A Pilot Study of the Bullies to Buddies Training Program

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In a national study of bullying, Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt (2001) found that 29.9% of sixth through tenth grade students in the United States report moderate to frequent involvement in bullying: 13% as bullies, 10.6% as victims, and 6.3% as both bullies and victims. Even if they are not chronically involved with bullying, research indicates that the majority of students will experience some form of victimization at least once during their school careers (Felix & McMahon, 2007).

Research has shown that students involved in bullying are at increased risk for negative outcomes throughout childhood and adulthood. Children who are the targets of bullying are more likely to experience loneliness and school avoidance than non-bullied students (Kochenderfer & Ladd, 1996; Nansel et al., 2001), have poor academic outcomes, and are at increased risk for mental health problems such as anxiety and suicidal ideation, which can persist into adulthood (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Kochenderfer & Ladd, 1996; Kumpulainen et al., 1998; Olweus, 1995; Rigby, 2000; Schwartz, Gorman, Nakamoto, & Tobin, 2005). Bullies also experience more negative outcomes than their peers; they are more likely to exhibit externalizing behaviors, conduct problems, and delinquency (Haynie et al., 2001; Nansel et al., 2001), are more likely to sexually harass peers, be physically aggressive with their dating partners, and be convicted of crimes in adulthood (Olweus, 1993; Pepler et al., 2006). Children who both bully and have been victimized experience the greatest risk for psychosocial and behavioral problems (Haynie et al., 2001). Even students who are not directly involved with bullying incidents as bullies, victims, or bully-victims can

experience negative outcomes, as chronic bullying within a school creates a negative school environment for all students (Jacobs, 2008).

The alarming prevalence of bullying in schools and the harmful consequences for all involved clearly signal the need for effective intervention. Many states have enacted bullying legislation and most schools have implemented some sort of program to address this growing problem (Limber & Small, 2003). Programs that address bullying in schools typically incorporate targeted and/or universal intervention components. Targeted interventions focus on changing the behaviors of specific groups of students, such as bullies or students who are at risk for becoming bullies. Universal interventions focus on training all members of the school community to react more effectively to bullying incidents as well as altering the school culture to be less accepting of bullying (Orpinas, Horne, & Staniszewski, 2003; Salmivalli, Kaukiainen, & Voeten, 2005). Many programs are modeled on the work of Norwegian researcher Dan Olweus, whose anti-bullying program incorporates both targeted and universal elements (Jacobs, 2008).

Despite the large-scale dissemination of these programs, their effectiveness has not been demonstrated on a consistent basis. For example, although the original report of outcomes of the Olweus program demonstrated a 50% reduction in student bullying behavior two years after implementation (Olweus, 1994), other studies using interventions replicating or modeled after the Olweus program have yielded mixed results (e.g. Bauer, Lozano, & Rivara, 2007). A meta-analysis by Smith, Schneider, Smith, & Ananiadou (2004) concluded that the majority of whole-school programs yielded non-significant outcomes on measures of self-reported victimization and bullying. A second meta-analysis, conducted by Merrell, Gueldner, Ross, and Isava (2008), also included

targeted interventions, and found that the majority of intervention outcomes evidenced no meaningful change in a positive or negative direction.

A less frequently utilized approach to bullying intervention is to empower victims to react more effectively to the bully. Research has revealed a number of characteristics and behaviors that put children at risk for victimization. Victims of bullying are more likely than non-victims to exhibit behavioral vulnerability (e.g. looking scared/weak), withdrawn and solitary behavior (e.g., talking very quietly), submissiveness, (e.g., giving up easily), and signs of distress (e.g., crying easily) (Fox and Boulton, 2005). In addition, they often lack friendships and positive relationships with classmates (Andreou, Vlachou, & Didaskalou, 2005; Nansel et al., 2001). Externalizing behaviors also may serve as antecedents for victimization. Research has demonstrated an association between relational aggression and peer rejection, such that engagement in relationally aggressive behavior (including retaliation) may lead to peer rejection, and rejected children may be more likely to engage in aggressive behavior (Kuppens, Grietens, Onghena, Michiels, & Subramanian, 2008). Not surprisingly, victims are likely to have low self-esteem and poor perceptions of their social competence (Andreou et al., 2005; Jankauskiene et al., 2008; Rodkins & Hodge, 2003). Gini, Pozzoli, Borghi, & Franzoni (2008) report that victims become less well-liked by peers with increasing age; that is, positive attitudes toward victims decrease over time, while negative attitudes toward victims (i.e., dislike for being "weak") increase. Ideally, intervention with victims should target both their behavior (submission, anger, distress, retaliation) and their perceptions of themselves as helpless victims, before attitudes and behavior become well-established.

Children who are victims of bullying typically believe that teacher intervention

will be effective in countering bullying behavior, and such intervention is a component of

most bullying prevention programs. However, research suggests that teachers under-

identify bullying behavior, and that, when students report bullying events to teachers,

bullying may increase (Smith & Shu, 2000). Although teacher intervention has been

shown to reduce bullying in some studies, such intervention must be timely and

consistent, and requires close supervision of students. Moreover, teachers' attitudes about

bullying have been shown to influence their willingness to intervene, as well as the skill

with which they do so (Kochendorfer-Ladd, & Pelletier, 2008). Thus, it is not always

possible – and, in some instances, may not be advisable – to rely on teacher intervention

as a means of managing the problem of bullying.

Additional support for targeting victims of bullying comes from research showing

that anti-bullying programs, in general, have been more successful in reducing the

proportion of children being bullied than the proportion of children bullying others. This

may be because victimized children are more motivated to learn behaviors and coping

strategies that will help prevent continued victimization than bullies who are likely

enjoying their current status (Rigby, 2004). Change in bullying behavior may follow

change in the behavior of victims, as bullying students with more adaptive coping skills

may lose its appeal.

Little research has been conducted to evaluate the effectiveness of interventions

designed specifically to target victims, rather than bullies or the school environment as a

whole (Fox & Boulton, 2003). The few programs targeting victims that have been

evaluated incorporate assertiveness training and/or social skills training to address the

risk factors of chronic victimization (Felix & Furlong, 2008; Rigby, 2004). *Assertiveness training* teaches victims to react less passively to bullies (Smith, Ananiadou, & Cowie, 2003). An example of an assertiveness program designed specifically for victims of bullying is the "Assertiveness Training Program" which was developed for the Sheffield Anti-Bullying Project. An evaluation of this program by Tonge (1992) revealed a statistically significant increase in victims' self-esteem as well as other positive outcomes including an increase in self-confidence and assertive behaviors and a decrease in reports of being bullied (as cited in Fox & Boulton, 2003, p. 233).

 Social skills training programs teach victims skills that will make them less obvious targets for bullies (Felix & Furlong, 2008). An example of a social skills program for victimized and at-risk children is the "Social Skills Group Intervention" developed by DeRosier and Marcus (2005). This program teaches students basic social skills and coping strategies, and resulted in increased social acceptance and self-esteem and lowered depression and anxiety for a group of third grade students (although several treatment effects were present for girls but not boys). Another social skills training program for victims of bullying is the "Social Skills Training Program" developed by Fox and Boulton (2003) which teaches victims to use social problem solving skills, relaxation skills, positive thinking, nonverbal behavior, and specific verbal strategies. An evaluation of this program revealed less positive results. The students participating in the program evidenced an increase in "global self-worth." However, there were no changes in victimization status or social skills problems.

 The limited research that has been conducted to date on programs that specifically target victims has yielded promising but mixed results. A comparison of research on

outcomes of the assertiveness training versus social skills training approaches suggests

that interventions should focus on strategies for coping with bullying incidents, rather

than on the development of overall social skills. There is a clear need for additional

outcome studies that examine the effectiveness of victim-focused intervention, so that

schools can determine whether this component should be included in anti-bullying efforts

(Pepler, Smith, & Rigby, 2004).

Although difficult to achieve in school settings, there is a particular need for

experimental studies in which random assignment to treatment and control groups is

employed. The meta-analysis reported by Smith, et al. (2004) featured fourteen studies,

of which eight employed control groups and only four utilized random assignment.

Merrell, et. al (2008) noted that, of the sixteen studies included in their meta-analysis,

only three employed true experimental designs. The remainder used quasi-experimental

or mixed designs. Methodological limitations of studies included in these meta-analyses

clearly indicate the need for outcome studies that employ stronger experimental designs.

Methodological limitations are particularly apparent in studies evaluating

programs designed specifically to target victims. Findings of research on the

"Assertiveness Training Program" (Tonge, 1992), and the assertiveness training program

evaluated by Arora (1992) cannot be attributed to program effects, nor can they be

generalized to other settings, due to methodological limitations including small sample

size and the absence of control groups (Fox & Boulton, 2003). The "Social Skills

Training Program" developed by Fox and Boulton (2003) did employ a waitlist control

group, but there was no random assignment of subjects to groups. Of the studies found in

a review of the literature on victim-focused programs, only one (DeRosier & Marcus, 2005) employed random assignment of children to treatment and control groups.

The present study was conducted to evaluate the impact of student training using an abbreviated version of the Bullies to Buddies program, developed by Israel Kalman (2005). The Bullies to Buddies Program (B2B) is a training intervention that teaches victims specific techniques that can be used to respond to bullying. These coping strategies help students avoid behaviors that are believed to contribute to continued victimization (retaliation, anger, reporting, resistance) and replace them with more socially adaptive responses. Through role plays consisting of examples and non-examples of appropriate strategies, students are taught to react to bullying calmly and with honesty (and even with humor and playfulness, if possible), instead of anger, defensiveness, and fear. The B2B program discourages victims from reporting bullying events to teachers, citing the need for them to develop a more effective repertoire of behaviors. It also discourages retaliation, which may precipitate the peer rejection that is associated with higher rates of victimization.

The study was designed to overcome the methodological problems associated with earlier studies through the use of a waitlist comparison group, as well as random assignment of classes to training or comparison groups. In addition, the training intervention did not target only so-called "victims" of bullying, but intact classrooms of children. According to Espelage and Swearer (2003), children may function at various times as bullies, victims, and bystanders, suggesting that many would benefit from a bullying intervention program focusing on victim responses. Moreover, research has shown that classwide implementation of interventions may lead to increased

generalization of newly-learned skills, and positively affect peer attitudes, two factors shown to be critical in bullying prevention (Fox & Bolton, 2003).

The fourth- and fifth-grade levels were selected because, by this age, students were assumed to have developed social competencies (such as perspective-taking) that would support their use of skills taught in the program; at the same time, because students had not yet reached pre-adolescence, the trajectory leading to peer disliking and rejection of victims might not yet have been established. In addition, based on reports of a peak in bullying at the sixth- through eighth-grade levels, intervention with fourth- and fifth-grade students was thought to be desirable as a preventive measure.

Method

Procedure

This study examined the effects of the Bullies to Buddies (B2B) bullying prevention program on 142 fourth- and fifth-grade students attending eleven schools in the Greater Cleveland, Ohio, area. Participating schools received professional services from PSI, a community-based educational service agency, including a series of optional prevention programs. Principals of thirteen schools receiving a prevention series (Dinero & Rosenberg, 2004) were asked to participate in a study examining the effectiveness of a specific approach to bullying prevention. Eleven principals agreed, and letters requesting parental consent and student assent were distributed. Students for whom either was denied or missing were not included in the study. PSI personnel were responsible for (1) enlisting schools to participate in the study; (2) distributing and collecting consent and assent forms; (3) training facilitators to deliver the B2B student training; (4) conducting the B2B training with students; and (5) coding, distributing, and then collecting, in an

envelope sealed by the teacher, completed survey materials at pretest and posttest.

Completed materials were hand-delivered in the original sealed envelopes to the research

team (headed by the first author) at Cleveland State University.

The entire B2B program includes teacher training in responding to student reports

of bullying (Kalman, 2007), as well as student training in responding to threats of

violence, stolen possessions, social exclusion, coercion to choose between friends, and

sibling rivalry (Kalman, 2005). For the present pilot study, only the student training was

conducted, and it consisted of three 45-minute lessons addressing common bullying

behaviors of spreading rumors, insults, and physical attacks. Facilitators received initial

training from Israel Kalman, the author of the B2B program, in two sessions, the first of

which focused on the overall philosophy and goals of the program, as well as skills that

would be taught to students. In a second training, lessons that would be taught to students

were modeled, including role plays that are a major feature of the training. In subsequent

sessions, the second author presented and modeled for facilitators the three lessons that

were to be taught to students. She observed facilitators presenting each lesson in practice

sessions, and provided feedback to ensure that lessons were delivered as designed.

Facilitators received detailed scripts for each lesson, and met periodically to review the

B2B sessions to monitor implementation integrity. (Manuals containing detailed scripts

for teacher and student training were made available by the author of the program.)

An alphabetically-ordered list of participating schools was created, and each

school (i.e., its fourth- or fifth-grade classroom) was assigned on an alternating basis to

either the participant or comparison group. (In three schools, two classrooms existed in

the same building at the fourth- or fifth-grade level, so both were designated to

participate, with one randomly assigned to the participation group, and one to the comparison group.) Pretests were administered to all students three weeks prior to the delivery of the B2B lessons to the participating classes. Posttests were administered to both participating and comparison classes within a one-week period following the delivery of the B2B lessons to the participating classes. The B2B lessons were presented to the comparison group classes at various times subsequent to the posttest; consequently, it was not possible to assess longer-term outcomes of the B2B training.

Participants

A total of 267 students participated in the study. The proportion of students receiving free and reduced lunches was not made available by schools, but three schools were located in urban areas; three in first-ring suburbs; four in suburbs; and one in a rural area. Forty-nine percent (n = 132) of the total sample were boys, and 51% (n = 135) were girls; 88% of students (n = 233) were of White/Caucasian ethnicity; 5% (n = 12), African-American; 4% (n = 10), Asian/Pacific Islanders; and 3% (n = 9), Hispanic. Because White/Caucasian students were over-represented in the sample as a whole, results may not be generalizable to non-White populations.

With respect to demographic characteristics, the participant (n = 142) and comparison groups (n = 125) were very similar (see Table 1); however, the participant group had a higher proportion of students of White/Caucasian ethnicity (90.8%, v. 83.2% in comparison group), coupled with a lower proportion of African-American students (1.4%, v. 8% in comparison group). Therefore, on this demographic dimension, the participant and comparison groups were not equivalent.

Instruments

Measures employed in this study included a teacher rating of victimization for each student ("On a scale from 1 to 9 [with a rating of "1" corresponding to low victimization, and "9" corresponding to high victimization], how would you rate this student in terms of the extent to which he or she has been a victim of bullying in recent months?") Ratings were later reversed for purposes of data analysis, resulting in a rating of "1" corresponding to high victimization, and "9" corresponding to low victimization.

Prior to the initiation of the B2B training with the participant group, students in both groups completed a survey in which they rated the frequency with which they had experienced bullying-related events; employed certain responses to bullying (if they had in fact experienced bullying); the degree to which they believed certain responses to be appropriate; and the frequency with which their teachers displayed certain behaviors in response to bullying events. The survey defined bullying as "called names, teased, excluded, threatened, gossiped about, etc." Items were designed to assess events and behaviors that are the focus of the B2B training (i.e., victim responses to bulling: "…in the past month, when kids called you names, threatened you, or made fun of you, about how often did you tell a teacher or other adult?; call them names back?; not care?").

A Principal Component Analysis employing Varimax rotation with Kaiser Normalization was conducted to estimate construct validity of the student survey (see Table 2). The analysis yielded a three-factor solution (eigenvalues greater than 2.0) at pretest (accounting for 35% of variance in responses) that was replicated at post-test (accounting for 38% of the variance in responses); this served as evidence of the stability of the survey's factor structure. The first factor, entitled "Victimization", with an initial eigenvalue of 5.36 at pretest and 6.28 at post-test (accounting for 16.2% and 19% of the

variance, respectively), was defined by items reporting experiences as a victim of

bullying, accompanied by a tendency to report incidents to the teacher or another adult.

The second factor, "Aggressive Response," with an initial eigenvalue of 3.96 at pretest

and 3.03 at post-test (accounting for 12% and 10.5% of the variance, respectively),

describes a tendency to respond to bullying with retaliation, and to engage in bullying-

related fights. The third factor was defined by items describing teacher reactions to

reports of bullying, which was not a focus of this study; therefore, data for this factor

(which explained an additional 7% and 9% of the variance at pretest and post-test,

respectively) are not included in Table 2. Survey factors were not employed as variables

in this study; instead, specific survey items representing phenomena of interest were

selected and employed as predictor (pretest) and dependent (posttest) variables.

Results

Participant and comparison group characteristics. An independent samples *t*-

test was conducted to determine whether there were differences between participant and

comparison groups at the time of pretest on teacher ratings of victimization. There were

no significant differences in teacher ratings of victimization between the participant

group (M = 2.10, S.D. = 1.40) and the comparison group (M = 2.07, S.D. = 1.50) (*df* =

298; *t* = .41). However, in both groups, ratings were negatively skewed; that is, teachers

assigned generally high ratings of victimization (see Table 1). It is possible that principals

who agreed to participate in the study were motivated by a perception of bullying as a

significant problem in their schools. The results of an independent samples *t*-test revealed

no differences between the participant and comparison groups at pretest in their reports of

bullying-related coping responses and beliefs about appropriate coping responses.

However, a significant difference between participant and comparison groups was found in pretest reports of having been threatened by peers, with students in the participant group reporting fewer instances ($df = 274$, $t = -2.68$, $p < .01$). Consequently, results of analyses employing this variable must be interpreted conservatively.

Gender Differences in Bullying-Related Phenomena

Preliminary analyses of pretest findings across both participant and comparison groups revealed some differences in variables as a function of gender. Boys were more likely to be rated as victims of bullying than were girls (relationship between gender and teacher victimization rating of $r = -.15$, $p < .01$). Girls were more likely than boys to report victimization in the form of "rumors spread" ($r = .15$, $p < .05$), while boys were more likely than girls to report that they "called names back" ($r = -.15$, $p < .05$) and "threatened to hit" ($r = -.22$, $p < .05$) in response to teasing or provocation by others.

Changes in reported bullying events, responses, and beliefs from pre- to post-test.

Table 3 presents results of paired-samples t-tests of the significance of differences between pretest and posttest reports of bullying-related events, responses, and beliefs about appropriate responses among students in the participant and comparison groups. Within the comparison group, no changes from pretest to posttest were reported in bullying-related phenomena of any kind. In contrast, students who participated in the B2B training reported a significant decrease in having had rumors spread about oneself, with a pretest mean score of 7.45 (SD = 2.13) and a posttest mean score of 7.75 (SD = 2.08); ($df = 142$, $t = -2.15$, $p < .05$). (A rating of 1 corresponded with "very often;" a rating of 9 corresponded with "never.") This finding was further explored through the more rigorous method of hierarchical regression analysis, where posttest reports of

rumors spread were predicted by pretest scores (entered into the equation first, due to their strong correlation with posttest scores), and by participation in the B2B training. Results indicated that participation in the training improved prediction of the frequency of "rumors spread" from pretest scores ($df = 1, 250; R^2 = .44; R^2$ change = .012, $p < .05$).

No change in other bullying-related events (threats, name-calling, fighting) was reported by participants, nor were there any changes in their reported behavioral responses to bullying. However, they did report changes in beliefs about appropriate responses to bullying. Specifically, beliefs about whether victims should tell adults about bullying events declined from pretest (M = 2.65, SD = 2.16) to posttest (M = 3.89, SD = 2.66); ($df = 141, t = -4.86, p < .001$). (A rating of 1 corresponded with "strongly agree;" a rating of 9 corresponded with "strongly disagree.") In addition, beliefs about whether victims should attempt to stop the bully's behavior decreased from a pretest mean rating of 2.42 (SD = 2.13) to a posttest mean of 3.65 ($df = 141, t = -4.99, p < .001$).

Difference in Changes in Beliefs about Appropriate Responses from Pretest to Posttest between Participant and Control Groups.

Further analysis was deemed necessary to link changes in student beliefs about appropriate coping responses to the B2B training. To control for strong pretest-posttest item correlation as well as item variance, hierarchical regression analyses were conducted to determine whether changes in beliefs were attributable to participation in the B2B training. In all analyses, pretest scores on survey items were entered into the equation first, followed by group membership (participant v. comparison).

Results are reported in Table 4. With respect to posttest beliefs about the appropriateness of telling an adult, telling the bully to stop, and "not being bothered" by

the bullying, participation in the B2B training explained an additional 3%, 3.4%, and

1.5% of the variance, respectively; all represented statistically significant improvements

in prediction over that afforded by pretest-posttest prediction only. The combination of

pretest-posttest and training participation explained 13.7%, 12.1%, and 7.8% of the total

variance in responses for each of these beliefs, respectively. However, participation in the

B2B training did not improve the prediction of posttest scores on the appropriateness of

retaliation, where only pretest scores served as significant predictors of posttest scores.

**Relationship between changes in reports of bullying events, responses, and beliefs
and teacher-rated victimization among B2B-trained students.** Because of its focus on

bullying victims, the B2B training might be expected to have a more significant impact

on victims than on bullies or bystanders. Pearson product-moment correlations were

calculated to determine whether teacher-rated victimization was related to change from

pre-test to post-test in student-reported bullying-related events, responses, and beliefs

about appropriate responses to bullying. Results are presented in Table 5. Among trained

students, teacher-rated victimization was related to changes in students' *reports of*

bullying-related events. That is, students who were rated by teachers as more frequent

victims reported a significant decrease in reports of being "called names" ($r = -.22$, $p <$

.01) and being "in trouble for fighting" ($r = -.26$, $p < .01$). Victimization ratings were not

related to changes in trained students' reports of threats or rumors.

With respect to changes in trained students' *reports of their responses to incidents*

of bullying, teacher-rated victimization was related only to changes in reports of "calling

names back" as a form of retaliation ($r = -.26$, $p < .01$); students rated by teachers as more

frequent victims reported an increase in this response. Victimization ratings were

unrelated to changes in trained students' reports of bullying responses of telling an adult, telling the bully to stop, or not being bothered by the bullying event.

However, changes in trained students' *reports of their beliefs about appropriate responses to bullying* were related to teacher-rated victimization for "should call names back" and "shouldn't bother me." Following training, students rated as more frequent victims of bullying were less likely to endorse the appropriateness of calling names back ($r = -.26$, p < .01), despite self-reported increases in this response, and more likely to endorse the belief that they shouldn't be bothered or upset when bullied ($r = .19$, p < .05). However, teacher-rated victimization was not related to changes in trained students' endorsement of "telling an adult" and "telling the bully to stop".

Results of the hierarchical regression analyses presented in Table 4 demonstrate that, while participation in the B2B training predicted various outcomes at posttest, teacher-rated victimization did not improve prediction. Thus, bullying victims did not differ from non-victims in the extent to which they changed beliefs about the appropriateness of various coping responses as a result of the B2B training.

Discussion

The Bullies to Buddies (B2B) bullying prevention program seeks to alter the behavior of bullying victims by teaching them to refrain from actions that reinforce the bullying behavior – such as getting angry, retaliating, and reporting to adults. In B2B, victims learn that, while they do not invite or cause bullies to behave as they do (i.e., bullying is not their fault), their reactions can perpetuate, and even exacerbate, bullying behavior. Victims are taught to respond to bullying calmly, and to avoid getting angry, retaliating, or reporting the bully to a teacher or other adult (unless the bullying is

physically injurious or extreme; this, and other exceptions to recommended non-resistance, are explored in detail in the student and teacher trainings). The overriding theme of recommended bullying responses is to avoid treating the bully as an enemy, and instead employ a calm and even friendly response when bullying is initiated. Students assume roles of both bully and victim in repeated role plays, so they can observe how a calm response to a bullying episode when it is first initiated can interrupt the typical sequence of escalation, leading many bullies to stop the bullying behavior.

Because it promotes behavior change, the B2B program is vulnerable to the same problems that have long been associated with social skills training, especially generalization of newly-learned behaviors. Although the profile of victims as socially unskilled, displaying inadequate and sometimes inappropriate behavior (Andreou, Vlachou, & Didaskalou, 2005; Fox and Boulton, 2005; Nansel et al., 2001), suggests that they may not easily learn to do so, victims are encouraged to respond playfully and paradoxically to bullying – including, in some instances, agreeing with and even exaggerating the bully's derogatory comments .

Several important findings emerged in this study. With respect to bullying *events*, fourth- and fifth-grade students who participated in the B2B training reported significant decreases in having had rumors spread about them, and this outcome was a result of participation in the B2B training (i.e., no decrease was reported by the comparison group). Fox and Boulton (2003) suggested that reductions in bullying following whole-class interventions were a result of increased awareness and disapproval of bullying behavior. In any event, in view of the limited dosage of the B2B training employed in this study, any change in the frequency or severity of bullying behavior is noteworthy.

Results showing no change in reported coping *behaviors* among trained students were consistent with the findings of a meta-analysis conducted by Merrell, et. al (2008), where the authors noted that successful bullying prevention programs more often result in changes in knowledge, attitudes, and self-perceptions about bullying than in documented changes in behavior. A central premise of the B2B program is that common responses to bullying, such as reporting to adults, telling the bully to stop, and retaliation serve only to exacerbate the problem, and these responses should be curtailed. In this study, the B2B training was successful in changing student *beliefs* about the appropriateness of these responses; in comparison to the waitlist group, at posttest, trained students reported that victims should not report to adults or tell the bully to stop, and they more strongly endorsed the notion that victims should not be bothered by bullying. Changing beliefs about appropriate responses, and even engaging in recommended responses, has not been demonstrated to result in an actual reduction of bullying behavior, however, and research to establish this relationship is essential.

It is possible that, in a more extensive version of the B2B training which includes additional opportunities for skill practice, monitoring (and prompting) of skill use, and followup evaluation, corresponding changes in behavior might occur. However, evidence that the behavior change recommended by the B2B program is itself responsible for a reduction in bullying will be required in order to fully establish the program's effectiveness.

Outcomes reported by students rated by teachers as more frequent victims of bullying are of particular interest, since B2B is designed to foster more effective responses among victims. Analysis of the degree of change in events, coping behaviors, and outcomes

reported by victims at posttest revealed that, among students who participated in the B2B training, children who are more frequent victims reported greater change (reduction) than non-victims in being called names and being involved in fights. In addition, victims reported greater change in beliefs that they should retaliate (reduction), and that they shouldn't be bothered by bullying (increase).

Findings of this study are noteworthy for several reasons, including the fact that a significant change in one especially problematic form of bullying – spreading rumors – was reported by students, and this change was explained by participation in the B2B training. Thus, although the program is targeted to bullying victims, exposing an entire class to the B2B training (as occurred in this study), at minimum, might be expected to raise awareness about, and discourage, at least some forms of bullying. However, because of methodological limitations, it is not known whether studies of other classwide bullying prevention programs demonstrate a similar effect – that is, whether exposure to *any* classwide program might have the same impact. A second noteworthy aspect of this study was its use of an experimental design in which classes of students were randomly assigned to either participant or comparison (wait-list) conditions; as noted earlier, few studies of bullying prevention programs have employed experimental methodology.

Several limitations of the study should be noted, especially the abbreviated nature and minimal dosage of the B2B intervention. As designed by the author, the B2B program includes both a teacher training component (encouraging teachers to adopt different responses to reports of bullying incidents) and a student training component. In this study, only the student training component was employed, and it was of limited duration (three 45-minute sessions). A second limitation was the self-report measurement of

bullying events and student use of the coping behaviors recommended in the B2B training; direct measurement of both phenomena (as well as monitoring of the integrity of coping behaviors) would provide a more objective and useful index of program effects. Because actual use of coping behavior was not measured, it is not possible to determine whether outcomes were the result of students' simply having experienced a(ny) bullying prevention training, the philosophy and knowledge imparted to all children by the B2B program, or the impact of the B2B training on the attitudes and behavior of victims.

Methodological limitations of the study included a sample in which children of color were under-represented, and the fact that classes – not children – were randomly assigned to participant v. comparison groups (although there is no reason to believe there was a systematic difference between classes in the characteristics or behavior of students). A final methodological concern is related to the tendency of teachers to assign relatively high ratings of victimization to most students. This may have occurred because it is an accurate depiction of the school populations included in this study, or because of inordinately broad definitions of "bullying." In any case, it created a restricted range of victimization ratings, which may have affected statistical analyses and their results.

Future research on the B2B program should employ objective measures of bullying and coping responses, and designs should provide for more extensive training and followup, as well as a method to monitor the use of recommended behavioral strategies by students. Thus, the use of B2B strategies by students, rather than their participation in a training (as was the case in this pilot study), would serve as an independent variable whose effectiveness can be more accurately assessed.

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    193 – 212.

Table 1. Comparison of participant and comparison groups on demographic
characteristics.

	Group	
Demographic Characteristic	Participant (n = 142)	Comparison (n = 125)
Gender		
Male	52.1% (74)	53.6% (67)
Female	47.9% (68)	46.4% (67)
Race/Ethnicity		
White/Caucasian	90.8% (68)	83.2% (104)
African-American	1.4% (2)	8.0% (10)
Asian/Pacific Islander	4.2% (6)	3.2% (4)
Hispanic/Non-White	3.5% (5)	3.2% (4)
Teacher-Rated Victimization[a]	$\underline{M}$ = 2.10 (S.D. = 1.40)	$\underline{M}$ = 2.07 (S.D. = 1.50)

[a]Note: Rating scale range of 1 (very frequently a bully victim) – 9 (never a bully victim).

Table 2. Item loadings on student survey factors 1 and 2.

Item	Factor 1 Pretest	Factor 1 Posttest	Factor 2 Pretest	Factor 2 Posttest
I get bullied.	.85	.87		
Others see me as bullying victim.	.78	.84		
I am called names.	.78	.80		
I am threatened.	.74	.68		
Rumors are spread about me.	.73	.75		
Bullying is a real problem here.	.58	.60		
When bullied, I tell the teacher.	.43	.55		
When bullied, I tell the bully to stop.	.37	.41		
Victims should call names back.			.75	.39
When bullied, I call names back.			.75	.53
When bullied, I threaten to hit.			.74	.80
I'm a bully.			.71	.68
I get in trouble for fighting, threatening, calling names, or spreading rumors.			.71	.76
Victims should threaten to hit bullies.			.66	.60
Others see me as a bully.			.50	.68