

BULLY PREVENTION IN POSITIVE BEHAVIOR SUPPORT

by

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Bullying behaviors are a growing concern in U.S. schools, and are documented to have detrimental effects for victims, perpetrators, and bystanders. Most interventions focused on bully prevention either have limited empirical support, or focus primarily on the behavior of the bully. We present here an alternative approach to bully prevention based on the growing recognition that interventions should be function-based. Bully Prevention in Positive Behavior Support (BP-PBS) gives students the tools necessary to remove the social rewards maintaining bullying behavior through a strong link to school-wide positive behavior support, a discrimination between “being respectful” versus “not being respectful” in unstructured settings, and the explicit teaching of a simple, school-

wide response to bullying effective for victims, bystanders, and perpetrators of bullying. This is coupled with an efficient strategy for school staff to use when dealing with reports of bullying including a sequence of questioning and practice. A single-subject, multiple-baseline design across six students and three elementary schools was implemented in an empirical evaluation of the effectiveness of BP-PBS. Results indicated that implementation of the program not only significantly decreased incidents of bullying behavior for all six students observed, but also increased the likelihood of appropriate victim responses and bystander responses, indicating a substantial decrease in the social rewards that served to maintain bullying behavior. In addition, through a pre-post survey, students also reported improved perceptions of the bullying and safety at their schools. Finally, school staff members were able to implement the program with a high degree of fidelity and regarded the program as effective and easy to implement. These findings have major implications for the design and support of effective social culture in schools. Limitations of the research and future efforts are suggested to encourage the field in a new direction with bully prevention efforts, away from overly complicated definitions and interventions, toward a school-wide approach including specific strategies and a reconceptualization of the bullying construct.

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
The Impact of Bullying	2
Explanations for Bullying	3
Bullying as a Developmental Process	3
As the Outcome of Individual Differences	4
As a Socio-Cultural Phenomenon	5
As a Response to Peer Pressures within the School	7
Bullying from the Perspective of Restorative Justice	8
Current Interventions	9
Mixed Program Results	13
The Bullying Construct	15
Program Maintenance	16
Bystanders	17
The Conceptual Framework Underlying BP-PBS	18
Positive Behavior Support	19
BP-PBS with Regard to the Bullying Construct	22
BP-PBS with Regard to Program Maintenance	23
BP-PBS with Regard to Bystanders	24

Chapter	Page
BP-PBS Pilot	26
Research Questions	27
Primary Research Question	28
Secondary Research Questions	28
II. METHOD	29
Participants and Settings	29
Measurement	32
Fidelity of Implementation	32
Problem Behavior	33
Victim Responses to Problem Behavior	34
Bystander Responses to Problem Behavior	34
Student Perceptions of Experience	35
Inter-Observer Agreement	36
Social Validity	37
Design and Procedure	38
Phase 1: Baseline	39
Phase 2: Bully Prevention in Positive Behavior Support	39
III. RESULTS	42
The Impact of BP-PBS on Incidents of Problem Behavior	42

Chapter	Page
The Impact of BP-PBS on Victim and Bystander Response Probabilities	46
The Impact of BP-PBS on Student Perceptions	48
Effects of Intervention Level	50
Effects of Grade	51
Interaction between Intervention and Grade.....	53
Fidelity of Implementation	54
Social Validity	56
IV. DISCUSSION	57
Implications for Practice.....	58
Limitations	60
APPENDICES	64
A. BP-PBS PILOT RESULTS.....	64
B. STAFF FIDELITY CHECKLIST	66
C. STUDENT EXPERIENCE SURVEY PLUS (SES+)	67
D. BULLY PREVENTION IN POSITIVE BEHAVIOR SUPPORT MANUAL	81
REFERENCES	112

LIST OF FIGURES

Figure	Page
1. Behavior Pathway of Bullying	16
2. Six Key Features of Bully Prevention in Positive Behavior Support	19
3. Three-tier Model of Positive Behavior Support	20
4. Conceptual Framework of BP-PBS	25
5. Incidents of Bullying Behavior	43
6. Conditional Probabilities	47
A1. BP-PBS Pilot Results: Incidents of Problem Behavior	64
A2. BP-PBS Pilot Results: Conditional Probabilities.....	65

LIST OF TABLES

Table	Page
1. School Selection Criteria	29
2. Selected Student Percentile Scores	31
3. Direct Observation Inter-observer Percent Agreement	37
4. Chi Square for PAND	46
5. Descriptive Data for the Multivariate Analysis of Variance	49
6. Results of the Multivariate Tests	50
7. Between-subjects Effects for Level of Intervention	51
8. Between-subjects Effects for Grade Level	52
9. Between-subjects Interactive Effects	53
10. Fidelity of Implementation by Student Knowledge	54
11. Fidelity of Implementation by Staff Adherence	55
12. Staff Ratings of BP-PBS Acceptability	56

CHAPTER I

INTRODUCTION

The issue of bullying has become a chronic and costly problem in American schools. It is perhaps the most common form of school violence (Batsche, 1997), the National School Safety Center (NSSC) called it the most enduring and underrated problem in U.S. schools (Beale, 2001), and in a national survey, nearly 30 percent of students surveyed reported being involved in bullying as either a perpetrator or a victim (Nansel, et al., 2001; Swearer & Espelage, 2004). In an effort to respond, the present research involved the development, field-testing and experimental validation of a novel approach to effective and efficient school-wide bully-prevention. This new approach, titled Bully Prevention in Positive Behavior Support (BP-PBS), blends school-wide positive behavior support, explicit instruction of a 3-step response to problem behavior, and a reconceptualization of the bullying construct, giving students the tools necessary to remove the social rewards maintaining inappropriate behavior, thereby decreasing the likelihood of problem behavior occurring in the future. It was hypothesized that BP-PBS would not only decrease incidents of bullying behavior, but would also increase appropriate victim and bystander responses to bullying behavior. In addition, because the program is designed to fit within a larger system of school wide positive behavior support, the resource intensity should be reduced making it far more likely to be implemented over consecutive years.

Bully Prevention in Positive Behavior Support follows a long line of research efforts on bullying and bullying prevention. In the following pages, the intensity of the problem, the conceptual frameworks underlying its understanding, and current intervention efforts are all discussed in the development of this novel approach, the empirical evaluation of which points future efforts in a new direction.

The Impact of Bullying

Victims, bystanders, and perpetrators of bullying are at risk for behavioral, emotional, and academic problems (Espelage & Swearer, 2003; Schwartz & Gorman, 2003) and are also at increased risk for depression, anxiety, loneliness, low self-esteem, and suicide (Baldry & Farrington, 1998). Over time, these children are more likely to skip and/or drop out of school (Berthold & Hoover, 2000; Neary & Joseph, 1994) and suffer from underachievement and sub-potential performance in employment settings (Carney & Merrell, 2001; NSSC, 1995). Bullies in particular are more likely to acquire increased numbers of criminal convictions and traffic violations than their less-aggressive peers (Roberts, 2000), and children who are both victims and perpetrators of bullying (bully/victims) are found to have significantly lower levels of social acceptance and self-esteem than children who are bullies or victims only (Andreou, 2000). The now infamous Columbine killings were perpetrated by young people thought to fit within this bully/victim category who fought back against those who had treated them badly or had seemed to collude in their social ostracism (Rigby, 2006).

Explanations for Bullying

Determining the cause of bullying is the first step toward decreasing its frequency in schools and preventing its occurrence. Accomplishing this goal requires a conceptual framework for bullying that identifies causal variables over which parents, educators, and professionals have control. In the following section, 5 major frameworks for bullying are considered: Bullying as a developmental process, an outcome of individual differences, a socio-cultural phenomenon, a response to peer pressures within the school, and from the perspective of restorative justice (Rigby, 2006). These explanations are important because they are at the heart of current efforts to combat bullying and each may be useful in a given context. Following this analysis, Bully Prevention in Positive Behavior Support will be discussed with school wide positive behavior support at its foundation along with a conceptual model for the program.

Bullying as a Developmental Process

According to the perspective of bullying as a developmental process, bullying is thought to begin when children find a need to assert themselves at the expense of others to establish their social power (Rigby, 2004). This is done crudely at first through more external behaviors such as hitting others to intimidate them. However, children gradually discover less overt ways of dominating others and over time, verbal and covert bullying become more common than physical forms (Hawley, 1999). Both Olweus (1993) and Smith & Sharp (1994) found through child self-reports, that behaviors typically labeled as bullying become less common. However, although reported victimization tends to decrease over time, when children move to middle school, there tends to be a temporary

increase in reported bullying (Rigby, 2002). These findings are not well understood, but it is hypothesized that in combination with increased hormone release, the value of social reinforcement may increase during this time, and bullying may become more “worth while”.

This view of bullying has had appeal in the past because it suggests that bullying is part of a natural developmental process. Schools taking this perspective may be encouraged to work specifically with children less mature and teach them to get past bullying. It may also persuade teachers to be more sensitive to subtle forms of bullying among older children, which can be more detrimental than direct forms (Rigby & Bagshaw, 2001).

As the Outcome of Individual Differences

According to this perspective, bullying is said to result from encounters between children who differ in their personal power, when the more powerful child is motivated to overpower and oppress less powerful children, and to do so repeatedly. This power differential is related to physical and/or psychological differences, and according to Olweus (1993), children exhibiting high frequencies of bullying behavior (more powerful) tend to be physically stronger, more aggressive, and more manipulative than average. In addition, children who are often the victims of bullying tend to be physically weaker, more introverted, and lower in self-esteem (Mynard & Joseph, 1997; Slee & Rigby, 1993). It has been suggested that these power differences may be at least somewhat genetically based. O'Connor, Foch, Todd, & Plomin (1980) found that

identical twins are significantly more likely to be similar in their bullying of peers than fraternal twins.

Although schools can have little impact on the genetic structure of students, understanding bullying from this perspective draws attention to the importance of recognizing students likely to exhibit bullying and students likely to be victimized. Adults may be encouraged to modify the behavior of these children through counseling and/or (in the case of bullies) disciplinary measures. Several intervention programs emphasizing this theory have focused upon the use of clearly defined rules of behavior and the application of appropriate sanctions for those identified as “bullies”. Examples of such programs include those implemented in both primary and secondary schools in Norway designed by Olweus (1993) and in Flanders by Stevens et al. (2000). Finally, while most attention has been directed towards changing the person who bullies, some schools have also attempted to help victimized students become less vulnerable by acquiring social skills, especially in the area of assertiveness (Field, 1999; Smith & Sharp, 1994).

As a Socio-cultural Phenomenon

As a socio-cultural phenomenon, bullying is considered an outcome of social groups with differing levels of power. This perspective typically focuses on differences with a historical or cultural basis such as race, social class, religious affiliation, and especially gender. Males are viewed to have more power than females as a consequence of social beliefs that they should be the dominant gender. In order to maintain dominance, boys may feel justified in oppressing girls. Several studies have indicated that boys are

more likely than girls to exhibit bullying behavior (Olweus, 1993; Smith & Sharp, 1994). Cross-gender bullying may be due to a belief about how boys should behave in the company of girls. Some boys may learn that it is acceptable to harass or sexually coerce girls (Rosenbluth, Whitaker, Sanchez, & Valle, 2004) or other boys who do not clearly possess stereotypical masculine qualities. For example, the use of language with sexual connotations such as the term “gay” has become quite prevalent in schools (Duncan, 1999). On the other hand, explaining the bullying of girls (often in the form of relational bullying) is more complex and invokes the notion of femininity construction, with girls deviating from an idealized conception of what it means to be feminine. But these notions continue to be challenged as our definition of behaviors labeled as bullying become more complete to include social ostracism, technology abuse, and other forms more “acceptable” for girls.

The socio-cultural perspective on bullying can have striking implications for how a school approaches the issue. It directs attention to how school curriculum can influence children to positively respond to socio-cultural differences. It has been suggested that schools explicitly address issues related to gender, race, and social class, while delivering bully-proofing curricula indirectly, promoting cooperative problem solving, emotional sensitivity, and independent critical thinking. The Australian national Website on bullying (<http://www.bullyingnoway.com.au/>) is a strong example of this approach and includes specific strategies, case studies, and online resources for educators and families.

As a Response to Peer Pressures Within the School

Similar to the socio-cultural perspective on bullying, bullying as a response to peer pressure focuses on bullying within a social context. But unlike the socio-cultural categories of gender, race, and class, this view of bullying recognizes two levels of contexts: “the school ethos” and smaller cliques. The school ethos is the broad social context including behaviors and attitudes of members in the community. Smaller groups within the ethos are made up of individuals with a closer association. Such groups are typically formed based on perceived common interests. These groups provide support for group members, and they may become a threat to outsiders, whom they bully. These actions are due to a perceived grievance, prejudice, or simply a desire to have fun at the expense of another. Importantly, acts of bullying are maintained by a connection with the group rather than personal motives. Research has supported this theory by way of findings indicating that students are more likely to bully when they have the support of peers. More specifically, bystanders are present when a child is being bullied at school on about 85% of occasions (Pepler & Craig, 1995). Also, when a bystander expresses disapproval of the bullying, there is a strong possibility that it will stop (Hawkins, Pepler, & Craig, 2001).

The implication of this theory for schools is the necessity to recognize the impact of groups as distinct from individuals and to focus interventions accordingly. Several methods have been devised for working with groups of children who have bullied others, including the No Blame Approach (Robinson & Maines, 1997), which involves a meeting between a teacher/counselor, a bullying group, and some socially responsible peers.

During the group session the teacher/counselor describes the victim's suffering, and the group is asked to consider ways in which the situation can be improved. The socially responsible peers in the group are expected to exert positive "peer pressure" on the bullies, encouraging them to behave more appropriately toward the victim.

Bullying from the Perspective of Restorative Justice

A view that emphasizes individual differences, bullying from the perspective of restorative justice sees bully-victim problems as a consequence of poor character development. It is believed that children who exhibit bullying behaviors feel little or no pride in their school and are badly integrated into the community (Morrison, 2002). Emotional reactions are mishandled and *appropriate* feelings of shame are not commonly felt by bullies, while victims are prone to experience too much inappropriate shame. While this approach does emphasize individual differences, an important role is assumed by the school community and others involved in the situation including family and friends of both the bully and the victim.

Restorative justice encourages appropriate feelings of shame in those who exhibit bullying behavior through exposure to criticism from those they have offended. This can be done constructively in the presence of people that truly care for the individuals, with success greatly dependent on their ability to care for the individual, while at the same time, disapproving of their behavior (Morrison, 2002). Problem behavior in this sense is considered a "violation against people" and the intervention involves a restoration of positive relationships rather than applying punishment for breaking rules (Cameron & Thorsborne). This view has motivated schools to promote values likely to lead to

responsible citizenship, such as the importance of helping others and taking pride in one's school. Incidents of bullying require confrontations with perpetrators, the deliberate inducement of appropriate shame, and action taken to restore positive relations with the victim. Community conferences are implemented when serious cases of bullying take place, and victims are encouraged to express their anguish while perpetrators listen and agree to compensate the victim (Thorsborne & Vinegrad, 2003).

Current Interventions

Over the last 20 years, great attention in education has been directed toward "bullies" and the negative impact of their behavior on schools (Smokowski & Kopasz, 2005). Major concern about improving school safety has followed, with an onslaught of bully-prevention campaigns across the country. According to a national survey of state departments of education, 39 states inform educators, parents, and students about how to respond to bullying (Furlong & Morrison, 2000), and 23 states have passed anti-bullying laws including clear prohibitions on bullying and legislative findings of its deleterious effects on school environments (<http://bullypolice.org>). With this enhanced interest in stopping bullying has come a rapidly increasing number of intervention programs designed to reduce bullying in schools. Evaluations of these interventions have commonly involved measurements of the incidence of bullying behavior before and after the intervention. Most of the time, these estimates have been based on student self reports, but in some cases, peer nominations were used, and in a few, teachers or researchers conducted systematic observations. Some evaluations involved up to 42

schools while others involved as few as 1. Finally, in some of the studies, control schools were used, a desirable procedure because pre-testing itself can raise awareness to bullying and result in an apparent increase. These different measurement techniques are important because they inform school personnel on decisions regarding the type and intensity of intervention they will implement. Some of the programs with the most empirical support are reviewed here.

Dan Olweus, thought by many to be the father of bullying prevention, developed the Bergen Anti-Bullying program based on aggression research (Olweus, 1993; Olweus & Limber, 1999). He contended that bullies obtain attention and status through bullying behavior so interventions must change the environment to remove that status and attention for problematic behavior. An intensive intervention, the Bergen Anti-Bullying program includes multiple components at the individual, class, and school level. Components at the individual level include confrontation with bullies, talking with victims, and talking with the parents of bullies and victims. Classroom-level components include establishing classroom rules about bullying and its consequences. These rules require that (a) students will not bully, (b) students will help others who are being bullied, and (c) students will attempt to include in activities children who are often left out by others. Consistent classroom meetings are also held to discuss social relations and bullying. Finally, school-wide components of the intervention include a school conference day to educate teachers, administrators, parents, and students about bullying and victimization.

The original Bergen Anti-Bullying Program was implemented from 1983 until 1985, and 4th through 9th grade students completed a self report questionnaire at 3 different points throughout the year. Teachers also provided a rating of the amount of bullying that took place in their classrooms. Results of that initial intervention indicated a 50% reduction in bullying frequency, as well as a decrease in the percentage of new victims. Improvements in school climate were also noticed including improved social relations among students and more positive attitudes toward school.

Since that original study, several variations of Olweus' program have been implemented and evaluated in the United States (Olweus & Limber, 1999; Committee for Children, 2001), Germany (Hanewinkel, 2004), and in the United Kingdom (Smith & Sharp, 1994). Although the results of these interventions have been less significant, Olweus has suggested that these projects were only "partial replications" of the original program (Olweus, 1993).

The SAVE model, a Spanish government-supported initiative implemented in 25 elementary and middle schools (ages 8-16) in Seville from 1995 through 2000, included a study of nearly 5000 students (Ortega, Del Rey, & Mora-Merchan, 2004). Following an ecological preventive model, this intervention promoted an atmosphere of coexistence, further defined as a desire to get along with others, to promote solidarity in the school atmosphere, and to use nonviolent strategies for resolving problems. A democratic form of classroom management was encouraged, allowing students enough time and space for negotiating conflicts. In addition, the SAVE curriculum included instruction on cooperation and education on feelings, attitudes, and values. Finally, for those already

involved in school bullying, the SAVE program included peer support and other mediation procedures such as conflict resolution, assertiveness training, and empathy development. Changes in bullying and victimization were measured pre-post with a survey created by Ortega et al. (2004). The authors of the study reported a 50% decrease in the number of students who self-identified as victims and a 20% reduction in the number of students who self-identified as bullies.

In Canada, Pepler and colleagues (Pepler et al., 1994, 2004) developed and evaluated the Toronto Anti-Bullying Intervention Program with elementary and middle school children from 1992 through 1995 across 2 schools. Less comprehensive than the Olweus or Spanish program, student self reports in one school indicated a significant decrease (10%) in victimization, but no significant decrease in bullying across the school years. The results of the second school's implementation of the program indicated significant decreases in student reports of bullying (12%) and victimization (10%). Observations were also conducted on the playground through the use of video cameras mounted in strategic areas. This video footage was then matched with audio recordings from units worn by selected students. Results of these observations showed up to 70% decreases in incidents of bullying over 3 years.

Finally, Steps to Respect: A Bullying Prevention Program (Committee for Children, 2001) is a universal, multilevel program designed to reduce bullying problems in elementary schools by (a) increasing staff awareness and school responsiveness to bullying, (b) fostering socially responsible beliefs among students, (c) teaching students specific skills to solve bullying problems, and (d) promoting acquisition of skills

associated with general socio-emotional competence. Comprised of a school-wide program guide, multiple levels of staff training, classroom curriculum, and ongoing support for implementation, evaluations of the Steps to Respect program have shown significant impacts on (a) group differences in student behavior, attitudes, and skills, (b) increased prosocial beliefs, and (c) increased social competence. Group differences were measured by way of pre and post-test survey administration along with random playground observations during 1 year of program implementation for up to 1000 students. (Frey et al., 2005). Results of the direct observations revealed that playground bullying increased in control schools, but not in schools implementing Steps to Respect. Teacher ratings of student interpersonal skills did not show significant changes, but observations of general social behavior showed a decrease in argumentative interactions and increased agreeable interactions among students in the intervention schools.

Mixed Program Results

While some interventions have shown promising results, the overall results of bully prevention efforts are mixed. In addition, despite the overdue attention given to bully prevention, there are indications that the movement is not making good progress. The U.S. Surgeon General's report on youth violence (U.S. Department of Health and Human Services, 2001) identified 29 best practices in youth violence prevention; the only bullying program to make the list was Olweus' Bergen Anti-Bullying Prevention Program (Olweus, Limber, & Mihalic, 1999), and it was listed as a "promising" rather

than a "model" program. A more recent listing of 32 "effective programs" produced the same result; only the Olweus program made the list (Osher & Dwyer, 2006).

In a meta-analysis of 16 bullying prevention studies conducted by Merrell, Gueldner, Ross, and Isava (2008), results indicated that anti-bullying programs produced meaningful effects for little more than one third (36%) of outcome variables while the majority of intervention effects failed to evidence sufficient power for consideration as clinically important. In addition, the most improved intervention outcomes were most commonly noted in indirect, knowledge-based outcomes. For example, using Cohen's *D*, the largest effect sizes determined in the meta-analysis were for student social competence ($ES = 3.31$), knowledge of the specific bully prevention program ($ES = 1.52$), and global self esteem ($ES = 1.08$). Rather than measuring how students actually responded to the bully prevention interventions, these variables measured how well participants understood the program and how they should or would respond to incidents of bullying. Finally, in a few variables, significant negative effects were discovered (1 out of 28 mean effects across studies, or slightly less than 4%; 8 out of 107 individual effects within studies, or about 7%). While these findings were difficult to interpret, it is indeed possible that some well-intentioned programs may actually produce adverse effects with students. This may be the case when interventions group together deviant peers for treatment (Dishion, McCord, & Poulin, 1999). It may also be the case that through some interventions, students and teachers learn how to better recognize bullying, and then report it more often.

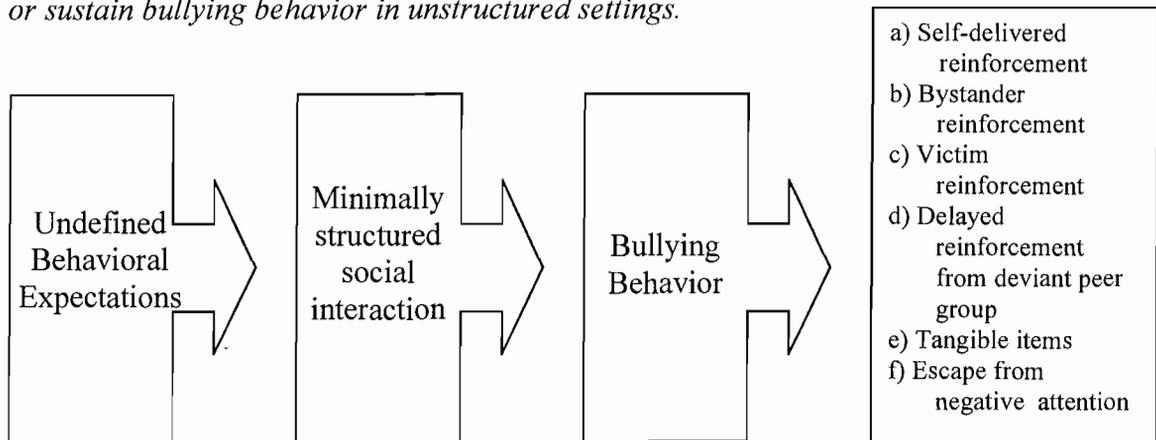
The Bullying Construct

Why then do bully prevention efforts struggle to achieve their objective? One critical problem is the difficulty in conceptualizing and measuring bullying behavior (Griffin & Gross, 2004). Common definitions of "bullying" involve repeated acts of aggression, intimidation, or coercion against a victim who is weaker in terms of physical size, psychological/ social power, or other factors that result in a notable power differential (Carney & Merrell, 2001; Due, et al., 2005; Olweus, 1993; Smith & Ananiadou, 2003; Smith & Brain, 2000). The broad range of physical, verbal, and social behaviors, the intent to harm, the repetition of confrontation, and the imbalance of power between the perpetrator(s) and victim(s) are key features of bullying that make it extremely difficult to recognize and measure, forcing observers to judge not only intent, but the levels of power in each participant and the number of times the behavior has occurred in the past. There is no doubt that an understanding and an appreciation of bullying has been aided by the development of these complex definitions, but they are clearly not ideal for assessing its prevalence or developing effective interventions.

Decreasing the frequency and preventing incidents of bullying requires the identification of causal variables over which parents, educators, and professionals have control. Such variables are to be found outside the person and include the events that reliably precede and follow problem behavior. In other words, what is needed is a functional assessment of bullying. A functional assessment is used to identify events in the environment that may trigger problem behavior and may serve to reinforce problem behavior, increasing the likelihood that it will occur in the future. These events that

trigger and maintain bullying can be observable and subject to alteration by school staff and professionals. The following model depicts the hypothesized pathway of bullying behavior, including the variables that tend to precede it, as well as the consequences that serve to maintain it (see figure 1 below).

Figure 1. Behavior Pathway of Bullying: Environments that promote or sustain bullying behavior in unstructured settings.



Program Maintenance

Another major issue in previously designed bullying prevention programs is the lack of program maintenance. Of the positive outcomes found in some interventions, few have been maintained even two years later. For example, an implementation of the Olweus Bullying Prevention Program in southeastern United States (Limber et al., 2004) produced significant reductions in self-report measures of peer victimization in boys, but 2 years later, differences from the baseline level of peer victimization were insignificant. Additionally, an analysis of results obtained in a study conducted in Rogaland, Norway indicated an actual increase in bullying behavior 3 years after the implementation of the Olweus program (Roland, 1993).

Two reasons for these disappointing results exist. First, bullying programs often require large amounts of time and resources to implement, and schools are unable to continue their focus on bullying when few positive outcomes are seen (Rigby, 2006). Second, a lack of sustained school-wide systems inhibit a school's capacity to maintain prevention efforts. Consistent findings across interventions suggest that bully prevention programs involving consistent, school-wide efforts along with the creation of pro-social atmospheres tend to be more effective than programs that implement at the classroom level only or address just the victims and/or bullies involved (Olweus, Limber, & Mihalic, 1999; Pepler et al., 1994).

Bystanders

With regard to involving more than just the victims and bullies in prevention efforts, research on the contextual process of bullying provides significant support for the inclusion of bystanders in bullying intervention efforts (O'Connell et al., 1999). Along with the victims of bullying, bystanders play an enormous role in acting to maintain bullying behavior by either responding positively (e.g. joining in, laughing) or simply standing and watching, rather than intervening to help the victim. Bystanders include anyone other than the victim or perpetrator who interacts within the bullying situation. Sometimes, bystanders will take an active part in bullying, following the bully's lead by engaging in additional bullying behavior. More often, supporters of bullying do not take part in the actual bullying, but reinforce the behavior at the time of the incident or later on after the incident has occurred by praising the bully for their self-reported bullying behavior. Possible bystanders may also include disengaged onlookers who don't approve

of the bullying, but also don't do anything about it. Finally, some bystanders will defend the victim, getting involved by telling the bully to stop, helping the victim to walk away, or reporting the problem behavior to an adult. Very few bully prevention programs take this important process of bystander reinforcement into account and it has been suggested that future research include teaching bystanders specific strategies to either remove themselves from the bullying vicinity in order to avoid inadvertently reinforcing the behavior, or to intervene on behalf of the victim (Hartung, & Scambler, 2006).

The Conceptual Framework Underlying BP-PBS

The conceptual framework underlying Bully-Prevention in Positive Behavior Support lies in an effort to identify the most efficient procedures for achieving durable reductions in violent and disruptive behavior. Among the most important changes to occur in the field over the past 20 years are shifts in emphasis toward prevention as well as remediation of problem behaviors (Horner, et al., 2004). It is this emphasis on establishing preventative systems of behavior support that prompted the development of PB-PBS. Six key features of BP-PBS map perfectly onto those developed through a synthesis of research on effective implementation of school-wide PBS, making BP-PBS an ideal additional component of Positive Behavior Support (see figure 2 below).

Figure 2. Six Key features of Bully Prevention in Positive Behavior Support

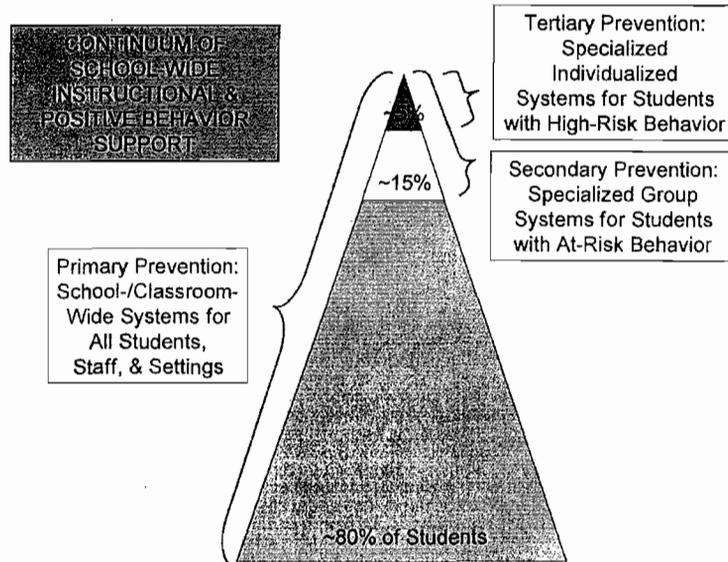
1. The use of empirically-tested instructional principles to teach expected behavior outside the classroom to all students.
2. The monitoring and acknowledgement of students for engaging in appropriate behavior outside the classroom.
3. Specific instruction and pre-correction to prevent bullying behavior from being rewarded by victims or bystanders.
4. The correction of problem behaviors using a consistently administered continuum of consequences.
5. The collection and use of information about student behavior to evaluate and guide decision making.
6. The establishment of a team that develops, implements, and manages the BP-PBS effort in a school.

Positive Behavior Support

BP-PBS was designed to fit within a system of Positive Behavior Support (PBS), a prevention-focused alternative to student support that blends socially valuable outcomes, research-based procedures, behavioral science, and a systems approach to reduce problem behavior and improve school climate (Horner, Sugai, Todd, & Lewis-Palmer, 2005). With a foundation in early efforts to apply principles of behavior to life improvement for children with severe problem behaviors (Bijou & Baer, 1961; Bijou, Peterson, & Ault, 1968), PBS involves the application of behavior analysis to real world settings where children and adults struggle to maintain appropriate behavior. Through a three tiered prevention model (Walker et al., 1996), Positive Behavior Support utilizes effective strategies to create environments that support and encourage success for both

teacher and student behavior (Lewis, Sugai, & Colvin, 1998; Sugai et al., 2000). See Figure 3 below for a description of the 3-tier model of behavior support.

Figure 3. Three-tier model of Positive Behavior Support (Walker et. al, 1996)



The primary tier of PBS strives to create positive, predictable environments for all students at all times of the day. This tier prescribes the use of empirically-tested instructional principles to clearly teach expected, appropriate, positive behavior to all students, modeling appropriate behavior, leading them through practice in specific settings, and testing their knowledge (Colvin & Kame'enui, 1993). Effective reinforcement of appropriate and expected behaviors follows, and is implemented by all staff in the school (Crone & Horner, 2003), who receive training and feedback regarding the effective implementation of the systems. In addition, reinforcement and discipline are documented through a concise, predictable, and clear continuum of consequences matched to the intensity of the problem behavior (Sprague & Horner, 2006).

The secondary tier of school-wide positive behavior support includes all of the components described in the primary tier with additional support given to students who are "at risk" for whom the primary tier of support is not enough. The secondary tier usually involves interventions given to small groups of children, including more reinforcement, and a more individual consideration of antecedents and consequences (Sugai, et al., 2000). BP-PBS is considered to fit within this tier of support. Although it is an intervention implemented throughout the school, it teaches students to remove the social rewards serving to maintain bullying behavior. It is hypothesized that this approach will have the greatest impact on those students "at risk" for bullying behavior, while more serious issues of bullying may require an intervention with more intensity.

Finally, the tertiary tier of support is for students whose negative behavior patterns have been established and who fail to respond to the primary and secondary levels of intervention. For these students, behavior support is individualized based on a functional assessment of their behavior. The foundation for understanding patterns of problem behavior (Repp & Horner, 1999), functional assessment takes note of individual differences, links interventions directly to problem behavior, and increases the effectiveness of interventions (O'Neill, Horner, Albin, Sprague, Storey, & Newton, 1997). In the case of BP-PBS, tertiary support would be initiated when a student failed to respond to BP-PBS. The completion of a functional assessment would likely follow, allowing for a thorough analysis of the reinforcement that maintains the student's problem behavior along with the antecedents that trigger it. Once this is established, an individualized intervention can be implemented at each point in the pathway to deal with

the student's problem behavior most effectively. Interventions like this may involve significant resources to implement with fidelity, but by having a secondary intervention such as BP-PBS in place, the number of students requiring this level of support will be greatly reduced.

PBS has been shown to have short and long-term beneficial effects on attachment to school, academic achievement, aggression, drug use, crime, student reports of positive reinforcement, positive referrals, decreased discipline referrals, and increased academic learning time (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Metzler, Biglan, Rusby, & Sprague, 2001). To date, evaluation and research studies have focused on the impact of PBS on the improvement of social and academic outcomes for all students. But even with the powerful impact it has on school systems, a small population of students remain in need of additional behavioral supports surrounding problem behavior outside the classroom, including victimization and bullying. BP-PBS was designed for these secondary tier students.

BP-PBS with Regard to the Bullying Construct

Because of the problems evident in the definition of bullying, BP-PBS focuses on the improvement of behaviors that are specific, observable, and measurable. In addition, the definitions of these behaviors did not speculate on the intent of the behavior, the power of the individuals involved, or the frequency of its occurrence. Both verbal and physical aggression were evaluated and were defined as follows: Physical aggression was the display of aggression toward other children including hitting, biting, kicking, or choking, stealing, throwing objects, or restricting freedom of movement. Verbal

aggression was defined as the direction of negative communication either verbal or nonverbal, toward one or more peers who were identifiable as intended victims and who could see or hear the negative communication. Examples of negative communication might include teasing, name calling, or inappropriate gestures. Having specific operational definitions were particularly useful in this study as an effective means of recognizing the behavior's occurrence, analyzing the intervention's effectiveness, and achieving inter-rater reliability. Unfortunately, the definitions provided here do not fit into many bullying categories as provided by past research and will likely be considered within a broader category of victimization - and rightly so. Victimization includes problem behavior regardless of a power differential and regardless of frequency. Therefore, single incidents of problem behavior between children of similar power were responded to in an equal fashion. Reducing peer maintained problem behavior outside the classroom remains the goal of BP-PBS, and the reduction of "bullying" behaviors is a sub-set of this process.

BP-PBS with Regard to Program Maintenance

BP-PBS also takes into account the problems associated with inadequate maintenance of prevention programs. First of all, BP-PBS is an addition to the already research substantiated School-wide Positive Behavior Support (Hawkins, et al., 1999; Metzler, et al., 2001). The program requires only a small amount of additional resources from the school, making it far more likely to be implemented with fidelity and maintained over multiple years of implementation. In addition, schools in the study were required to first maintain effective school-wide systems to a criterion of at least 80% on

the School-Wide Evaluation Tool (Todd, et. al, 2003), a tool designed to measure the use of school-wide positive behavior support systems. Having these systems in place provided familiarization with positive behavior supports and empirically based instructional techniques, making effective and long-lasting program implementation more likely. Lastly, having effective school-wide positive behavior support practices in place is likely to increase community buy-in, resources allocated to program implementation, and ongoing professional support.

BP-PBS with Regard to Bystanders

In order to decrease the frequency of problem behavior and prevent bullying, in addition to redefining bullying and ensuring program maintenance, we must analyze the causal variables that maintain the problem behavior. For this study, the events that serve to reinforce problem behavior - increasing the likelihood that it will occur again - were of particular importance. If perpetrators attain peer attention or tangible items when they behave inappropriately, they will be more likely to engage in those behaviors in the future. BP-PBS teaches the entire school an effective 3-step response to problem behavior, encouraging them not to reinforce problem behavior, thereby putting the behavior on extinction. In addition, students are rewarded for responding appropriately to problem behavior or intervening to help other students in need. Finally, staff within schools that implement the program are taught a clear and simple method of responding to reports of problem behavior, thereby reducing the likelihood of future occurrences.

The following 2 models depict the various elements of the BP-PBS program and its effect on peer maintained problem behavior (see figure 4 below). The first describes

an environment that promotes or sustains bullying behavior, while the second outlines the linked strategies of BP-PBS that make the maintenance of bullying less likely.

Figure 4. Conceptual Framework of BP-PBS: Environments that promote or sustain bullying behavior and the strategies of BP-PBS making the maintenance of bullying less likely

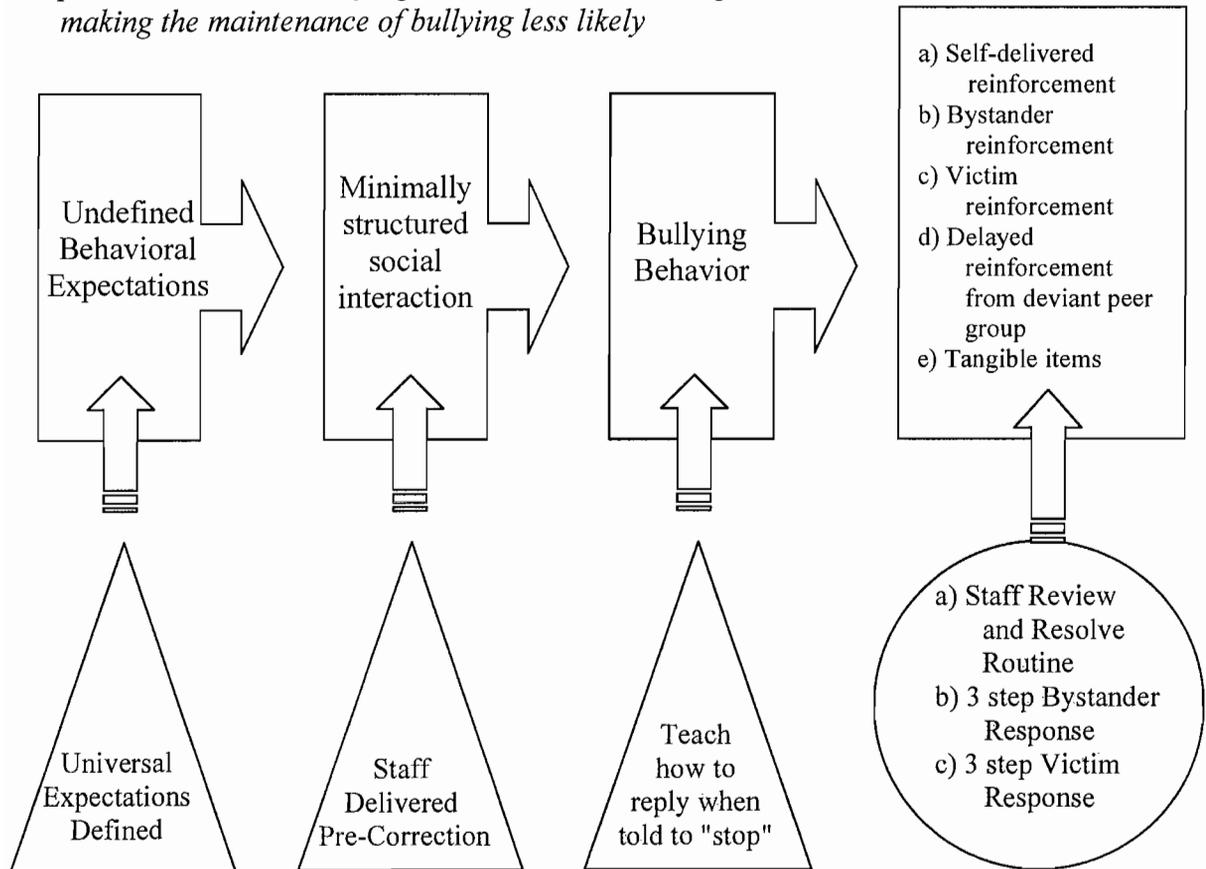


Figure 4 indicates how Bully-Prevention in Positive Behavior Support works to reduce incidents of bullying through the alteration of events that precede and follow behavior.

Specifically, BP-PBS works to (a) define universal expectations, especially those outside the classroom, (b) pre-correct on the appropriate response to problem behavior, (c) teach an appropriate reply when the 3-step response is used, (d) train staff on a

universal review and resolve routine, and (e) teach all students a specific 3-step response that reduces the probability of bullying incidents (see Bully Prevention in Positive Behavior Support Manual in Appendix D). Research suggests that bullying behavior is frequently followed by and reinforced by peer attention or tangibles (Salmivalli, 2002; Soutter & McKenzie, 2000). Through the implementation BP-PBS, students and staff learn to eliminate the reinforcement for bullying. In addition, inconsistent staff procedures for dealing with reported incidents of bullying can lead to an increased likelihood of its display in certain settings. In a study of behavioral procedures in schools, the major limitation of many discipline programs is a lack of clear procedural implementation guidelines (Chard, Smith, & Sugai, 1992). Students who frequently exhibit problem behavior do not take long to learn what they can get away with, and with little staff consistency, these students quickly discover how to "work the system". BP-PBS eliminates this problem through specific instruction to all school staff on effective, efficient procedures for pre-correcting students on how to respond, dealing with reports of problem behavior, and delivering consequences. Through the implementation of these procedures, staff members build consistency regarding responses to problem behavior, thereby reducing the probability that students will attempt to work the system.

BP-PBS Pilot

The BP-PBS curriculum was developed from the identification of need and core features of effective interventions that have been defined in the literature (Merrell, et al. 2008), and early field-test trials in New Mexico schools (Jones & Horner, 2006). In an effort to

evaluate the initial effectiveness of the BP-PBS curriculum, a pilot study was conducted in an elementary school during the winter of 2007. The school was validated as using SWPBS to criterion through their School-wide Evaluation Tool (Todd, et al., 2003) score above the 80% criterion. The lead author of the study trained the teachers and supervisors on the BP-PBS curriculum, and also taught the 3rd, 4th, and 5th grade students the BP-PBS program. Ten-minute playground observations were conducted with three highly aggressive students, along with a composite peer to evaluate the effectiveness of the program. Results indicated a significant reduction in problem behavior after the intervention was delivered (55-69% reduction). In addition, other students on the playground were significantly more likely to respond appropriately (less likely to reward bullying behavior) when they experienced problem behavior (see Figures A1 and A2 in Appendix A for results of the BP-PBS pilot). The encouraging results from the pilot analysis led to the present experimental assessment of the effects that bully-prevention within school-wide positive behavior support can have on both the reduction of bullying behavior, and the improvement of social consequences to bullying provided by peers.

Research Questions

This study was developed to evaluate the impact of Bully Prevention in Positive Behavior Support (BP-PBS) through the analysis of (a) the verbal and physical aggression of children identified as bullies, (b) reduction in the probability of peer-delivered social consequences following verbal and physical aggression, and (c) student perceptions of experiences related to bullying. More specifically, researchers wanted to

answer the following questions:

Primary Research Question

- Is there a functional relation between the implementation of Bully-Prevention in Positive Behavior Support and a reduction in bullying behaviors, including physical and verbal aggression on the playground during lunch recess, performed by typical elementary grade students?

Secondary Research Questions

- Is there a functional relation between the implementation of Bully-Prevention in Positive Behavior Support and (a) an increased conditional probability that victims of bullying behaviors will say "stop" and/or walk away, and (b) a decrease in the conditional probability of victim social reward for bullying behaviors?
- Is there a functional relation between the implementation of Bully-Prevention in Positive Behavior Support and an increased conditional probability that bystanders of bullying behaviors will say "stop" or help victim to walk away?
- Is there a relationship between the implementation of Bully Prevention in Positive Behavior and student perceptions of their experiences related to bullying, harassment, and school safety for 3rd, 4th, and 5th grade students?

CHAPTER II

METHOD

Participants and Setting

Three elementary schools within a school district in Oregon were eligible to participate in the study. Of the 12 interested schools within the district, the 3 selected schools included between 319 and 567 students, and were attended by students of varying levels of socio economic status (SES) as determined by the percent of students on free and/or reduced lunch programs. In addition, to be eligible for the study, selected schools were made up of grades K-5, and had implemented Positive Behavior Support (PBS) with adequate fidelity, meeting an 80% criterion on the School-wide Evaluation Tool (Todd, et. al, 2003; See table 1 below for school selection criteria including SET score, SES, overall student enrollment, and school grade levels). In appreciation of the district's willingness to participate in the study, all interested schools in the district were provided with the intervention regardless of their study participation status.

Table 1. School selection criteria

School	<i>SET</i>	<i>SES*</i>	<i>Enrollment</i>	<i>Grades</i>
School A	90%	32%	567	K-5
School B	98%	87%	319	K-5
School C	93%	71%	341	K-5

* Percentage of students who qualify for free and/or reduced lunch.

Once participating schools had been selected, 2 students in each school were nominated by the principal for their high levels of problem behavior outside the classroom related to physical and/or verbal aggression toward peers. Teachers of these students were asked to complete the Social Skills Rating System (SSRS; Gresham, & Elliott, 1990) in an effort to compare the students' social skills and problem behavior to national norms. The SSRS is a nationally standardized series of questionnaires that obtain information on the social behaviors of children and adolescents from teachers, parents, and the students themselves (only teacher form used in this study). It includes ratings on social skills, problem behaviors, and academic competence, measured on a 3 level scale (fewer, average, and more). It produces standard scores and percentile ranks based on a large, national sample of 4,170 boys and girls aged 3 through 18, as well as for handicapped elementary students.

Analysis of the SSRS indicated that all 6 selected students received scores under the 20th percentile in the category of problem behavior, which includes items such as: "Fights with others", "Is easily distracted", and "Doesn't listen to what others say". This means that when compared to other students of similar age and gender, these students were perceived to exhibit more problematic behavior than 80% of their peers. In addition, all but one of the students scored under the 16th percentile on social skills, which includes items such as: "Makes friends easily", "Receives criticism well", and "Follows your directions". Scoring under the 16th percentile on this measure means that when compared to other students of similar age and gender, the social skills of these students were perceived to be worse than 84% of their peers (see table 2 below for results of the SSRS).

Table 2. Selected student percentile scores on the Social Skills Rating System (SSRS) compared to other students of similar grade and gender in the U.S.

<i>Student</i>	<i>Grade</i>	<i>Gender</i>	<i>Social Skills</i>	<i>Problem Behavior</i>	<i>Academic Competence</i>
Rob	4	M	14 th %ile	12 th %ile	15 th %ile
Bruce	5	M	10 th %ile	9 th %ile	21%ile
Cindy	4	F	45 th %ile	16 th %ile	75 th %ile
Scott	4	M	8 th %ile	5 th %ile	21 st %ile
Anne	5	F	14 th %ile	9 th %ile	12 th %ile
Ken	3	M	16 th %ile	19 th %ile	16 th %ile

Every student in the 3 selected schools was assured voluntary participation and several forms of consent were completed prior to study implementation. First, the participating district along with each participating school completed a letter of approval for the study, and each school was asked to include a letter of involvement in their fall newsletter. Next, for participation in the survey measures, passive parental consents were sent home to all 3rd, 4th, and 5th grade students within the selected schools. Students returning those consents were not included in direct observation. Finally, when students were nominated as potential participants for the direct observation, the parents were asked to sign an individual consent. Implementation was conducted on a daily basis throughout the study and all students in the study were provided with a unique numerical identification.

The first student in school A was Rob, a 10 year-old 4th grade boy whose problematic behavior outside the classroom involved teasing and physically disrupting

peers (i.e., poking, grabbing, pushing, and holding). Rob was on an IEP for deficits in reading and math, and spent approximately 30% of his day in Special Education classes.

Bruce was the second selected student in school A; an 11 year-old 5th grade boy whose problematic behavior included talking back to adults, fighting, teasing, stealing, and disrupting peers. Bruce was not on an IEP for academic difficulties and spent all of his time in the general education classroom.

The 2 students selected at school B were Cindy and Scott. Cindy was a 10 year-old 4th grade girl whose problematic behaviors included teasing, stealing, and gossip. Scott was a 10 year-old 4th grade boy whose problem behaviors included talking back to adults, fighting, teasing, stealing, and disrupting peers. Scott was on an IEP for deficits in reading, writing, and math, and spent approximately 70% of his day in special education classes.

Finally, Anne and Ken were the two selected students at school C. Anne was an 11 year-old 5th grade girl whose problematic behaviors included talking back to adults, teasing, and disrupting peers. Ken was a 9 year-old 3rd grade boy whose problematic behaviors included teasing and disrupting peers. Neither Anne nor Ken was on an IEP and both spent all of their time in the general education setting.

Measurement

Fidelity of Implementation

Fidelity of BP-PBS implementation was assessed through both student knowledge of the curriculum, and staff adherence to program components. Student knowledge of the

curriculum was evaluated at three different points in the study and involved the random questioning of 10 students on the lunch recess playground regarding their knowledge of the 3 step response (Stop/Walk/Talk) to problem behavior. Staff adherence involved a daily checklist filled out by each playground supervisor. Items on the checklist assessed the daily number of times staff (a) checked in with chronic targets and instigators of problem behavior, (b) delivered positives for student use of Stop/Walk/Talk, (c) received reports of problem behavior, (d) practiced Stop/Walk/Talk with students, and (e) gave out office discipline referrals for continued problem behavior (See Appendix A for staff adherence checklist).

Problem Behavior

The primary measure for this study was the frequency of problem behaviors related to bullying including (a) physical aggression, and (b) verbal aggression, which occurred within 10 minute observations during school lunch recess. Physical aggression was defined as including hitting, biting, kicking, choking, stealing, throwing objects, or restricting freedom of movement (behaviors within games were considered physical aggression when they went beyond the appropriate expectations for the game). Verbal aggression was defined as the direction of negative communication either verbal or gestural, toward one or more focus children including teasing, taunting, threatening, negative body language, or negative gestures. Observers received regular training regarding the operational definitions of problem behaviors.

In addition to the 2 students selected in each school for observation, data were gathered daily on 5 randomly selected peers for a total of 10 minutes. Random selection

involved visually selecting the peers each day prior to any observation. Observers recorded behavior for 2.5 minutes on each peer until all five had been observed. The peer data collection process produced a composite index of typical peer problem behavior per session.

Victim Responses to Problem Behavior

The second measure recorded victim responses to problem behavior within 5 seconds of the behavior. Observers recorded whether victims responded in an appropriate manner as taught in the Bully-Prevention in Positive Behavior Support curriculum. Appropriate victim responses included the use of a "stop signal", or "walking away". Inappropriate victim responses included "positive responses" (i.e. laughing, cheering), "negative responses" (i.e. complaining, fighting back) or "no response". As with problem behaviors, victim response data for composite peers was gathered.

Bystander Responses to Problem Behavior

The third measure recorded social responses from bystanders. Within 5 seconds of each instance of problem behavior, bystanders within 10 feet of the behavior were observed for their response. Appropriate responses included the use of a "stop signal", or "helping victim walk away", while inappropriate responses included "positive responses"(i.e. laughing, cheering), "negative responses" (i.e. complaining, fighting back) or "no response". Observers received regular training regarding the responses made to problem behavior. As with problem behaviors and victim responses, bystander response data for composite peers was also gathered.

Student Perceptions of Experience

The fifth and final measure assessed all 3rd, 4th, and 5th grade students on their perceptions of bullying behavior in each of the study schools both 1-2 weeks prior to the BP-PBS training implementation and 8-12 weeks after the BP-PBS training using the Student Experience Survey (SES). The SES (Frey, et. al, 2004) is a 21 item measure, originally developed by the Committee for Children for the purposes of evaluating the Steps to Respect bully prevention program. The tool was designed to assess perceptions and attitudes related to bullying. Students were asked about perceptions of bullying or aggressive behavior, assertiveness skills, and their own and adults' responsiveness to bullying. In addition, 9 items were added to the end of the SES including statements about the frequency of bullying behavior, victimization, and use of BP-PBS curriculum components. The survey was administered in classrooms and took approximately 15-20 minutes to complete (See Appendix B for the SES +). Following an introduction to the measure, examples and survey items were read aloud. The survey is also read aloud if reading difficulties or limited English proficiency were of concern.

Four response formats were used in the SES+.

1. Five items assessed the relative difficulty of performing certain behaviors. The set of available responses was 0-3: *not hard at all, a little bit hard, pretty hard, really hard.*
2. Nine items assessed the level at which students thought that the provided statement was true. The set of available responses was 0-3: *not true, a little true, pretty true, very true.*

3. Seven items assessed the level at which students agreed with the provided statement. The set of available responses was 0-3: *don't agree, agree a little, agree some, and agree a lot.*
4. Finally, for the 9 items added to the SES, each assessed the frequency with which behaviors occurred in the school setting. The set of available responses was 0-4: *never, once in a while, once a week, once a day, more than once a day.*

Inter-Observer Agreement

To attain inter-observer agreement on behavioral observations, 9 undergraduate and graduate students in the Special Education Department at the University of Oregon were trained during recess observations to achieve initial inter-observer agreement of at least 85%. Once this was consistently achieved, observations within the study were assessed for inter-rater reliability on 30% of observations for each phase, for each participant. Observations throughout the study had to attain inter-rater reliability of at least 0.85 to be counted in the study. Inter-observer agreement was calculated on a daily basis by dividing the number of agreements by the total frequency of incidents observed and multiplying by 100%. Inter-observer agreement for (a) problem behavior, (b) victim responses to problem behavior, and (c) bystander responses to problem behavior for each of the 6 observed students and peer composites met or exceeded 83% for occurrence agreement (see table 3 below for inter-observer agreement for each observed student before and after the intervention). Observations were summarized daily to determine the frequency of problem behaviors for each 10 minute observation, along with the conditional probabilities of victim and bystander responses to the behavior.

Table 3. Direct observation inter-observer percent agreement.

<i>Student</i>	<i>Baseline % of Data Points with IOA</i>	<i>Baseline IOA</i>	<i>Intervention % of Data Points with IOA</i>	<i>Intervention IOA</i>
1	31%	90%	39%	93%
2	33%	95%	38%	88%
3	35%	89%	35%	92%
4	33%	93%	35%	85%
5	33%	92%	40%	88%
6	32%	88%	40%	86%

Social Validity

A four-item BP-PBS Acceptability Questionnaire was used to assess the social validity of the intervention. Three months after BP-PBS was implemented, the survey was completed by all staff involved in the intervention including teachers, instructional aides, and administrators. Questions on the BP-PBS Acceptability Questionnaire assessed the extent to which BP-PBS was perceived to (a) improve behavior at school, (b) be worth the time and effort, (c) be worth recommending to others, and (d) be easy to implement. Scores on the BP-PBS Acceptability Questionnaire were recorded on a Likert scale from 1 to 6 with higher scores indicating a more favorable impression.

Design and Procedure

The study implemented both single subject and group designs. First, a multiple-baseline-across-schools design was used to examine the effectiveness of BP-PBS on reducing problem behavior outside the classroom and increasing appropriate responses to problem behavior. Next, a between-subjects multivariate analysis of variance (MANOVA) was used to evaluate student perceptions and attitudes about bullying and aggressive behavior before and after the intervention through the Student Experience Survey Plus (SES+).

A single subject design was ideal for this study because it offered the advantage of demonstrating experimental control within single participants, which is especially useful when evaluating students displaying specific problem behaviors like those related to bullying. Idiographic in nature, single subject designs evaluate how specific individuals behave, why they do what they do, and then tests whether interventions like BP-PBS can change their behavior. Multiple baselines also control for potential threats to internal validity through repeated evidence of the effect at several different points in time (Alberto & Troutman, 2003).

The between-subjects MANOVA also added an important component to the study, evaluating if a relationship exists between students' ($n = 483$) level of intervention, grade level (3rd, 4th, or 5th), and scores on the SES+. It was anticipated that student scores on the SES+ would improve significantly when compared to pre-intervention. An alpha level of .05 ($p < .05$) was used for all statistical tests.

Phase 1: Baseline

During baseline, the 6 selected students (two students in each of 3 schools) were observed during lunch recess on the school playground. Baselines were established concurrently for each of the students along with a peer composite, observed on a daily basis throughout the study. Incidents of problem behavior and conditional probabilities of victim and bystander responses were collected each day of the study. These observations were conducted five times a week during Baseline and BP-PBS implementation. The first administration of the SES+ was also completed during this phase, 1 to 2 weeks prior to the implementation of the BP-PBS intervention.

Phase 2: Bully Prevention in Positive Behavior Support

Once a stable baseline was established, BP-PBS was implemented sequentially, one school at a time following documented change in the primary dependent variable: problem behavior. Implementation of the intervention involved a two step process in which (a) the first author provided training to the whole school faculty on the BP-PBS curriculum (Ross, Horner, & Stiller, 2008), and then (b) the school staff used the BP-PBS curriculum to provide training for students. During the first step in the intervention process the instructional, administrative, and supervisor staff within the school received a 1 hour workshop on the BP-PBS program components using the BP-PBS curriculum manual (see Appendix C for complete manual). Next, all playground supervisors and instructional aides received an additional half-hour training on supervising behavior outside the classroom. Teachers then scheduled delivery of the one hour BP-PBS curriculum to their students during the next week.

The Bully-Prevention in Positive Behavior Support curriculum used by teachers focused on un-structured and less monitored settings such as the cafeteria, gym, playground, hallway, and bus area, where bullying is most common. The specific skills taught within the BP-PBS curriculum include:

1. The discrimination of behavior that is “respectful” and “not respectful”.
2. If someone is not respectful to you (victim), say “stop” and use the “stop gesture” (hand held up).
3. If you see someone being treated disrespectfully (bystander), say “stop” and take the victim away.
4. If, after you say “stop” and disrespectful behavior continues, walk away.
5. If, after you walk away, disrespectful behavior continues, come and tell an adult.
6. If someone says “stop” to you, (a) step back, (b) take a breath, and (c) go about your day.

Note that at no time during the training was the concept of “bully” presented or taught. The focus was on learning what “respectful behavior” looked like, and how to handle situations when someone was forgetting how to be respectful. A major emphasis within the training was on teaching students that disrespectful behavior typically keeps happening because it results in attention and praise from others. Students were encouraged to take away the attention that serves as oxygen maintaining the flame of disrespectful behavior.

During the extra half-hour of training for supervision staff, the author taught a

specific "review and resolve" routine that was to be used on the playground when a student reported inappropriate behavior by another student. In addition to following normal standards for protection and safety, playground supervisors were taught:

1. If a student reports problem behavior, ask the reporting student, "Did you say stop," "did you walk away?"
 - a. If the reporting student did not say "stop"/ "walk away" then encourage them to do that the next time, and go no further.
 - b. If the reporting student did say "stop"/ "walk away" then interact with the student identified as engaging in problem behavior.
2. Ask offending student if she/he was asked by others to "stop." Then ask if they did in fact "stop." Provide practice for the steps to follow when someone asks you to stop.

After all students and staff had been trained on the BP-PBS components, playground supervisors and instructional aides were asked to complete the staff fidelity checklist, collected and entered at the end of every week. The student knowledge fidelity assessment was also conducted at three points during the BP-PBS intervention phase. Finally, between 8 and 12 weeks after BP-PBS was implemented, students were asked to complete the post-intervention SES+ and staff was asked to complete the BP-PBS Acceptability Questionnaire.

CHAPTER III

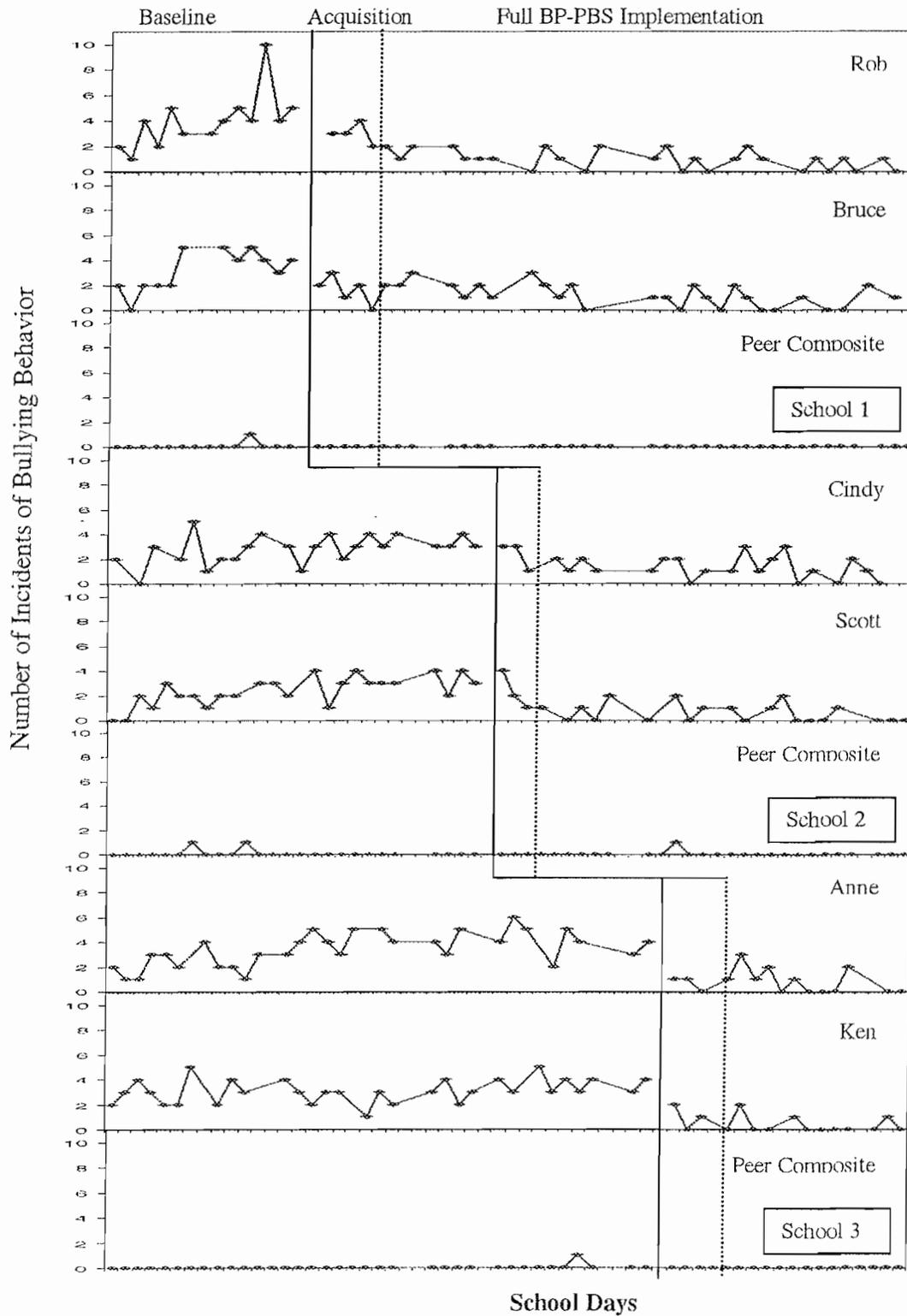
RESULTS

Results indicated a functional relation between the implementation of Bully-Prevention in Positive Behavior Support and a reduction in bullying behaviors including physical and verbal aggression on the playground during lunch recess. The implementation of BP-PBS was also functionally related to an increased conditional probability that victims and bystanders of bullying behaviors would say "stop" and/or walk away. Finally, results indicated a statistically significant relationship between the implementation of BP-PBS, grade levels, and scores on the SES+.

Impact of BP-PBS on Incidents of Problem Behavior

The frequency of incidents of bullying behavior (physical and verbal aggression) during 10 minute observations of lunch recess across experimental phases for each participant and composite peer is presented in Figure 7. High, variable, and increasing rates of physical and verbal aggression were observed in baseline phases for the selected students. These observed rates not only decreased rapidly and became less variable during intervention, but they were achieved without being accompanied by extinction bursts that are often seen with extinction-based procedures. Composite peer results, on the other hand, indicated minimal incidents of problem behavior both before and after BP-PBS implementation, arguing for substantial clinical significance.

Figure 7. Incidents of bullying behavior during Baseline, BP-PBS Acquisition, and Full BP-PBS Implementation for each participant and composite peers during 10 minute observations of lunch recess.



The six target students averaged 3.14 incidents of bullying behavior during baseline: 4 for Rob, 3.17 for Bruce, 2.78 for Cindy, 2.38 for Scott, 3.4 for Anne, and 3.1 for Ken. For School 1, Rob's baseline levels of problem behavior varied drastically, from 1 to 10 incidents, and produced an overall increasing trend. Bruce's baseline problem behavior was less variable, ranging between 0 and 5 incidents, but with a similar increasing trend. For School 2, Cindy produced a baseline with a slightly flatter increasing trend and a range of 0-5 incidents over 23 observations. Scott produced a baseline quite similar to that of Cindy with a slightly increasing trend, a range of 0-4 incidents, and an average of 2.38 incidents on a daily basis. Finally, for school 3, Anne produced a baseline of problem behavior ranging from 1 to 6 incidents and maintaining a strong increasing trend over 30 observations. Ken's baseline ranged from 1 to 5 incidents with a slightly lower average and a flatter trend.

After the school staff was trained on the curriculum components of BP-PBS, they were asked to deliver the curriculum to the students within the next 3-5 school days. During that time, some but not all of the students may have received the intervention and the phase is therefore labeled as a separate acquisition phase of the intervention. During this acquisition phase, the selected students averaged 1.88 incidents of problem behavior during observations, with a range of 0-4 incidents and an overall acute decreasing trend.

Once the BP-PBS intervention was fully implemented, it was associated with significant reductions in the mean level of problem behavior (0.88 incidents), decreasing trends, and reductions in variability for all 6 targeted students. Rob's BP-PBS phase documents an average of .96 incidents with problem behavior (a reduction of over 3

incidents per 10 minute observation) with a gradually decreasing trend across the intervention phase. Bruce, Cindy, Scott, Anne and Ken averaged 1.18, 1.30, 0.60, 0.83, and 0.43 incidents of problem behavior respectively across the BP-PBS phase. These levels represent reductions of 1.99, 1.48, 1.78, 2.57, and 2.67 average incidents from baseline means. The trends during the BP-PBS phase decreased steadily for all 6 students, and each student demonstrated reduced variability.

In addition to the decrease in average incidents of problem behavior for each selected student, the overall intervention effect size was calculated using Percentage of All Non-Overlapping Data (PAND). PAND represents an alternative index of effect size, reflecting non-overlapping data between phases, but avoiding the overemphasis on one data point, which plagues the percent of non-overlapping data approach (PND) typical in single subject research (Parker, Hagan-Burke, & Vannest, 2007). PAND can also be translated to Pearson's Phi, a reasonable effect size measurement according to Cohen (Cohen, 1988). PAND requires the evaluation of all non-overlapping data points by calculating the number of data points in both intervention and baseline phases that would have to be swapped across phases in order to achieve complete score separation. When only the baseline and Full BP-PBS Implementation phases were considered, a total of 36 overlapping data points were found across baseline and intervention phases: 3 for Rob, 6 for Bruce, 10 for Cindy, 8 for Scott, 6 for Anne, and 2 for Ken. This number was then divided by 251, the total number of data points in the 2 phases, for a total of 13.94% overlapping data points.

Following this calculation, a Chi square was used to calculate the Pearson Phi effect

size as the difference between the two cell ratios: $\Phi = [a / (a + c)] - [b / (b + d)]$. In this study: $(110/133) - (12/118) = .83 - .10 = 0.73$, so $\Phi = .73$. (See table 4 below for the PAND Chi Square). According to Cohen's rule of thumb for Φ , 0.72 is considered between a medium and large effect size.

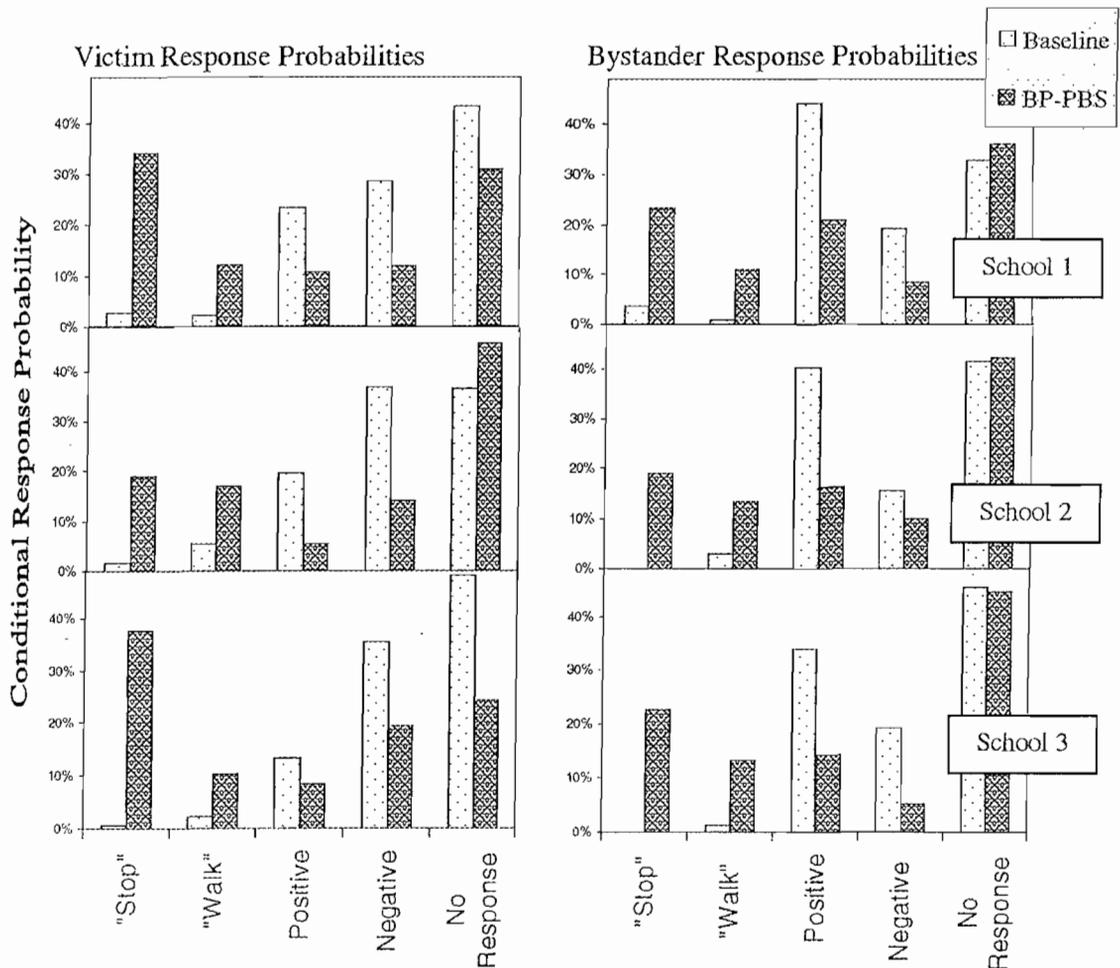
Table 4. Chi Square for PAND between baseline and full BP-PBS implementation phases.

Overlap	Intervention	Baseline	Total
Lower	110 <i>cell a</i>	12 <i>cell b</i>	122
Higher	23 <i>cell c</i>	106 <i>cell d</i>	129
Total:	133	118	251

The Impact of BP-PBS on Victim and Bystander Response Probabilities

Each time a data collector recorded an incident of bullying behavior, they also recorded the conditional probability of victim (victim) and bystander responses, which are presented below in Figure 8. Bars indicate the pre and post response probabilities in each school.

Figure 8. Conditional probabilities of victim and bystander responses to bullying behavior during 10 minute observations of lunch recess.



Overall, before the BP-PBS intervention, when an incident of bullying behavior occurred, *victims* (victims) of bullying said “stop” 2% of the time, “walked” away 3% of the time, delivered a positive (reinforcing) response 19% of the time, delivered a negative (still reinforcing) response 34% of the time, and delivered no response 43% of the time. *Bystanders* of bullying incidents said “stop” 1% of the time, helped the victim “walk” away 2% of the time, delivered a positive (reinforcing) response 39% of the time, delivered a negative response 18% of the time, and delivered no response 40% of the

time.

The BP-PBS intervention was associated with increases in appropriate responses to problem behavior for all 3 schools. Overall, *victims* of bullying said “stop” 30% of the time (a 28% increase from baseline), helped the victim “walk” away 13% of the time (a 10% increase), delivered a positive response 8% of the time (an 11% decrease), delivered a negative response 15% of the time (a 19% decrease), and delivered no response 34% of the time (a 9% decrease). Finally, after BP-PBS was fully implemented, *bystanders* of bullying said “stop” 22% of the time (a 21% increase), helped the victim “walk” away 13% of the time (an 11% increase), delivered a positive response 17% of the time (a 22% decrease), delivered a negative response 8% of the time (a 10% decrease), and delivered no response 41% of the time (a 1% increase). Of particular note was the large impact that BP-PBS implementation had on the use of “stop” by all students, the decrease in victim delivery of a negative response (i.e. complaining, fighting back), and the decrease in bystander delivery of a positive response (i.e. cheering, laughing). It is likely that these changes in conditional probabilities had the greatest impact on the rapid decrease in future incidents of bullying behavior.

The Impact of BP-PBS on Student Perceptions

For the group design portion of the study, data were analyzed using a between subjects Multivariate Analysis of Variance (MANOVA). The analysis was conducted to determine if (a) the pre and post BP-PBS survey were equivalent, (b) if grade 3, 4, and 5 were equivalent, and (c) if grade level and intervention level had an interaction effect on

the 10 dependent variables of the SES+: SES score, perceptions of verbal aggression towards others, verbal aggression by others towards self, physical aggression towards others, physical aggression by others towards self, gossip towards others, gossip by others towards self, and use of stop, walk, and talk responses to problem behavior.

Each school's level of SES + score was run on a computerized statistical program (SPSS). First, descriptive data for each variable was analyzed (see Table 5 below).

Table 5. Descriptive data for the Multivariate Analysis of Variance.

<i>Dependent Variable</i>	<i>Mean</i>	<i>Std. Error</i>	<i>95% Confidence Interval</i>	
			<i>Lower Bound</i>	<i>Upper Bound</i>
SES	15.59	.29	15.03	16.152
Verbal	.71	.03	.65	.764
Other Verbal	1.43	.04	1.35	1.502
Physical	.27	.02	.23	.302
Other Physical	.79	.03	.73	.852
Gossip	.53	.02	.49	.580
Other Gossip	.98	.04	.91	1.044
Stop	2.02	.04	1.94	2.093
Walk	1.68	.04	1.61	1.753
Talk	1.74	.04	1.66	1.820

The lead author then ran the MANOVA to determine the relationship between the students' ($n = 483$) level of intervention (*pre or post BP-PBS*), their grade level (3^{rd} , 4^{th} , or 5^{th}), and their scores on the SES+. Results indicated that there was a significant effect of level of intervention, grade, and interaction, on SES+. Wilks' Lambda reported $F(1, 480) = 25.23, p < .05$ for intervention level, $F(2, 480) = 3.03, p < .05$ for grade level, and $F(1, 480) = 2.80, p < .05$ for the interaction effect (see Table 6).

Table 6. Results of the multivariate tests.

<i>Effect</i>	<i>Value</i>	<i>F</i>	<i>Hypothesis df</i>	<i>Error df</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>
Intercept	.10	876.33	10	951	.000	.90
Grade	.94	3.031	20	1902	.000	.03
Intervention	.79	25.23	10	951	.000	.21
Grade * Intervention	.94	2.80	20	1902	.000	.03

Computed using alpha = .05

Effects of Intervention Level

Next, a comparison between pre and post BP-PBS surveys was analyzed. Results indicated that 9 out of the 10 dependent variables were significantly different in the post survey. SES scores, scores of perceived verbal aggression *towards* others, scores of perceived verbal aggression *by* others, scores of perceived physical aggression *towards* others, scores of perceived physical aggression *by* others, scores of perceived gossip *by*

others, scores of perceived use of “stop”, scores of perceived use of “walk”, and scores of perceived use of “talk” were all significantly different in the anticipated direction (See Table 7 below). The only dependent variable not significantly different was the score of perceived gossip *towards* others, $F(1, 480) = 0.20, p = 0.54$.

Table 7. Between-subjects effects for level of intervention.

<i>Dependent Variable</i>	<i>Type III Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>
SES	2807.81	1	2807.81	36.07	.000	.036
Verbal	23.25	1	23.25	27.26	.000	.028
Other verbal	105.31	1	105.31	74.21	.000	.072
Physical	3.59	1	3.59	10.59	.001	.011
Other physical	27.23	1	27.23	29.60	.000	.030
Gossip	0.20	1	0.20	.37	.541	.000
Other gossip	10.13	1	10.13	8.82	.003	.009
Stop	162.90	1	162.90	113.63	.000	.106
Walk	75.52	1	75.52	63.62	.000	.062
Talk	31.72	1	31.72	20.14	.000	.021

Effects of Grade

Next, the comparison between 3rd, 4th, and 5th grade was analyzed. Results indicated that 4 out of the 10 dependent variables were significantly different in the post survey. Fifth grade students scored significantly higher than the other two grades on

perceived gossip *towards* other students, $F(2, 480) = 5.57, p < 0.05, \eta^2 = .01$. Also, 4th graders scored significantly higher than the other two grades on perceived use of the stop, walk, and talk responses: $F(2, 480) = 30.61, p < 0.05, \eta^2 = .02$, $F(2, 480) = 23.77, p < 0.05, \eta^2 = .02$, $F(2, 480) = 21.63, p < 0.05, \eta^2 = .01$, respectively. Also worth noting was the near significance of perceived verbal aggression *by* other students for 3rd graders, $F(2, 480) = 7.11, p = 0.08$, and the near significance of perceived physical aggression *by* other students for 4th graders, $F(2, 480) = 4.93, p = 0.07$ (See Table 8).

Table 8. Between-subjects effects for grade level.

<i>Dependent Variable</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>
SES	196.26	2	98.13	1.26	.28	.00
Verbal	1.85	2	.93	1.08	.34	.00
Other verbal	7.11	2	3.55	2.51	.08	.01
Physical	.28	2	.14	.41	.66	.00
Other physical	4.93	2	2.47	2.68	.07	.01
Gossip	5.57	2	2.79	5.22	.01	.01
Other gossip	3.93	2	1.96	1.71	.18	.00
Stop	30.61	2	15.31	10.68	.00	.02
Walk	23.77	2	11.89	10.01	.00	.02
Talk	21.63	2	10.81	6.86	.00	.01

Interaction between Intervention and Grade

Finally, the interaction effect of intervention level and grade level was analyzed. Results indicated that verbal aggression *towards* others and *by* others was impacted by the intervention significantly more for 3rd graders than for either of the other two grades: $F(1, 481) = 9.20, p < 0.05, \eta^2 = .01$, $F(1, 481) = 13.97, p < 0.05, \eta^2 = .01$. These results argue that the BP-PBS intervention had the greatest impact on 3rd grader use of verbal aggression (See Table 9).

Table 9. Between-subjects interaction effects between level of intervention and grade level.

<i>Dependent Variable</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Partial Eta Squared</i>
SES	119.70	2	59.85	.77	.46	.00
Verbal	9.20	2	4.60	5.40	.01	.01
Other verbal	13.97	2	6.99	4.92	.01	.01
Physical	.65	2	.33	.96	.38	.00
Other physical	4.37	2	2.19	2.38	.09	.00
Gossip	1.27	2	.63	1.19	.31	.00
Other gossip	4.39	2	2.19	1.91	.15	.00
Stop	6.86	2	3.43	2.39	.09	.00
Walk	1.33	2	.66	.56	.57	.00
Talk	2.55	2	1.28	.81	.45	.00

Fidelity of Implementation

Fidelity of BP-PBS implementation was assessed through both student knowledge of the curriculum, and staff adherence to program components (see Table 10 and 11 below). In regards to the student knowledge of the curriculum, students were assessed three times during the course of the intervention. The results indicate that at each of the 3 assessment points, students knew the 3 step response to problem behavior with more than 93% accuracy.

Table 10. Fidelity of implementation by student knowledge of Stop/Walk/Talk.

<i>Student Knowledge of Stop/Walk/Talk</i>	<i>Correct Responses</i>		
	Time 1	Time 2	Time 3
School 1	96.67% (29/30)	100% (30/30)	93.33% (28/30)
School 2		100% (30/30)	100% (30/30)
School 3			96.67% (29/30)

Table 11. Fidelity of implementation by staff adherence to program components.

School	Average daily frequency				
	Check-ins	Positives	Reports	Practices	ODRs*
School 1	2.30	2.20	2.00	3.51	0.06
School 2	1.06	1.48	2.57	1.43	0.00
School 3	2.54	3.44	2.41	3.90	0.15
Overall	1.97	2.25	2.27	2.95	0.06

* ODR – Office Discipline Referral

In Table 11, the staff adherence daily checklist results are described for each school. A total of 34 ($n = 34$) staff filled out the daily checklist during the study. Results indicated that overall, staff participated in an average of 1.97 ($M = 1.97$, $SD = 1.81$) check-ins with chronic targets and instigators of problem behavior on a daily basis and delivered positive reinforcement to students for using the BP-PBS curriculum components an average of 2.25 ($M = 2.25$, $SD = 1.83$) times per day. In addition, on average school staff were able to practice the BP-PBS components with students 2.95 ($M = 2.95$, $SD = 2.61$) times each day, and they delivered office discipline referrals to students exhibiting continued problem behavior a total of 10 times throughout the study, for an average of 0.06 times a day ($M = 0.06$, $SD = 0.24$). Finally, on average, staff received 2.27 ($M = 2.25$, $SD = 2.07$) student reports of problem behavior on a daily basis. Together the data indicate that students were able to learn and retain the fundamental

components of the BP-PBS curriculum and that staff were able to implement the BP-PBS curriculum components throughout the study.

Social Validity

A summary of BP-PBS Acceptability Questionnaire ratings is provided in Table 12. Twenty-five ($n = 25$) staff from all three schools completed the questionnaire on a 6 point scale (1 through 6), with higher scores indicating a higher satisfaction with intervention components. Overall, staff gave ratings of 4 or greater on the 6 point scale as to whether BP-PBS resulted in improved behavior ($M = 4.43$, $SD = 1.04$), whether it was worth the time and effort ($M = 4.74$, $SD = 1.10$), and whether they would recommend it to others ($M = 4.6$, $SD = 1.23$). Staff ratings were even higher on the 6 point scale for the program's ease of participation ($M = 5.51$, $SD = 0.77$), which is likely related to the efficiency of the curriculum delivery and the simplicity of program components.

Table 12. Staff Ratings of BP-PBS Acceptability

<i>School</i>	<i>Improved Student Behavior</i>	<i>Worth the Time and Effort</i>	<i>Would Recommend to Others</i>	<i>Easy to Participate</i>
School 1	4.75	5.00	4.50	5.38
School 2	4.43	4.71	5.00	5.86
School 3	4.1	4.5	4.3	4.3

CHAPTER IV

DISCUSSION

Results strongly support the addition of a targeted intervention, like BP-PBS, to a school's system of positive behavior support. Results indicate a large reduction in the number of incidents, variability, and trend of bullying behavior. These effects were coupled with an increase in appropriate bystander and victim responses to bullying behavior, which likely served to moderate the changes in behavioral incidents. By responding appropriately to incidents of bullying behavior, victims and bystanders learned to put bullying behavior on extinction, reducing the peer attention maintaining the problem behavior. Finally, results also indicated a significant improvement in student perceptions of experiences related to bullying, harassment, and school safety.

Not only did faculty and staff give the intervention high scores regarding its effectiveness and efficiency, they were able to implement the study procedures with a high degree of fidelity. A simple, cost-efficient system that teaches all students a specific response to problem behavior and teaches all staff a specific approach to reports of problem behavior can have a large impact on patterns of bullying behavior. BP-PBS will be most effective for students who engage in problem behavior that is maintained by peer attention. If students do not find peer attention reinforcing, the BP-PBS procedures may be less effective. Further research on the role of functional behavioral assessment results to guide the design of bully prevention procedures is warranted.

Implications for Practice

The empirical findings in this study have major implications for educators across the country. First, the results indicate that the use of “bullying” language seems less than necessary, as its complex definitions and descriptions can be difficult to recognize for students as well as staff. By avoiding the language, BP-PBS was able to focus on real and observable behaviors, allowing for more reliable data collection and more consistent responses by staff and students. By not evaluating levels of power and frequency, observers undoubtedly coded more than just bullying, but it is also doubtful that anyone will complain the program reduced too much problem behavior. The more complex definitions of bullying serve to understand the phenomenon, but data indicate that it may not be necessary for effective intervention.

Program maintenance of BP-PBS signified another major implication for educators across the country. Past research has made evident the difficulties in implementing resource-intensive bully prevention efforts over multiple years. Although these programs have provided some efficacious results, schools have great difficulty maintaining funding and remaining motivated to continue program implementation. In their efforts, bully prevention programs have included components of individual counseling with the victim and the bully, small group social skills instruction, staff training, and others. Many of these components are extremely valuable and absolutely necessary for a small percentage of students, but by effectively teaching and reinforcing a simple, specific, school-wide response to problem behavior, BP-PBS requires substantially less money, time, and effort, while significantly limiting the number of

students needing this additional level of support. It has been recommended that future efforts consider interventions of differing intensities in order to determine the most efficient level of intervention and prevention (Hartung & Scambler, 2006). BP-PBS is a definite step in this direction.

There is evidence that teachers' support and coaching for student skill use, outside of lesson instruction, has enormous benefits. In the BP-PBS curriculum, practice is initiated with victims, perpetrators, and bystanders each time problem behavior is reported, reinforcing appropriate use of skills, and serving as a small punisher for problem behavior. In addition, a small adult check-in with chronic victims and perpetrators of bullying at the beginning and end of unstructured times (cafeteria, gym, recess) provides pre-correction and needed preparation in difficult settings. Administrators should create opportunities for staff to discuss additional strategies to provide ongoing, high levels of this kind of support. Specifically, this may involve increasing adult availability to help coach students in unstructured settings.

For the program to be effective, BP-PBS requires the maintenance of adult awareness and motivation. Administrative, teacher, and supervisor buy-in is absolutely essential, as the reinforcement of students who use the BP-PBS skills will make or break the program. Good practice also includes ongoing training and brainstorming about how to make the program fit within the context of the school. This can include weekly supervisor meetings to discuss upcoming issues, BP-PBS posters, and ongoing evaluation of program effectiveness. The follow-up survey at the end of the curriculum manual can serve in this regard.

The BP-PBS focus on classroom intervention in elementary grades reflects a need to intervene before surges in bullying that typically occur toward the end of elementary school and into middle school years (Pellegrini & Long, 2002). Children's views on dealing with aggressive peers undergo changes while long-standing patterns of interaction become increasingly resistant to change around this time (Newman, Murray, & Lussier, 2001), so BP-PBS has targeted the middle to upper elementary school years as a particularly favorable time to influence bullying-related skills, beliefs, and behavior. That said, with the growing need for bullying prevention and intervention at the middle and high school level, BP-PBS can be adapted by making the program language more "cool", and by discussing more subtle scenarios of problem behavior increasingly relevant to older students, such as gossip, inappropriate comments, cyber-bullying, and exclusion. An evaluation of the middle school version including these components is the next step in the BP-PBS research agenda.

Finally, given the troubling effects of bullying and the promising results of this study, EVERY school implementing school-wide positive behavior support should also consider the implementation of a secondary level of support for bully prevention. With the reduced resources necessary, implementation of programs like BP-PBS can have very powerful effects for a little added effort.

Limitations

Limitations of the current study should prompt caution in interpreting the results. First of all, with regard to the single subject portion of the study, no functional

assessment was conducted with observed students to determine that peer attention did in fact serve to maintain their problem behavior. Even though each of the observed students responded positively to the intervention, it is possible that some students will not. Continued research is needed to determine how these students will respond to the procedures of BP-PBS and how it can be strengthened to include other functions of behavior, such as adult attention, tangibles, self-stimulation, or escape for the victim.

With regard to the data collection of student behaviors on the playground, because of the short amount of time during lunch recess, direct observation data were limited to 10-minute observations of each student. Therefore, the data collected may or may not have generalized to other unstructured settings throughout the school including the cafeteria, hallways, gym, bus, or library. In addition, although great efforts were made to protect the identity of observed students, at times some students may have become aware that they were being observed. This recognition coupled with the implementation of BP-PBS curriculum training may have had a disproportionate impact on their behavior.

To statistically evaluate the effect size of the multiple baseline design, percentage of all non-overlapping data points (PAND) was calculated according to Parker, Hagan-Burke, and Vannest (2007). While this approach is considerably more accurate than the typical PND approach, several issues require careful consideration for interpretation. First, the calculation of the effect size Phi requires the creation of a chi-square with overlapping and non-overlapping data filling a 2 x 2 table. Although seemingly appropriate, an assumption of the chi-square is that all observations are independent, and unfortunately the data points in a single subject design can't be truly independent without

randomization. Second, it is debatable whether PAND is a measure of effect size or rather a measure of the magnitude of confidence in a functional effect. PAND calculates whether there *is* a true difference between the baseline and intervention phases but does not take into consideration the magnitude of that difference. For example, if intervention A decreases problem behavior by 80% and intervention B decreases it by 20%, there is no question that intervention A has a larger effect size. But because PAND simply calculates the number of overlapping data points between phases, it is very possible that the two interventions could have an equivalent percentage of all non-overlapping data and therefore equivalent Phi effect size calculations.

Limitations should also be considered when evaluating the group design portion of the study. In order to avoid issues of confidentiality, this study implemented a simple pre-post, between subjects, non-experimental design. As no control group was included, significant threats to internal validity must be considered, including threats of history, maturation, and testing. Future research should evaluate the effectiveness of BP-PBS across many schools over an extended period of time, using pre-post, within subjects, control group designs. It would also be quite valuable to determine the effects of BP-PBS over multiple years and even into adulthood.

The practical implications of these data lie in the combined results of the problem behavior, peer response, student perception, fidelity, and acceptability data. BP-PBS is an example of a targeted intervention that was implemented with high fidelity by regular faculty and staff in 3 typical elementary schools. The intervention was associated with significant improvements in perceptions of problem behavior, directly observed problem

behavior, and responses to problem behavior. Further, faculty and staff evaluated the procedures as effective in improving behavior, “worth the time and effort,” “easy to implement,” and highly likely to recommend it to others.

As schools address the need to build environments that prevent problem behavior and support adaptive behavior, one important element will be the use of efficient, targeted interventions. BP-PBS holds promise as one intervention that will meet this need, especially for those students who engage in bullying behaviors maintained by peer attention. Resources in schools are scarce, and intervention intensity must be matched to the severity of problem behavior. As schools move to build school-wide discipline systems that prevent problem behaviors, targeted interventions like BP-PBS will be an important and useful component.

APPENDIX A

BP-PBS PILOT RESULTS

Figure A1. BP-PBS Pilot Results: Incidents of Problem Behavior on the Playground during 10 minute observation of lunch recess.

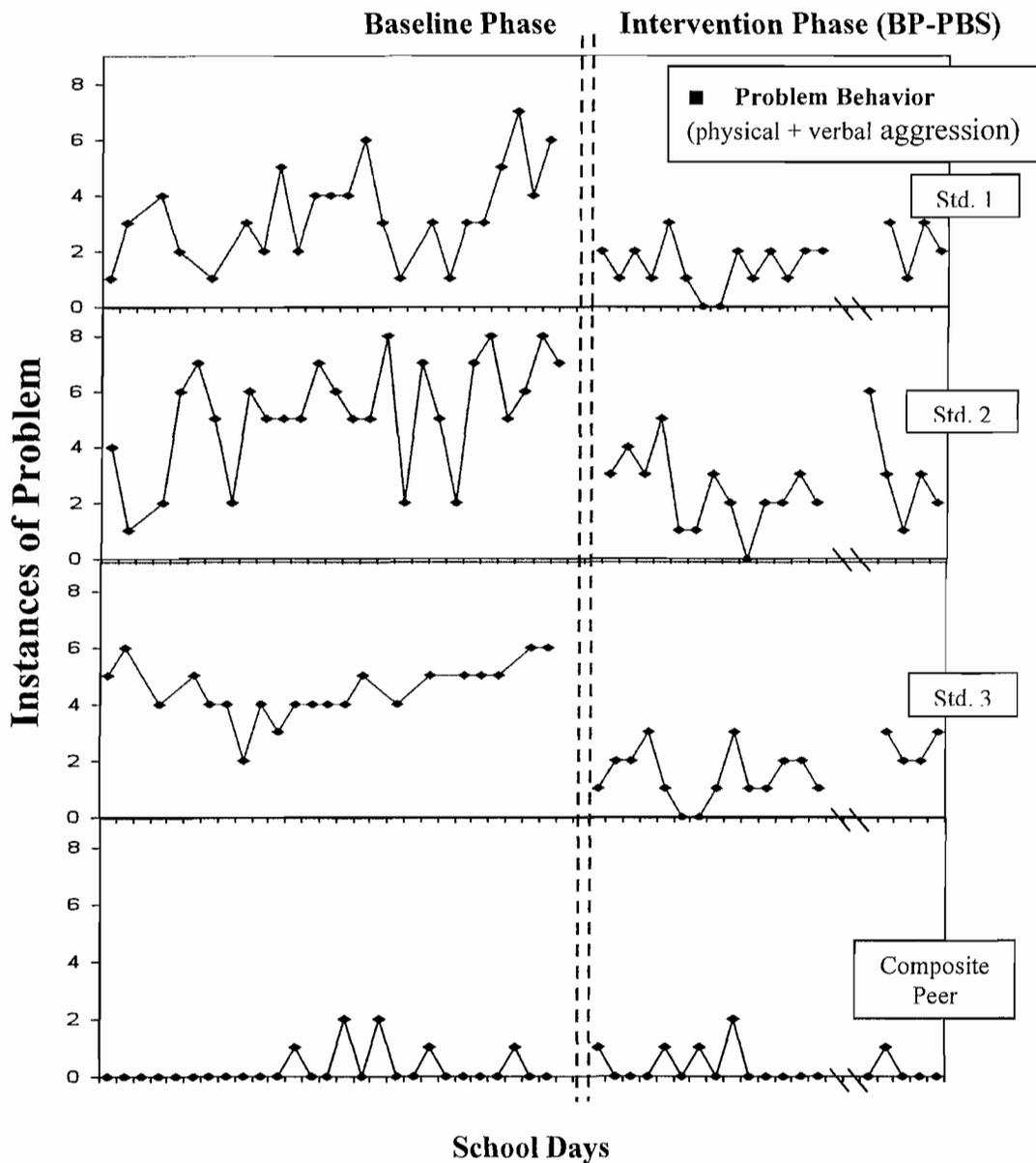
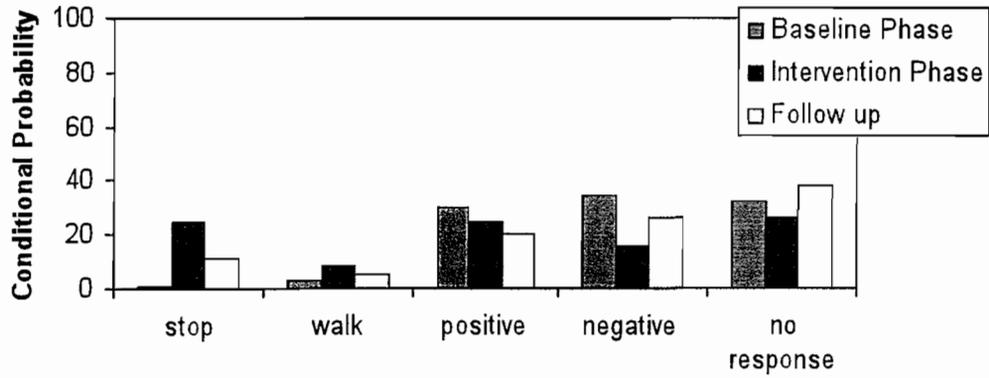
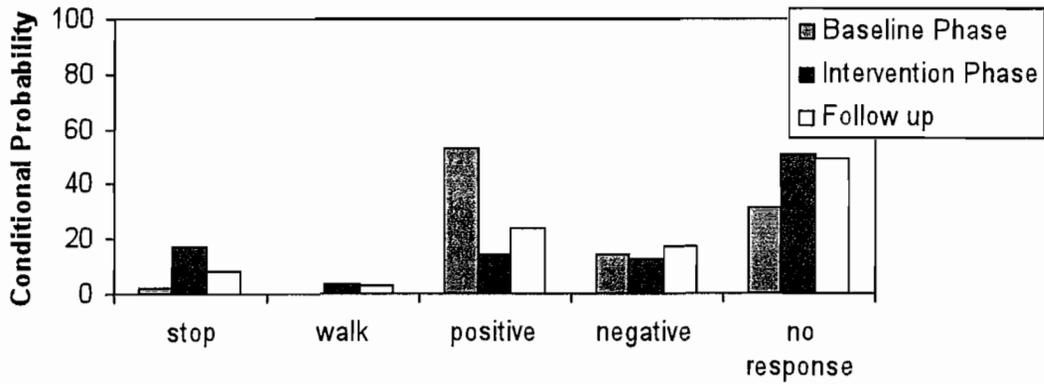


Figure A2. BP-PBS Pilot Results: Conditional Probabilities

Probability of Recipient Response following Problem Behavior



Probability of Bystander Response following Problem Behavior



APPENDIX B

STAFF FIDELITY CHECKLIST

Appendix B. Staff fidelity checklist filled out daily by each playground supervisor.

Problem Behavior Outside the Classroom

Staff Name: _____ School: _____

Today, how many of the following occurred:

Date:	Check-ins	Positives for S/W/T	Reports of Problem Behavior	Practices of S,W,T With students	ODRs Given out for Problem Behavior

Comments: _____

APPENDIX C
STUDENT EXPERIENCE SURVEY PLUS (SES+)

Student Experience Survey: What School Is Like for Me (Attitude Scales)

Administration of this survey should be prefaced by a brief discussion about the purpose of the survey and guidelines about student behavior during the survey (for example, not saying answers out loud and respecting others' privacy). Confidentiality also should be addressed in the introduction. Students should be told that their answers will be confidential, and only the staff involved in summarizing the information will have access to the surveys (An astute student may ask about the identification codes on the survey. You will need to assure the student that there will be restricted access to the key linking identification codes with student names.)

Administration Script

Use the following script to introduce and administer the Student Experience Survey to students.

Introduction. Today we are giving a survey to students in third through fifth grades (or fourth through sixth) to learn about what things are like for students here. This will take 15–20 minutes. The survey asks your opinion about different things at school. For example, I'll ask you how hard it would be to calmly tell kids to stop if they were teasing you. There are no wrong or right answers to the questions; we are just interested in what you want to tell us.

We want your answers to be private. To keep your answers private, please gently tear off the first page with your name on it and use it to cover your answers as you go along. Your name will not be on your survey.

Please don't say answers out loud or show your answers to others. You may skip any question that you don't want to answer. Please do not write the names of other students when answering any of the questions.

I am going to read the questions out loud. You may choose to follow along with me, or you may go ahead and work at your own pace. Raise your hand if you need help or have a question. If you have a hard time remembering or aren't sure of an answer, just make your best guess.

Let's start with the first page. The first question asks if you are a boy or girl—circle your answer. The next question asks what grade you are in—circle your grade. The next question asks how old you are—circle your age. Make sure your circles are good and dark.

Part 1. Now the rest of the questions on this page and the next one ask you how hard it would be to do things. For example, there is a game you'd really like to have—how hard would it be to save money to buy it yourself? Would it be not hard at all, a little bit hard, pretty hard, or really hard? Circle how hard it would be for you. (Read questions 1–5 below on pages 1–2 of the survey—emphasizing the word calmly.)

1. Kids at school are pushing you around. How hard would it be to calmly tell them to stop?
2. Kids at school are ganging up on you. How hard would it be to calmly tell them to stop?
3. Kids at school are teasing you. How hard would it be to calmly tell them to stop?
4. Kids at school are telling lies about you. How hard would it be to calmly tell them to stop?
5. Kids are passing mean notes about you in class. How hard would it be to calmly tell them to stop?

Part 2. The questions on this page ask if something is, in your opinion, very true, pretty true, a little true, or not true at all. The example says, "If we had free time at school, I would draw pictures." If that's how you feel, circle "very true." If it's pretty much how you feel, circle "pretty true." If you feel a little bit that way, circle "a little true." If that is not true at all for you, circle "not true." (Read questions 6–14 on pages 3–4 of the survey.)

6. My school is a safe place to be.
7. If I were being bullied, I would ask an adult at school for help.
8. Adults at my school know about kids being bullied.
9. If a bunch of kids at school were teasing another kid, I would calmly tell them to stop.
10. Adults at my school stop kids from being bullied.
11. If I saw someone being ganged up on at school, I would tell an adult.
12. If my friends were passing mean notes about another kid, I would tell them to stop.
13. If my friends were telling lies about another kid, I would tell them to stop.
14. If I saw someone being hit or pushed around at school, I would tell an adult.

Part 3. In this part, we want to know what you think about things that happen at school. I will read a sentence, then you decide how much you agree with it. The example says, "It's okay to go to the store by yourself." Some kids might think this is okay, others might not. What do you think? Do you agree a lot, agree some, agree a little, or not at all? Circle the one that shows what you think. (Read questions 15–21 on pages 5–6 of the survey.)

15. It's okay to say something mean to a kid who's pushing you around.
16. It's okay to say something mean to a kid who really makes you angry.
17. It's okay to say something mean to a kid who does something mean to you.
18. It's okay to hit a kid who hits you first.
19. If a kid makes you angry, it's okay to say that you won't like the kid anymore.
20. It's okay to hit a kid who's pushing you around.
21. It's okay to stop talking to a kid to get even.

Part 4. In this part, we want to know how often you have experienced certain things. I will read a sentence, then you decide how often you experienced it: never, once in a while, once a week, once a day, or more than once a day. The example says, "I cleaned my room." Some kids might clean their room once in a while, and others might do it every day. Circle the one that shows how often you clean your room. (Read questions 15-21 on pages 5-6 of the survey.)

22. I said mean things, teased, or called other kids names.
23. Other kids said mean things, teased, or called me names.
24. I hit, kicked, or pushed other kids at school.
25. Other kids hit, kicked, or pushed me at school.
26. I told my friends secrets I heard about other people.
27. Other kids told secrets about me.
28. When someone did something to me that I didn't like, I calmly told them to stop.
29. When someone did something to me that I didn't like, I walked away.
30. Someone continued to do something to me that I didn't like, even after I told them to stop and I walked away, so I told an adult.

Conclusion. Thank you for answering the questions on the survey. Your answers will help us learn about what things are like for kids at this school. Do you have any questions you'd like to ask me?

Examples of student questions

Below are examples of possible questions students may ask, along with possible answers you can offer. The most important things to convey to students are (a) there are no right or wrong answers—just opinions, and (b) students' responses will be kept either confidential or anonymous, depending on the evaluation strategy.

Why are you doing this?

We want to learn about students' experiences at school. You are the experts.

Why do you ask about so many bad things?

We want to know about different things that happen at school—the fun stuff and also the not-so-fun stuff, like kids being teased. You know the most about those things. We want to hear from you about what happens.

What will you do with our answers?

We will look at how lots of different kids answered the questions. That will give us a big picture of what things are like at school.

What do the numbers at the top of each page mean? (referring to ID codes, in the case they are used to track students from pre- to posttest)

The numbers are for us to keep track of whom we've given the survey to. Remember that we are keeping your answers private and that the surveys will not have your names on them. Only a few people in the office (name the staff members, if possible) will be able to see the surveys so they can summarize or put together all the information you have given us.

What do the numbers below each of the boxes mean? (referring to the numbers below the response options for each question)

These numbers help us enter the information into a computer.

Why are you asking us the same questions again? (at posttest)

We want to know if things have changed or stayed the same since the last time we asked you these questions.

What School Is Like for Me

ID # _____

Name _____

ID # _____

Page 1

What School Is Like for Me

Are you a boy or a girl?	Boy	Girl				
What grade are you in?	3	4	5	6		
How old are you?	8	9	10	11	12	13

Part One

Please circle the answer that is most true for you. There are no right or wrong answers. We just want to know what you think. You may skip any questions that you don't want to answer.

Example:

*There is a game that you'd really like to have. How hard would it be to save the money to buy it yourself?

not hard at all
 a little bit hard
 Pretty Hard
 REALLY HARD

<p>1. Kids at school are pushing you around. How hard would it be to <u>calmly</u> tell them to stop?</p> <p style="text-align: center;"> <input type="radio"/> not hard at all <input type="radio"/> a little bit hard <input type="radio"/> Pretty Hard <input type="radio"/> REALLY HARD </p>
0 1 2 3

ID # _____

Page 3

Part Two

Circle the answer that is most true for you.

Example:

*If we had free time at school, I would draw pictures.

Very TRUE**Pretty true**

a little true

not true

6. My school is a safe place to be.

Very TRUE**Pretty true**

a little true

not true

3

2

1

0

7. If I were being bullied, I would ask an adult at school for help.

Very TRUE**Pretty true**

a little true

not true

3

2

1

0

8. Adults at my school know about kids being bullied.

Very TRUE**Pretty true**

a little true

not true

3

2

1

0

9. If a bunch of kids at school were teasing another kid, I would calmly tell them to stop.**Very TRUE****Pretty true**

a little true

not true

3

2

1

0

ID # _____

Page 4

10. Adults at my school stop kids from being bullied.

Very TRUE

Pretty true

a little true

not true

3

2

1

0

11. If I saw someone being ganged up on at school, I would tell an adult.

Very TRUE

Pretty true

a little true

not true

3

2

1

0

12. If my friends were passing mean notes about another kid, I would tell them to stop.

Very TRUE

Pretty true

a little true

not true

3

2

1

0

13. If my friends were telling lies about another kid, I would tell them to stop.

Very TRUE

Pretty true

a little true

not true

3

2

1

0

14. If I saw someone being hit or pushed around at school, I would tell an adult.

Very TRUE

Pretty true

a little true

not true

3

2

1

0

ID # _____

Page 7

23. Other kids said mean things, teased, or called me names.

Never Once in a while Once a week Once a day

More than
once a day

24. I hit, kicked, or pushed other kids at school.

Never Once in a while Once a week Once a day

More than
once a day

25. Other kids hit, kicked, or pushed me at school.

Never Once in a while Once a week Once a day

More than
once a day

26. I told my friends secrets I heard about other people.

Never Once in a while Once a week Once a day

More than
once a day

27. Other kids told secrets about me.

Never Once in a while Once a week Once a day

More than
once a day

Go to next page

ID # _____

Page 8

28. When someone did something to me that I didn't like, I calmly told them to stop.

Never Once in a while Once a week Once a day **More than
once a day**

29. When someone did something to me that I didn't like, I walked away.

Never Once in a while Once a week Once a day **More than
once a day**

30. Someone continued to do something to me that I didn't like even after I told them to stop and I walked away, so I told an adult.

Never Once in a while Once a week Once a day **More than
once a day**

Thank You. Please Wait Quietly.

APPENDIX D

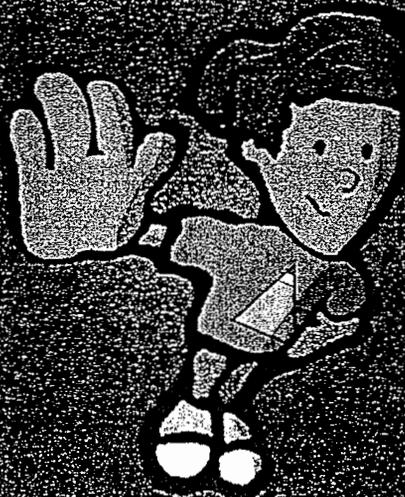
BULLY PREVENTION IN POSITIVE BEHAVIOR SUPPORT MANUAL



Educational and Community Supports

Bully Prevention

In Positive Behavior Support



Giving students the tools to reduce bullying behavior through the blending of school-wide positive behavior support, explicit instruction, and a redefinition of the bullying construct.

Scott Ross, M.S., Rob Horner, Ph.D., & Bruce Stiller, Ph.D



Before We Intervene.....

Prior to implementing BP-PBS in your school, it is important to understand the signals and layout most ideal for your specific setting. By giving these issues adequate consideration, the program will have a higher likelihood of being embraced by the students and staff.

The Stop Signal

As discussed, Bully Prevention in Positive Behavior Support describes a 3 step response to problem behavior, including "Stop", "Walk", and "Talk. This terminology is adequate for most settings, but for some (particularly older students), this language may seem childish or "uncool". Therefore, the language used for each of the three steps should be discussed prior to program implementation. Older students may wish to vote on the signals or staff may decide what signals will work best for their school, but two critical elements must be kept in mind. First, the signals must be short, easy to remember, and easy to produce. Complicated signals will only reduce the amount they are used. Second, whatever signal your school decides on, the ENTIRE school must implement it. Different classrooms or grades must not have their own signal. Doing so will eliminate the clarity of the response sequence.

The following are examples of statements that may be used in the place of "stop":

"enough"

"time-out"

"quit-it"

"overboard"

"too far"

"un-cool"

The hand signal that accompanies the "stop" command should also be discussed, and might include:



Curriculum Delivery Layout

In addition to the specified language, it is important to understand how Bully Prevention in Positive Behavior Support can be taught most effectively. For this purpose, the program has been broken into 6 lessons. Lesson 1 includes most of the curriculum components including the stop/walk./talk response, and also includes a good deal of class-wide practice. This lesson is the longest of the 6 and takes approximately 50 minutes to complete. The second lesson, ideally delivered on the following day, only takes 30 minutes, and includes how to reply when someone delivers the stop/walk/talk response to you, and also includes some essential group practice.

The following 4 sections of the manual cover specific examples of how to use the stop/walk/talk response appropriately, and should be delivered for 10-15 minutes one or two times a week. More specifically, following 3 sections involve practice around how to respond to gossip, inappropriate remarks, and cyber-bullying. The 4th is a generic practice lesson for use with other specific problem behaviors that may surface at your school.

Section 6 is the supervision curriculum. This section clarifies how supervision should be conducted in unstructured settings such as the cafeteria, gym, hallways, and playground. Delivered in each applicable setting, this practice involves reviewing how to respond to reports of problem behavior, how to reinforce appropriate use of stop/walk/talk, and how to check in with chronic targets and instigators. This is a critical part of BP-PBS as supervisors play an enormous role in the generalization of lessons learned inside the classroom. If we fail to respond to reports of problem behavior outside the classroom appropriately, the likelihood that children will use the program components will drop significantly.

Section 7, the faculty follow-up, is an opportunity to check how the program is working. Based on the responses to a small survey, changes can be made in how the program is implemented.

Finally, section 8 includes all the citations used throughout the manual as well as resources applicable to the effective and efficient use of the program.



Student Curriculum **1**

Bully Prevention

In Positive Behavior Support



Student Curriculum (Part 1)

Time:
50 minutes

.....

Bully Prevention Introduction

Objectives:

- Establish rules and expectations for group discussions
 - Teach 3-5 school-wide rules for outside the classroom
 - Teach Social Responsibility Skills (Stop/Walk/Talk)
 - Practice
-

Procedure:

- I. Establish rules for instruction based on 3-5 school-wide positively stated rules
 - Examples might include:*
 - Be Safe - Keep hands and feet to self during lesson
 - Be Respectful - One person speaks at a time
 - Be Responsible - Use what you learn!

- II. Discuss what school-wide rules look like outside the classroom
 - Examples might include:*
 - Saying nice things to other students
 - Walking in hallways or the cafeteria
 - Keeping your hands and your feet to yourself

Notes: _____

Student Curriculum

1

III. Discuss examples of not following school-wide rules in specific settings

Notes: _____

Examples might include:

- Running in the Hallways or Cafeteria
- Talking behind someone's back
- Throwing objects at another student
- Threatening another student
- Hitting, kicking, or restricting another's movement
- While playing basketball, 4-square, or kickball
- Calling someone names

IV. Discuss why kids exhibit problem behavior outside the classroom

The candle under a glass cup

Materials Needed:

- Small candle
- Clear glass cup that can fit over the top of the candle
- Matches or lighter

Procedure:

1. Compare fire and problem behavior with the class (Light the candle)
 - Both can be bright and both can hurt
2. Explain how problem behavior needs *peer attention* to keep going just like a candle needs *oxygen* to stay lit.
3. Discuss the many forms of *peer attention*
 - Arguing with someone that teases you
 - Laughing at someone being picked on
 - Watching problem behavior and doing nothing about it.
4. Explain how taking away peer attention is like taking the oxygen away from a candle (cover the lit candle with the clear glass cup, and watch as the flame slowly dies out).
5. Students can take away the peer attention that keeps problem behavior going by:
 - Telling someone teasing you to "stop"
 - Walking away from problem behavior
 - Helping another student by saying "stop" or by walking away from problem behavior with them.
 - Telling an adult

Student Curriculum

1

V. Teach Social Responsibility Skills (Stop/Walk/Talk)

Describe the 3 steps for responding to problem behavior

Notes: _____

Be sure to practice each step with the students and ensure that they are fluent. This should include at least 3 correct examples and at least 2 non-examples (When not to use the 3-step response)

1. The Stop Signal

- ① Teach students the school-wide "stop signal" (verbal and physical action) for problem behavior.
- ② Model the use of the stop signal when they experience problem behavior *or* when they see another student experiencing problem behavior
- ③ Practice the Stop Signal, calling volunteers to the front of the class.
 - Include at least 3 examples of the right time to use the stop signal

Positive examples of when to use the stop signal might include:

- Johnny pokes Sally in the back over and over while in line
- Susie teases Sally and calls her a derogatory name
- Joey tackles Sam while playing two-hand touch football
- Sam steals the ball away from Fred when they are not playing a game that involves stealing.

- Include at least 1-2 examples of when not to use the stop signal

Negative examples: when not to use the stop signal

- Johnny accidentally breaks the double-dribble rule in basketball
- Kelly makes a suggestion for a game that Fred does not like
- Sam steals the ball away from Fred when they are playing basketball: a game where stealing is appropriate
- Sally continues to poke Susie in line, even after Susie has delivered the stop signal

Student Curriculum



Notes:

Important Note:

If any student is in danger, the "stop" and "walk away" steps should be skipped, and the incident should be reported immediately.

• Describe to students how they should expect adults to respond to "Talk"

1. Adults will ask you what the problem is
2. They will ask if you said "stop"
3. They will ask if you "walked away" calmly

• Practice "talk" with student volunteers at the front of the class

- Again, be sure to include at least 3 examples of how to "talk" and at least one example of when not to "talk"

4. Review Stop/Walk/Talk

• Test students orally on how they should respond to various situations that involve problem behavior

Include questions that involve each possible scenario:

- Using "Stop", "Walk", and "Talk"
- Responding to "Stop", "Walk", and "Talk"

Student Curriculum

2

Notes: _____

Review the Social Responsibility Skills (Stop/Walk/Talk)

Discuss the 3 steps for responding to problem behavior

- ⊙ Review the school-wide Stop/Walk/Talk signals (verbal and physical action) to be used when students experience problem behavior *or* when they see another student experiencing problem behavior
 - Remind students that Stop/Walk/Talk removes the reinforcement for problem behavior
 - Teach students to encourage one another when they use the appropriate response

Responding to Stop/Walk/Talk

Teach students that at some point the stop/walk/talk procedure will be used with EVERY student and it is important to respond appropriately, even if you don't agree.

- ⊙ Model how to respond if someone else uses "stop", "walk", or "talk"
 1. Stop what you are doing
 2. Take a deep breath and count to 3
 3. Go on with your day

Good examples of responding to stop/walk/talk should include

- Responding appropriately even when you don't think you did anything wrong
- Responding appropriately even if you think the other student is just trying to get you in trouble

Group Practice

Break up the class into groups of 2

- ⊙ Instruct the students to practice the "stop" signal, as well as how to reply to someone else using the "stop" signal with you.

<h2 style="margin: 0;">Student Curriculum</h2>	2
--	---

- Students should take turns being the target and the instigator of problem behavior
- Students should first practice a given problem behavior scenario
- Once students have completed the first practice, they may be allowed to practice a scenario that they have personally encountered.

Notes: _____

Some possible scenarios that can be practiced:

- Johnny says something rude to Sally
- Joey steals the ball that Sam is playing with

- ⊙ After 5 minutes, bring class back together and discuss questions of comments that arose during practice

Group Practice (Part 2)

- ⊙ Briefly remind students how they should expect adults to respond when problem behavior is reported.

When students report problem behavior to an adult:

1. Adults will thank you for coming to them
2. They will ask you what the problem is
3. They will ask if you said "stop"
4. They will ask if you "walked away" calmly
5. They will practice Stop/Walk/Talk

Separate the class again, this time into groups of 4 with 1 person in each group acting as, a target of problem behavior, an instigator of problem behavior, a bystander, and a playground supervisor.

- ⊙ Instruct the students to practice the entire Stop/Walk/Talk sequence, how to reply when someone else uses the "stop" signal with you, and how adults will respond to reports of problem behavior.
 - Students should take turns being each of the roles
 - Once students have completed a given practice scenario, then they may be allowed to practice a scenario that they have personally encountered.

Gossip **3**

Bully Prevention

In Positive Behavior Support



Student Curriculum – Gossip

Time:
20 minute lesson

Objectives:

- Review the Social Responsibility Skills (Stop/Walk/Talk)
- Using Stop/Walk/Talk with Gossip
- Group Practice

Procedure:

Review rules for instruction based on 3-5 school-wide positively stated rules

Examples might include:

- Be Safe - Keep hands and feet to self
- Be Respectful - When giving examples of things that have happened to you, rather than saying the names of others, say, "Someone I know..."
- Be Responsible - Practice what you learn when you are outside the classroom

Discuss what school-wide rules have to do with gossip

- Being Respectful means saying only nice things about other students
- Being Kind means encouraging others and making them feel good even when they are not present.

Notes: _____

Gossip

3

Notes: _____

Examples of NOT being respectful or kind to other students

- Telling a negative story about someone else, regardless of whether it is true or not.
- Sharing secrets that someone told you
- Blaming negative behavior on someone else

Review the Social Responsibility Skills (Stop/Walk/Talk)

Discuss the 3 steps for responding to gossip

- Review the school-wide Stop/Walk/Talk signals (verbal and physical action) to be used when students hear something not kind or respectful about another student.
 - How can Stop/Walk/Talk be used when someone says something disrespectful about another student?
 - Often, the target of gossip will not hear the negative remark, so it is important for others that DO hear the remark to say "stop".
 - Sometimes this means saying stop to your friends, which can be very difficult to do.

Group Practice

Break up the class into pairs including a bystander and an instigator.

- Instruct the students to practice using the "stop" signal and the reply to "stop" when someone says something unkind or disrespectful about another student.
 - Students should first practice an instructed scenario prior to trying a scenario they have encountered.

Inappropriate Remarks

4

Notes:

Examples of replying to stop/walk/talk should include

- Responding appropriately even when you don't think you did anything wrong
- Responding appropriately even if you think the other student is just trying to get you in trouble

Group Practice (Part 2)

- After 5 minutes of practicing in pairs, bring the class back together and discuss questions and comments that arose during practice

Next, separate class into groups of 4, with 1 person in each group acting as a playground supervisor, a target of an inappropriate remark, an instigator, and a bystander.

- Instruct the students to practice the entire Stop/Walk/Talk sequence, how to reply when someone uses the "stop" signal with you, and how adults will respond to reports of inappropriate remarks.

When students report gossip to an adult:

1. Adults will thank you for coming to them
2. They will ask you what the problem is
3. They will ask if you said "stop"
4. They will ask if you "walked away" calmly
5. They will practice Stop/Walk/Talk

- Once students have completed an instructed practice scenario, then they may be allowed to practice a scenario that they have personally encountered.

Review Stop/Walk/Talk

- Test students orally on how they should respond to various situations that involve inappropriate remarks
- Reward Students for their participation.

Cyber-Bullying **5**

Bully Prevention

In Positive Behavior Support



Student Curriculum – Cyber-Bullying

Time:
20 minute lesson

.....
Objectives:

- Review the Social Responsibility Skills (Stop/Walk/Talk)
 - Using Stop/Walk/Talk with Cyber-Bullying
 - Group Practice
-

Procedure:

Review rules for instruction based on 3-5 school-wide positively stated rules

Examples might include:

- Ⓢ Be Safe - Keep hands and feet to self
- Ⓢ Be Respectful - When giving examples of things that have happened to you, rather than saying the names of others, say, "Someone I know..."
- Ⓢ Be Responsible - Practice what you learn when you are outside the classroom

Discuss what school-wide rules have to do with text messaging, emails, and other digital technologies

- Ⓢ Being Kind and Respectful means saying only nice things about other students, in your words as well as in your use of digital media.

Notes: _____

Cyber-Bullying

5

Notes:

Examples of NOT being respectful or kind to other students

- Repeatedly sending offensive, rude, or insulting emails and text messages
- Posting cruel gossip or rumors about a person to damage his or her reputation or friendships
- Sharing someone's secrets online

Review the Social Responsibility Skills (Stop/Walk/Talk)

Discuss the 3 steps for responding to Cyber-Bullying

- ④ Review the school-wide Stop/Walk/Talk signals (verbal and physical action) to be used when students use technology to be disrespectful to other students.
 - How can Stop/Walk/Talk be used when someone uses technology to be disrespectful or unkind to others?
 - Here, walking away may not be feasible, in which case, skipping to the talk step would be an appropriate response.

Group Practice

Break the class up into groups of 2, and have the students pass a piece of paper back and forth to one another, simulating digital media.

- ④ Instruct the students to practice using a "stop" signal when someone does something disrespectful using digital media. Also, students should practice how to respond when someone delivers a "stop" response to them.

Examples of replying to stop/walk/talk should include

- Responding appropriately even when you don't think you did anything wrong
- Responding appropriately even if you think the other student is just trying to get you in trouble

Inappropriate Remarks

5

Group Practice (Part 2)

- After 5 minutes of practicing in pairs, bring the class back together and discuss questions and comments that arose during practice

Next, separate class into groups of 4, with 1 person in each group acting as a supervisor, a target of cyber-bullying, an instigator, and a bystander. Here, have the students pass a piece of paper back and forth to simulate digital media messages.

- Instruct the students to practice the entire Stop/Walk/Talk sequence, how to reply when someone uses the "stop" signal with you, and how adults will respond to reports of Cyber-Bullying

When students report Cyber-Bullying to an adult

1. Adults will thank you for coming to them
2. They will ask you what the problem is
3. They will ask if you said "stop"
4. They will practice Stop/Walk/Talk

- Once students have completed an instructed practice scenario, then they may be allowed to practice a scenario that they have personally encountered.

Review Stop/Walk/Talk with Cyber-Bullying

- Test students orally on how they should respond to various situations that involve Cyber-Bullying
- Reward Students for their participation and Appropriate Behavior

Notes: _____

Supervising Behavior 6

Notes: _____

The Social Responsibility Skills (Stop/Walk/Talk)

It is very important that all staff are fluent with the 3 step response. Practice should include at least 3 correct examples and at least 2 non-examples (When not to use the 3-step response)

The Stop Signal

- How the stop signal should look and sound
 - Firm hand signal
 - Eye contact
 - Clear voice
- Practice modeling the stop signal for students that experience problem behavior *or* when they see other students experiencing problem behavior

Walk Away

Sometimes, even when students tell others to "stop", problem behavior will continue. When this happens, students are to "walk away" from the problem behavior.

- Practice modeling "walking away" when students experience continued problem behavior *or* when they see another student experiencing continued problem behavior
 - Staff should remind students that walking away removes the reinforcement for problem behavior
 - Teach students to encourage one another when they use the appropriate response

Talk: report problem to an adult

Even when students use "stop" and they "walk away" from the problem, sometimes students will continue to behave inappropriately toward them. When that happens, students should "talk" to an adult.

Faculty Follow-up

7

Bully Prevention

In Positive Behavior Support



Faculty Follow-up

Objectives:

- Introduction
- BP-PBS effectiveness survey
- BP-PBS decision making flow chart

Introduction

- No intervention is perfect, so it is critical that ongoing evaluations are conducted to determine the effectiveness of the intervention.
- Doing so provides for program adaptation and valued decision making, which can greatly improve potential student and staff outcomes. Within the faculty follow-up section, the BP-PBS program provides both a staff survey as well as a decision making flow chart. The staff survey can be filled out on a weekly, monthly, or even semiannual basis by the entire staff or by the PBS team, depending on the needs of the school and the concerns about problem behavior outside the classroom. The survey is simple to complete, including only 6 questions to be answered on a 1 to 5 scale. In addition, each question is directly related to the decision making flow chart. The flow chart points out adaptations that can be made in the program based on the answers that are given on the survey. Again, very simple to follow, the flow chart can assist in meaningful decisions that greatly impact the outcomes of the BP-PBS program.

Notes: _____

Bully Prevention

In Positive Behavior Support

Faculty Follow-up Survey

1. Are students able to identify our school-wide expectations?

No				Yes
1	2	3	4	5

2. Do students use the BP-PBS "stop" signal when appropriate?

No				Yes
1	2	3	4	5

3. Do faculty use the BP-PBS "pre-correct" routine when appropriate?

No				Yes
1	2	3	4	5

4. Do faculty use the BP-PBS "review" routine when appropriate?

No				Yes
1	2	3	4	5

5. To what extent do students perceive our school as a safe setting?

Not Safe				Very Safe
1	2	3	4	5

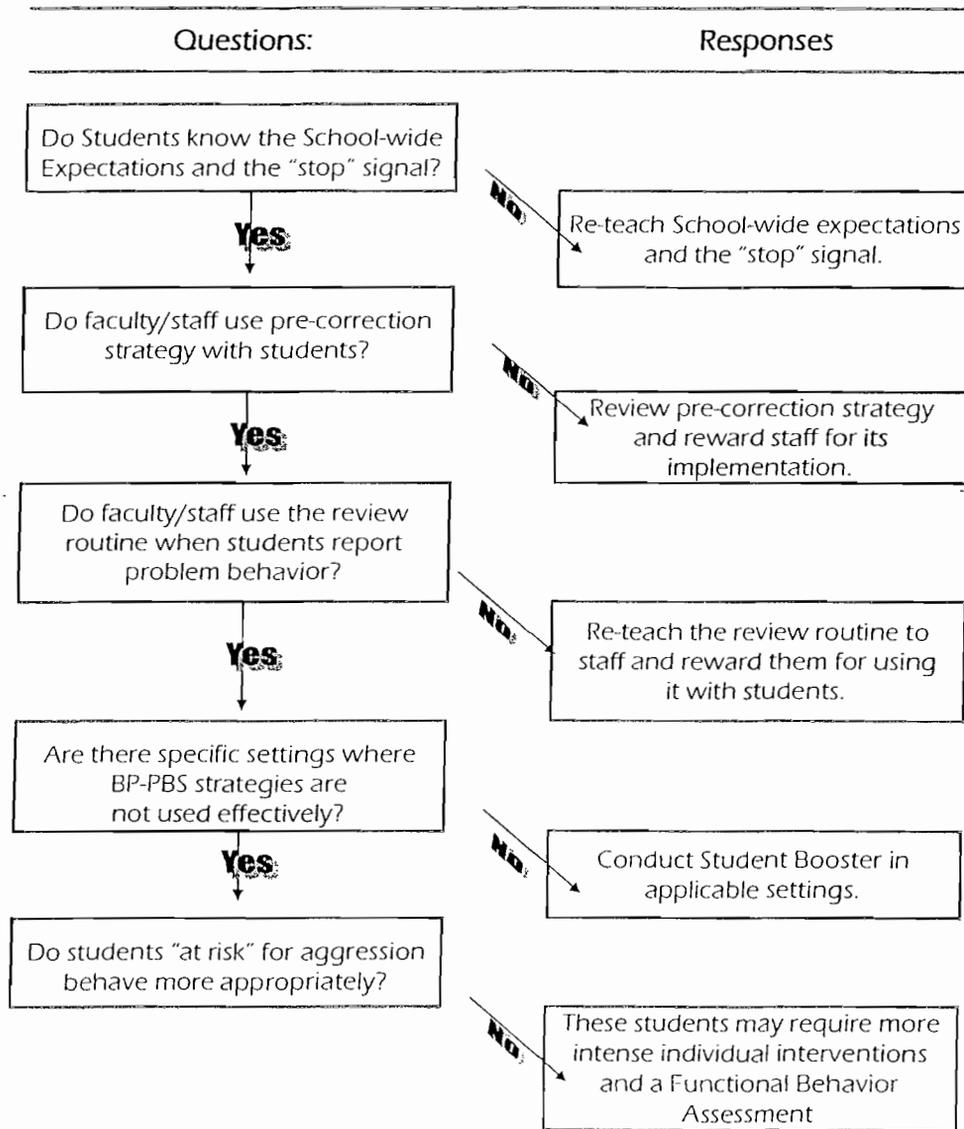
6. Has there been a decrease in aggression since we instituted BP-PBS?

No Decrease				Big Decrease
1	2	3	4	5

Bully Prevention

In Positive Behavior Support

Decision Making Flowchart



REFERENCES

- Alberto, P. A., & Troutman, A. C., (2003). *Applied behavior analysis for teachers* (6th ed.). Upper Saddle River, New Jersey; Merrill Prentice Hall. Upper Saddle River: New Jersey.
- Andreou, E. (2000). Bully/victim problems and their association with psychological constructs in 8 to 12 year old Greek schoolchildren. *Aggressive Behavior*, 26, 49-56.
- Baldry, A. C., & Farrington, D. P. (1998). Parenting influences on bullying and victimization, *Legal and Criminological Psychology*, 3, 237-254.
- Beale, A. V. (2001). Bullybusters: Using drama to empower students to take a stand against bullying behavior. *Professional School Counseling*, 4, 300-306.
- Berthold, K. A., & Hoover, J. H. (2000). Correlates of bullying and victimization among intermediate students in the Midwestern USA. *School Psychology International*, 21(1), 65-78.
- Bijou, S. W., & Baer, D. M. (1961). *Child development: vol. 1. A systematic and empirical theory*. New York: Appleton-Century-Crofts.
- Bijou, S. W., Peterson, R. F., & Ault, M. H. (1968). A method to integrate descriptive and experimental field studies at the level of data and empirical concepts. *Journal of Applied Behavioral Analysis*, 1, 175-191.
- Bully Police USA: A watch-dog organization advocating for bullied children and reporting on state anti bullying laws. Retrieved March 14, 2008, from <http://www.bullypolice.org>.
- Bullying. No Way! Australian school communities getting to the heart of the matter. Retrieved March 14, 2008, from <http://www.bullyingnoway.com.au/>
- Cameron, L., & Thorsborne, M. (2001). Restorative justice in school discipline: Mutually exclusive? In J. Braithwaite & H. Strang (Eds.), *Restorative justice and civil society* (pp. 180-194). Cambridge, England: Cambridge University Press.

- Carney, A. G., & Merrell, K. W. (2001). Bullying in schools: Perspectives on understanding and preventing an international problem. *School Psychology International, 22*, 364-382.
- Chard, D., Smith, S., & Sugai, G. (1992). "Packaged discipline programs: a consumer's guide", *Oregon Conference Monograph*, Eugene, OR: University of Oregon.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.) Hillsdale, NJ: Erlbaum.
- Colvin, G., & Kame'enui, E. J. (1993). Reconceptualizing behavior management and school-wide discipline in general education. *Education and Treatment of Children, 16*, 4, 361-81.
- Cornell, D. G., Sheras, P. L. & Cole, J. C. Assessment in Bullying. In Jimerson, S. R., & Furlong, M. J. (2006). *Handbook of school violence and school safety: from research to practice*. Mahwah, New Jersey; Lawrence Erlbaum.
- Crone, D. A. & Horner, R. H. (2003). *Building positive behavior support systems in schools: Functional behavioral assessment*. New York: Guilford Press.
- Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist, 54*, 755-764.
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P., & Currie, C. (2005). Bullying symptoms among school aged children: International comparative cross-sectional study in 28 countries. *European Journal of Public Health, 15*, 128-132.
- Espelage, D. L., & Swearer, S. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review, 23*, 365-383.
- Field, E. M. (1999). *Bully busting*. Lan Cove, NSW: Finch Publishing.
- Frey, K. S., Dietsch, B. J., Diaz, M., MacKenzie, E. P., Edstrom, L. V., Hirschstein, M. K., & Snell, J. L. (2004). *The student experience survey: What school is like for me*. Seattle, WA: Committee for Children.
- Furlong, M., Morrison, G., (2000). The school in school violence: definitions and facts. *Journal of Emotional and Behavioral Disorders, 8*, 2, 71-82.
- Gresham, F. M., & Elliott, S. N. (1990). *The social skills rating system (SSRS)*. Circle Pines, MN: AGS Publishing.

- Griffin, R. S., & Gross, A. M. (2004). Childhood bullying: Current empirical findings and future directions for research. *Aggression and Violent Behavior, 9*(4), 379-400.
- Hanewinkel, R. (2004). Prevention of bullying in German schools: An evaluation of an anti-bullying approach. In P.K. Smith, D. Pepler & K. Rigby (Eds.) *Bullying in schools: How successful can interventions be?* New York: Cambridge.
- Hartung, C. M., & Scambler, D. J., (2006) Dealing with bullying and victimization in schools. *Emotional & Behavioral Disorders in Youth, 77-80.*
- Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine, 153*, 226-234.
- Hawkins, J. D., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development, 10*, 512-527.
- Hawley, P. H. (1999). The ontogenesis of social dominance: a strategy-based evolutionary perspective. *Developmental Review, 19*, 97-132.
- Horner, R. H. (2000). Positive behavior supports. *Focus on Autism and Other Developmental Disabilities, 15*(2), 97-105.
- Horner, R.H., Sugai, G., Todd, A.W., & Lewis-Palmer, T. (2005). School-wide positive behavior support: An alternative approach to discipline in schools. In L. Bambara & L. Kern (Eds.). *Individualized supports for students with problem behavior: Designing positive behavior plans.* New York: Guilford Press.
- Jones, C. & Horner, R. H. *Embedding bully proofing in school-wide PBS.* Presentation delivered at the PBIS forum in Chicago, October, 2006.
- Lewis, T. J., Sugai, G., & Colvin, G. (1998). Reducing problem behavior through a school-wide system of effective behavioral support: Investigation of a school-wide social skills training program and contextual interventions. *School Psychology Review, 27*, 446-459.
- Limber, S. P., Maury, N., Allison, J., Tracy, T., Melton, G. B., & Flerx, V. (2004). Implementation of the Olweus Bullying Prevention Program in the southeastern United States. In P. K. Smith, D. Pepler, & K., Rigby (Eds.), *Bullying in schools: How successful can interventions be.* Cambridge, England: Cambridge University Press.

- Merrell, K., Gueldner, B., Ross, S. W., & Isava, D. (2008) How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, 23, 1, 26-42.
- Metzler, C.W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive behavior management program to improve school-wide positive behavior support. *Education and Treatment of Children*, 24, 448-479.
- Morrison, B. (2002). Bullying and victimization in schools: A restorative justice approach. *Trends and Issues*, 219.
- Mynard, H., & Joseph, S. (1997). Bully victim problems and their association with Eysenck's personality dimensions in 8 to 13 year olds. *British Journal of Educational Psychology*, 67, 51-54.
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simmons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *JAMA*, 285, 2094-2110.
- National School Safety Center (1995). School bullying and victimization. Malibu, CA.
- Newman, R. S., Murray, B., & Lussier, C. (2001). Confrontation with aggressive peers at school: Students' reluctance to seek help from the teacher. *Journal of Educational Psychology*, 91, 398-410.
- O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: insights and challenges for intervention. *Journal of Adolescence*, 22, 437-452.
- O'Connor, M., Foch, T., Todd, S., & Plomin, R. (1980). A twin study of specific behavioral problems of socialization as viewed by parents. *Journal of Abnormal Child Psychology*, 8, 189-199.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell Publishing.
- Olweus, D., Limber, S., & Mihalic, S. (1999). Bullying prevention program. In D. S. Elliott (Ed.), *Blueprints for violence prevention book nine* (pp. 1-79). Golden, CO: Venture Publishing and C & M Press.
- O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior*. Belmont, CA: Brooks/Cole.

- Ortega, R., Del Rey, R., & Mora-Merchan, J. (2004). Save model: an anti-bullying intervention in Spain. In P. K. Smith, D. Pepler, & K., Rigby (Eds.), *Bullying in schools: How successful can interventions be*. Cambridge, England: Cambridge University Press.
- Osher, D., & Dwyer, K. (2006). Safe, supportive, and effective schools: Promoting school success to reduce school violence. In Jimerson, S. R., & Furlong, M. J. (2006). *Handbook of school violence and school safety: From research to practice*. Lawrence Erlbaum, Mahwah, New Jersey.
- Parker, R. I., Hagan-Burke, S., & Vannest, K. (2007). Percentage of all non-overlapping data (PAND): An alternative to PND. *Journal of Special Education, 40*,4, 194-204.
- Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology, 20*, 259-280.
- Pepler, D.J., & Craig, W. M. (1995). A peek behind the fence: Naturalistic observations of aggressive children with remote audiovisual recording. *Developmental Psychology, 31*, 548-553.
- Pepler, D. J., Craig, W., Ziegler, S., & Charach, A. (1994). An evaluation of an anti-bullying intervention in Toronto schools. *Canadian Journal of Community Mental Health, 13*, 95-110.
- Repp, A. C., & Horner, R. H. (1999). *Functional Analysis of Problem Behavior: From Effective Assessment to Effective Support*. New York: The Guilford Press,
- Rigby, K. (2002). *New perspectives on bullying*. London: Jessica Kingsley.
- Rigby, K., (2006) What we can learn from evaluated studies of school-based programs to reduce bullying in schools. In Jimerson, S. R., & Furlong, M. J. (2006). *Handbook of school violence and school safety: From research to practice*. Mahwah, New Jersey: Lawrence Erlbaum.
- Rigby, K., Bagshaw, D. (2001) 'The Prevalence and Hurtfulness of Acts of Aggression from Peers Experienced by Australian Male and Female Adolescents at School', *Children Australia, 26*, 36-41.
- Roberts, W. B. (2000). The bully as victim. *Professional School Counseling, 4*, 148-156.
- Robinson, G., & Maines, B. (1997). *Crying for help – the no blame approach to bullying*. Bristol, England: Lucky Duck.

- Roland, E. (1993). Bullying: A developing tradition of research and management. In D. P. Tattum (Ed.), *Understanding and managing bullying* (pp. 15-30). Oxford, England: Heinemann Educational.
- Ross, S. W., Horner, R. H, Stiller, B. (2008). *Bully Prevention in Positive Behavior Support Manual*. Eugene, OR: University of Oregon.
- Salmivalli, C. (2002). Is there an age decline in victimization by peers at school? *Educational Research, 44*, 269-277.
- Schwartz, D., & Gorman, A. H. (2003). Community Violence Exposure and Children's Academic Functioning. *Journal of Educational Psychology, 95*, 163-73.
- Sprague, J. R. & Horner, R. H. (2006). Schoolwide Positive Behavior Supports. In S. R. Jimerson & M. J. Furlong (Eds.), *The handbook of school violence and school safety: From research to practice*. Mahway, NJ: Lawrence Erlbaum Associates.
- Slee, P. T., & Rigby, K. (1993). The relationship of Eysenck's personality factors and self-esteem to bully/victim behavior in Australian school boys. *Personality and Individual Differences, 14*, 371-373.
- Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behavior, 26*, 1-9.
- Smith, P. K., & Ananiadou, K. (2003). Interventions to reduce school bullying. *Canadian Journal of Psychiatry, 48*(9), 591-599.
- Smith, P. K., & Sharp, S. (Eds.) (1994). *School bullying: Insights and perspectives*. London: Routledge.
- Smokowski, P.R., & Kopasz, K. H. (2005). Bullying in school: An overview of types, effects, family characteristics, and intervention strategies. *Children and Schools, 27*, 101-110.
- Soutter, A., & McKenzie, A. (2000). The use and effects of anti-bullying and anti-harassment policies in Australian schools. *School Psychology International, 21*, 96-105.
- Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., Scott, T., Liaupsin, C., Sailor, W., Turnbull, A. P., Turnbull, H. R., Wickham, D., Wilcox, B. & Ruef, M. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2*, 131-143.

- Swearer, S. M., & Espelage, D. L. (2004). Bullying in American schools: A social-ecological perspective on prevention and intervention. *British Journal of Developmental Psychology, 23*, 2, 316.
- Todd, A. W., Lewis-Palmer, T., Horner, R. H., Sugai, G., Sampson, N. K., & Phillips, D. (2003). *The School-wide Evaluation Tool: SET implementation manual*. University of Oregon.
- Thorsborne, M., & Vinegrad, D. (2003). *Restorative practices in schools*. Geelong, Australia: Margaret Thorsborne and Associates.
- U.S. Department of Health and Human Services. (2001). *Youth violence: A report of the surgeon general*. Rockville, MD.
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional Behavior Disorders, 4*(4), 194-209.