Sometimes	Never
9. In my classroom I see bullying	□	□	□
10. On the playground I see bullying:	□	□	□
11. In the cafeteria I see bullying:	□	□	□

12 Going to and from school I see bullying: □ □ □

13 Other kids hit, kick or push me:
□ every day
□ once or twice a week
□ once or twice a month
□ never

14. Other kids say mean things to me:
□ every day
□ once or twice a week
□ once or twice a year
□ never

15. Who has bullied you, said mean things to you, teased you, called you names, or tried to hurt you at school?
□ boys and girls
□ several boys
□ a single boy
□ several girls
□ a single girl
□ nobody

16. In what grade is the student or students who bully you?
□ I haven't been bullied
□ in my class
□ in the same grade as me, but in a different class
□ in a lower grade
□ in a higher grade

17. If you have been bullied this year, who have you told? (CHECK ALL THAT APPLY)
□ my mother or father
□ my sister or brother
□ a teacher or other adult at school
□ another kid at school
□ nobody

18. If you have been bullied this year, who has tried to help you? (CHECK ALL THAT APPLY)
□ my mother or father
□ my sister or brother
□ a teacher or other adult at school
□ another kid at school
□ nobody

19. How often do you hit, kick or push other kids?
□ every day
□ once or twice a week
□ once or twice a month
□ never

20. How often do you say mean things, tease or call other kids names?
□ every day
□ once or twice a week
□ once or twice a month
□ Not very often

21. How often do you spend recess alone because nobody wants to play with you?
□ every day
□ once or twice a week
□ once or twice a month
□ Not very often

APPENDIX G

PREINTERVENTION TEACHER

BULLYING QUESTIONNAIRE

Preintervention Bullying Questionnaire

1. During this school year (so far) how often have you witnessed a student being bullied?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

2. During this school year (so far) how often have you intervened on behalf of a student being bullying at school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

3. During this school year (so far) have you been made aware of a student missing school because they felt unsafe, uncomfortable or nervous at school or on their way to or from school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

	Often	Sometimes	Never
4. In my classroom I see bullying	□	□	□
5. On the playground I see bullying:	□	□	□
6. In the cafeteria I see bullying:	□	□	□
7. When using technology with my students I see bullying:	□	□	□

8. I have seen a student hit, kick, or push another student:
□ every day
□ once or twice a week
□ once or twice a month
□ never

9. I have seen a student say mean things to another student:
□ every day
□ once or twice a week
□ once or twice a year
□ never

10. I have seen bullying online or using technology (computer, phone, ipad, etc.):
□ every day
□ once or twice a week
□ once or twice a year
□ never

11. The students I have seen say mean things to another student, teased another student, call another student names, or tried to hurt another student are:
□ boys and girls
□ several boys
□ a single boy
□ several girls
□ a single girl
□ nobody

12. In what grade is the student or students who you have witnessed display bullying behavior?
□ I haven't witnessed bullying behavior
□ in my class
□ in the same grade I teach, but in a different class
□ in a lower grade
□ in a higher grade

13. How often has a student-reported bullying to you so far this year?
□ at least once a day
□ once or twice a week
□ once or twice this year
□ never

APPENDIX H

POSTINTERVENTION TEACHER

BULLYING QUESTIONNAIRE

Postintervention Bullying Questionnaire

1. During the PAST MONTH how often have you witnessed a student being bullied?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

2. During the PAST MONTH how often have you intervened on behalf of a student being bullying at school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

3. During the PAST MONTH) have you been made aware of a student missing school because they felt unsafe, uncomfortable or nervous at school or on their way to or from school?

□ Never.
□ Sometimes (1 or 2 times a month).
□ Regularly (1 or 2 times a week)
□ Every day.

ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR EXPERIENCES FROM THE PAST MONTH:

	Often	Sometimes	Never
4. In my classroom I see bullying	□	□	□
5. On the playground I see bullying:	□	□	□
6. In the cafeteria I see bullying:	□	□	□
7. When using technology with my students I see bullying:	□	□	□

8. I have seen a student hit, kick, or push another student:
□ every day
□ once or twice a week
□ once or twice a month
□ never

9. I have seen a student say mean things to another student:
□ every day
□ once or twice a week

□ once or twice a year
□ never

10. I have seen bullying online or using technology (computer, phone, ipad, etc.):
□ every day
□ once or twice a week
□ once or twice a year
□ never

11. The students I have seen say mean things to another student, teased another student, call another student names, or tried to hurt another student are:
□ boys and girls
□ several boys
□ a single boy
□ several girls
□ a single girl
□ nobody

12. In what grade is the student or students who you have witnessed display bullying behavior?
□ I haven't witnessed bullying behavior
□ in my class
□ in the same grade I teach, but in a different class
□ in a lower grade
□ in a higher grade

13. How often has a student-reported bullying to you so far this year?
□ at least once a day
□ once or twice a week
□ once or twice this year
□ never

APPENDIX I

MODIFIED BIRS

Modified BIRS

To be rated on the following scale: 1 = Strongly Disagree; 2 = Disagree;
3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree

1. The BP-PBS program has been an acceptable intervention for our school's problem behavior.
2. Most teachers have found this intervention to be appropriate for addressing bullying behaviors.
3. The intervention has proved effective in changing problem behaviors at our school.
4. I would suggest or recommend the use of this program to other schools.
5. I would be willing to continue using this intervention in the future.
6. The intervention would *not* result in negative side-effects for students.
7. The intervention is appropriate for a variety of students.
8. The intervention is consistent with how behavior is addressed in the classroom setting.
9. The intervention is a fair way to handle the bullying behavior.
10. The intervention is reasonable for the behavior problem described.
11. I like the procedures used in the intervention.
12. This intervention was a good way to handle the bullying behavior.
13. Overall, this intervention would be beneficial for our students.
14. The intervention would quickly improve bullying behavior.
15. The intervention would produce a lasting improvement in bullying behavior.
16. The intervention would improve bullying behavior to the point that it would not noticeably deviate from other classmates' behavior.
17. Soon after using the intervention, the teacher would notice a positive change in the problem behavior.
18. The child's bullying behavior will remain at an improved level even after the intervention is discontinued.
19. Using the intervention should not only improve the child's behavior in the classroom, but also in other settings (e.g., other classrooms, home).
20. When comparing this child with a well-behaved peer before and after use of the intervention, the child's and the peer's behavior would be more alike after using the intervention.
21. The intervention should produce enough improvement in the child's behavior so the behavior no longer is a problem in the classroom.
22. Other behaviors related to the problem behavior are also likely to be improved by the intervention.

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