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Evaluation of a Bullying Prevention Program

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Abstract. In order to address the federal "No Child Left Behind" Act, the state of Oklahoma required that all public schools address the problem of bullying. Although numerous anti-bullying programs exist, few have been evaluated to determine their effectiveness. The present study evaluated the effectiveness of one such program, "Bullyproof," in a sample of elementary students in a southwestern U.S. urban school district. The evaluation included tracking the frequency of observed bullying and attitudes toward bullying from pre-program to 5 months post-program. The study also included an assessment of participants' satisfaction with the program. At 5 months post-program, results indicated little change in frequency of observed bullying behaviors, although attitudes changed significantly toward an increased anti-bullying perspective and greater perceived power to intervene in bullying. Overall, participants rated the evaluation positively. Implications for future research efforts and programmatic efforts are discussed.

Bullying, or peer-victimization, is a facet of school violence that is often overlooked. Researchers, teachers, administrators, and policymakers, as well as the lay public, lent increased attention and resources to this problem following numerous school shootings in the past decade and their alleged connection to bullying. As a result of this attention, numerous prevention programs were developed to reduce the prevalence of bullying and to modify attitudes that allow this behavior to continue. Despite the proliferation of prevention programs, the effectiveness of such programs is essentially unknown, as evaluations are rarely conducted.

Bullying is often subsumed under the general aggression literature, in which specific features have been examined. Research suggests that bullying appears to occur by either reactive (angry, reaction to frustration) or proactive (instrumental and reinforced by achieving external rewards) aggression (Salmivalli & Nieminen, 2002). Bullying may occur in a number of modalities and across socioeconomic and ethnic boundaries (Dupper & Meyer-Adams, 2002). Regardless of the underlying motivation for aggressiveness, bullying can consist of various direct behaviors, such as teasing, taunting, threatening, hitting, stealing, and other physical behaviors (e.g., kicking, punching), as well as indirect or relational behaviors, such as causing a student to be socially isolated or spreading rumors (Smith & Sharp, 1994). Research demonstrates that while girls typically employ relational bullying, boys tend to engage in physical bullying (see Hoover, Oliver, & Hazler, 1992). Although bullying is defined in numerous ways, one common characteristic across definitions is the presence of a power differential, which was first described by Olweus (1990). That is, bullying occurs when there is an "imbalance in strength" and the student being harassed

has difficulty defending him/herself against the harasser(s) (Olweus, 1997, p. 496). For the purposes of this paper, bullying will be considered the experience of physical or mental abuse, in which a power differential exists between students.

Prevalence rates of bullying victimization in Europe and Australia are roughly similar across studies, generally ranging from 7-22 percent. In a large-scale, longitudinal Norwegian study (*N*=130,000) that began in the 1970s, approximately 15 percent of students, ages 7 to 16, reported being involved in bullying, either as bullies (7 percent) or victims (9 percent) (Olweus, 1991). Findings are similar in other European studies, in which prevalence rates for victims of bullying have ranged from 16 to 22 percent (Austin & Joseph, 1996; Pintabona, 2002). Reported prevalence rates from the United States are variable across studies, depending upon methodology and definition of bullying used. For example, Batsche and Knoff (1994) reported that 15-20 percent of all U.S. students can be characterized as victims. Another study, which surveyed urban, suburban, and rural environments, showed that 7-8 percent of children were victims of bullying in each location (Hazler, 1996). However, Hoover, Oliver, and Hazler (1992) found that approximately 75 percent of their sample retrospectively characterized themselves as victims. This incidence may have been a result of methodology, in which they included all participants who answered affirmatively to the general question, "Have you ever been bullied during your school years?" U.S. statistics also suggest that bullying behaviors appear to peak in younger children, particularly during the middle school years, after which the behaviors generally decline with age (Batsche & Knoff, 1994).

Research indicates that bullying may have a significant negative impact on victims. Pintabona (2002) screened 1,968 fourth-graders across 29 schools in Western Australia and found that 16.5 percent reported frequent bullying. Twenty-nine percent of the victims suffered clinical levels of depression, and 20 percent suffered clinical levels of anxiety. Other studies found that depression and anxiety are significantly associated with victimization, even after adjusting for social support, gender, and other demographic factors (Bond, Carlin, Thomas, Rubin, & Patton, 2001; see also Hawker & Boulton, 2000). Hoover, Oliver, and Hazler (1992) reported that 90 percent of students who were bullied experienced a drop in school grades, conceivably because students are unable to concentrate on their work when they are being harassed (Hazler, 1994). Other long-term effects of bullying include truancy, dropping out of school, difficulties with psychosocial and interpersonal relationships, loss of self-esteem, and feelings of isolation (Hawker & Boulton, 2000). The longitudinal course of these problems is relatively unknown; however, it is likely that some of the interpersonal and self-esteem deficiencies may last into adulthood (Hoover et al., 1992).

Due to the prevalence and detrimental effects of bullying, prevention programs have been implemented globally. Much of the research regarding prevention has been conducted in Europe and Australia. One of the first attempts to understand bullying as an epidemic and its resulting effects was Olweus's landmark Scandinavian study, which began in the 1970s and included a prevention program as part of the national anti-bullying campaign (Olweus, 1999). The program was implemented at four levels: general level, school level, class level, and an individual level. The general level included increasing teacher and administrator awareness of the bullying problem. Measures taken at the school level included increased supervision during breaks, a school conference day, and formation of a coordination group that planned school-wide anti-bullying activities. Class-level activities included creating class rules against bullying and holding regular class meetings and PTA meetings. Interventions at the individual level included talking with bullies and victims, as well as their parents. Students involved in this project

were followed for 2.5 years. Results from the program study showed a 50 percent reduction in bullying behaviors, according to the Olweus Bully/Victim Questionnaire (Olweus, 1983), up to 20 months after the program was implemented. The results did not vary significantly by gender or grade. Results also showed that students' satisfaction with school life increased, including a more positive attitude toward social relationships and schoolwork (Olweus, 1997). However, changes regarding attitudes about bullying were statistically weak and inconsistent (Olweus, 1991).

Only one study has attempted to replicate Olweus's findings on a large-scale level. The Sheffield Project, conducted in Sheffield, England, was an anti-bullying project funded by the Department for Education and Employment (Smith, 1999). Twenty-three schools participated over an 18-month period; approximately only 12 schools, however, made "good" progress through all the stages of intervention (Smith, 1999, p. 81). Overall results of the Sheffield project suggested a 46 percent reduction in bullying behavior, approximately 30 percent of which was accounted for by the intervention (students being a year older at the end of the project accounted for approximately 15 percent of the reduction) (Smith, 1999). Further examination revealed a 32 percent increase in the number of students who told a teacher when they were bullied and a 38 percent increase in the number of bullies who reported that someone had spoken to them about their behavior (Smith, 1999). Attitudes toward bullying and satisfaction with school life were not assessed.

Surprisingly, few studies of bullying, particularly on the effectiveness of bullying prevention programs, have been conducted in the United States. Although several prevention programs have been developed and implemented by clinicians, administrators, counselors, and teachers, this often occurs in absence of evaluation. Recently, however, the U.S. government has devoted some attention to the problem of bullying in schools. As a product of the "No Child Left Behind" federal bill passed in the United States, Oklahoma state legislature implemented the "School Bullying Prevention Act" (2002). This law stated that all Oklahoma public schools would be required to address bullying problems in school, particularly to implement a comprehensive bullying prevention program. Several state-approved prevention programs were listed on the bill, and administrators and counselors were to implement one of those listed as their representative program. The current study was an initial evaluation of the prevention program, "Bullyproof," as implemented in a midwestern elementary school, and enacted under the "School Bullying Prevention Act [2002]" (Stein, 1996). Three main hypotheses were evaluated in the present study: 1) frequency of reported observed bullying behaviors would decrease following the prevention program, 2) anti-bullying attitudes and feelings of responsibility for bullying behaviors would increase following the program, and 3) pro-bullying attitudes would decrease following the prevention program. The authors also assessed whether participants viewed the program as being useful in reducing bullying in their school.

Method

Participants

The present study was conducted at a public elementary school, in a mid-sized, urban city located in the southwestern United States. At the time of the study, the school had a population of 367 students, partitioned into 32 classes ranging from pre-kindergarten to 5th grade. According to the 2002-03 census, the school ethnic population was 86 percent African American, 9 percent white, 2 percent American Indian, 2 percent Hispanic, and 1 percent Asian American; 66 percent of the students at the site received free or reduced-price lunch; and the attendance rate was approximately 95 percent.

Ninety-eight 4th- (2 classrooms) and 5th- (3 classrooms) graders participated in the study. The mean class size was 19.6 students per class. The students ranged from

9-12 years of age, with 49 girls and 49 boys. Although participation in the program was voluntary, all students participated who were present on the days the pre- and five-month follow-up program surveys were administered. Informed consent was not obtained because the program was required by the school administration. Thirty-nine girls and 38 boys completed both pre- and follow-up program surveys, and only these will be used in analyses assessing between-group differences. Of these students, 86.9 percent were African American, 8.2 percent were white, 3.3 percent were Hispanic, and 1.6 percent were Native American. Because an evaluation portion was provided in the questionnaire only at post-program administration, all data provided for the evaluation section will be used (n = 67).

The Program

The "Bullyproof" program was selected based upon the availability, duration, and grade-appropriateness (specifically for 4th- and 5th-graders) of the program (Stein, 1996). Nan Stein, Ed.D., developed "Bullyproof" in 1996, at the Wellesley College Center for Research on Women. It includes 11 "lessons," cross-referenced activities by topic, several handouts for students to complete as a group and as homework, and background notes for the instructor. It also includes several resource references on bullying. The program was designed to educate students on the different roles that exist in bullying situations. "Bullyproof" focuses on preventing bullying behaviors, increasing assertiveness of victims, and broadening a sense of responsibility to include bystanders. Each weekly lesson plan was sent to the site principal for approval. The lesson on sexual harassment was revised, at the direction of the principal, because it was perceived to introduce graphic sexual content that might be upsetting to the students and was not deemed as age-appropriate. The lesson involved a boy who was stripped in the locker room and tied to a pole. The story was modified to involve a boy whose head was shaved, rather than being stripped. The other story in the lesson that was revised involved a girl who was developing faster than her peers and was ridiculed and called derogatory names. This was altered to the girl being ridiculed for her tall height.

Procedure

The initial survey was administered before the program began in September 2002. Each program session lasted approximately 45 minutes and was conducted once a week by the school guidance counselor, for 11 consecutive weeks. The follow-up program survey was administered 5 months after the last program session, at the end of the academic school year.

Definition of Bullying

In order to reduce the chance of subjective interpretation of bullying, the program administrator verbally provided a definition at the beginning of both pre- and post-program surveys:

> One child being exposed repeatedly to harassment and attacks from one or several other children. Harassment and attacks may be, for example, shoving or hitting another, calling him/her names or making jokes about him/her outside the group, taking his/her things, or any other behavior meant to hurt another. It is not bullying when two students with equal strength or equal power have a fight, or when someone is occasionally teased. It is bullying when the feelings of one and the same student are intentionally and repeatedly hurt. (Salmivalli, 2001, p. 269)

Measures

The measure used was a paper-and-pencil questionnaire designed by the first author and modeled after a questionnaire designed by Salmivalli (2001). Some of the language was modified to be easily understandable for the intended audience. The questionnaires also were verbally directed in order to reduce confounds due to reading ability and/or comprehension. The measure was split into four sections: self- and peer-nomi-

nations of bullying, frequency of bullying, attitudes toward bullying behaviors, and an evaluation of the program.

Self- and Peer-Nominations of Bullying
Students were asked to write down the names of bullies and victims in their class. They were also asked to write their own names if they felt they were bullies or victims of bullying. Students were reminded that only the investigators would see their answers, and assured that their confidentiality would be respected.

Frequency
Four questions assessed the frequency of different types of bullying students had observed in their class over the past two weeks. These included physical altercations (i.e., hitting, pushing), verbal threats (i.e., name-calling, ridiculing), indirect/relational bullying (i.e., leaving someone outside the group, spreading rumors), and physical attacks on property (i.e., breaking someone's property). The questions were evaluated on a 4-point Likert-scale rating system (i.e., 0 = not at all to 3 =

Table 1
Types of Bullying Observed by Students

Please circle the one number that is most appropriate for the types of bullying (physical, verbal, indirect, and attacks on property) you have observed in your class during the last two weeks:

	0 = not at all	1 = sometimes	2 = most of the time	3 = constantly
Hitting, pushing, kicking	0	1	2	3
Name-calling, ridiculing	0	1	2	3
Leaving outside the group, gossiping behind the person's back	0	1	2	3
Taking, breaking or hiding things that belong to another (a single item)	0	1	2	3

Table 2
Attitudes Toward Bullying

Please circle the one number that is most appropriate for how much you agree or disagree with the following statements:

	0 = strongly disagree	1 = disagree	2 = agree	3 = strongly agree
The bullied victims should be helped	0	1	2	3
Bullying is stupid	0	1	2	3
Bullying may be fun	0	1	2	3
It is the victim's fault that they are bullied	0	1	2	3
I can have an effect on whether or not there is bullying in my class	0	1	2	3
It is not my business to do something about bullying	0	1	2	3

constantly). A composite frequency score was calculated for all students by summing responses to all frequency questions. The possible range for the frequency composite was 0-12. Cronbach's alpha for the present study was .72. Table 1 shows the frequency of bullying questions.

Attitudes Towards Bullying

Students also were asked to evaluate, on a 4-point, Likert-rating scale, their attitudes toward bullying. The six items were divided into separate factors, which reflected *pro-bullying attitudes, anti-bullying attitudes, power attitudes,* and *responsibility attitudes*. Pro-bullying attitudes consisted of such items as, "Bullying may be fun sometimes"; anti-bullying attitudes consisted of such items as, "Bullying is stupid"; the power attitudes item was, "I can have an effect on whether or not there is bullying in my class"; and the responsibility attitude item was, "It is not my business to do anything about bullying" (Salmivalli, 2001). The responsibility item was recoded so that higher scores reflected greater perceived responsibility. The power and responsibility items were initially grouped together as per Salmivalli (2001); in the present study, however, the items appeared to be assessing separate constructs, and thus were examined independently. Table 2 shows the attitudes towards bullying items.

Evaluation by Students

Some researchers suggest that including students' opinions concerning bullying in their school and intervention strategies will increase the possibility for program success (Batsche & Knoff, 1994; Salmivalli, 2001). Thus, data were collected at follow-up regarding how students felt about the program and its usefulness. Students were asked to evaluate 10 statements along a four-point Likert-scale (0 = strongly disagree, 1 = disagree, 2 = agree, 3 = strongly agree). Statements that provided a positive evaluation of the program included such items as, "Learning about bullying was beneficial." Items that provided a negative evaluation of the program included "Learning about bullying was useless" and "Learning about bullying was anxiety-provoking and embarrassing." Items that reflected a negative evaluation of the program were reverse-coded. Each student's score on the evaluation statements was summed, creating a composite, where a high score reflected a positive evaluation of the prevention program. Table 3 presents the evaluation items.

Results

Self- and Peer-Nominations of Bullying

For the entire sample, 35 percent (n = 34) were named as victims by self- and peer-reported nominations. Eleven percent (n = 11) were named as bullies, and 5 percent (n = 5) were named as both victims and bullies.

Frequency of Bullying

Participants reported a significant amount of bullying behaviors in the previous two weeks. The following were reported observed at least sometimes: 81 percent hitting, pushing, and kicking; 85 percent name-calling and ridiculing; 81 percent leaving someone outside the group and gossiping behind the person's back; and 65 percent taking, breaking, or hiding things that belong to another. Independent sample t-tests were employed to assess potential differences in observed bullying by gender and grade. No significant differences were found by grade or gender. A repeated measures analysis was conducted to determine whether the overall frequency of observed bullying changed over the course of the study. Results indicated that frequency did not significantly change, $F(1, 60) = 2.49$, *ns,* from pre-program (M = 5.16; SD = 3.12) to post-program (M = 5.98; SD = 2.55). Due to the lack of significant pre-program differences, an analysis of covariance was conducted to determine the effect of grade and gender on the follow-up frequency of bullying scores when controlling for pre-program scores. ANCOVA results (see Table 4) indicate no significant effects for the covariate, grade, or gender.

Attitudes Toward Bullying

Overall, the majority of students reported significant anti-bullying attitudes prior to the program. Eighty percent agreed or strongly agreed that bullied victims should be helped and 75 percent agreed or strongly agreed that bullying is stupid. Fifteen percent agreed or strongly agreed that bullying may be fun, while 28 percent agreed or strongly agreed that the victim is at fault when he or she is bullied. Students were more ambivalent about their efficacy in and responsibility for intervening in bullying. Forty-five percent of students agreed or strongly agreed that they could have an effect on whether or not there is bullying in their class, and 46 percent agreed or strongly agreed that it was their business to do something about bullying.

Independent sample t-tests were employed to assess potential differences in bullying attitudes by gender and grade (see Table 5 for means, standard deviations, and statistic information). Significant gender differences were found for pre-intervention anti-bullying attitudes ($t(81) = 2.04$, $p < .05$) and post-intervention anti-bullying attitudes ($t(76) = 3.24$, $p < .01$), in that girls reported higher anti-bullying attitudes than boys. A significant difference by grade was found for the post-intervention power item ($t(39) = 2.41$, $p < .05$), in that 4th-graders reported greater perceived power than 5th-graders.

Pairwise t-tests were conducted on the attitude items overall and then by individual gender and grade to determine attitudinal differences from pre- to post-intervention.

Table 3
Evaluation

Please circle the one number that is most appropriate for how much you agree or disagree with the following statements:

	0 = strongly disagree	1 = disagree	2 = agree	3 = strongly agree
The information I received on bullying was necessary	0	1	2	3
I started to think differently about bullying	0	1	2	3
Learning about bullying was beneficial	0	1	2	3
Bullying in class went down after learning more about it	0	1	2	3
Learning about bullying was useless	0	1	2	3
It is not my business to do something about bullying	0	1	2	3
Learning about bullying made the atmosphere in class better	0	1	2	3
Learning about bullying was anxiety-provoking and embarrassing	0	1	2	3
Learning about bullying made me think	0	1	2	3
The situation and feelings of the persons who were targets of bullying only got worse after the campaign	0	1	2	3

Table 4
ANCOVA Results for Frequency of Bullying From Pre- to Post-Program With Pre-Program Scores as Covariate

Variable	Pre-Program		Post-Program		ANCOVA	
	M	*SD*	*M*	*SD*	*F* (1, 60)	η^2
Grade					0.78	.014
4th grade	6.13	2.98	5.50	2.54		
5th grade	4.89	3.21	5.93	2.76		
Gender					0.08	.001
Boys	5.55	3.13	5.21	2.60		
Girls	5.20	3.22	6.25	2.64		

Table 5
Pre/Post Results for Bullying Attitudes by Gender and Grade

Attitude Scale	Pre-Intervention		Post-Intervention		T-test
	M	*SD*	*M*	*SD*	
Pro-bullying	1.16	1.53	0.95	1.19	*ns*
Girls	0.95	1.34	0.89	1.27	*ns*
Boys	1.50	1.76	0.89	1.19	*ns*
4th Grade	1.00	1.04	0.89	1.41	*ns*
5th Grade	1.82	2.06	0.90	0.99	*ns*
Anti-bullying	4.50	1.99	5.21	1.35	-2.82**
Girls	4.86	1.79	5.67	0.77	-2.83**
Boys	4.03	1.94	4.77	1.55	*ns*
4th Grade	3.94	2.05	4.39	1.58	*ns*
5th Grade	4.08	1.91	5.10	1.48	-2.89**
Power	1.36	1.19	1.90	1.05	-2.79**
Girls	1.40	1.31	2.08	1.01	-1.97*
Boys	1.13	1.07	1.78	0.99	-1.94*
4th Grade	1.07	1.16	2.16	1.02	-2.81**
5th Grade	1.16	1.03	1.45	0.86	*ns*
Responsibility	1.76	1.22	1.98	1.18	*ns*
Girls	2.00	1.15	2.05	1.19	*ns*
Boys	1.59	1.20	1.90	1.21	*ns*
4th Grade	1.25	1.07	1.94	1.35	*ns*
5th Grade	1.80	1.26	1.86	1.13	*ns*

*p=.06; **p<.01

Results indicate an overall increase in anti-bullying attitudes and perceived power. Specifically, girls and 5th-graders reported a significant increase in anti-bullying attitudes. Both girls and boys reported a trend toward increased perceived power and 4th-graders reported a significant increase in perceived power.

Evaluation of Program

The possible range of scores on the composite evaluation score was 0 to 30. The overall mean score was 18.99 (SD = 6.55). ANOVAs were conducted to assess potential differences in evaluation scores by gender and grade. No difference was found for gender, F (1, 66) = .001, *ns*. A significant difference was found for grade, $F(1, 66) = 11.53$, $p < .001$. An examination of mean scores revealed that 5th-grade students rated the program less positively (M = 16.89; SD = 1.01) than did 4th-grade students (M = 21.95; SD = 1.09).

Discussion

Findings from an evaluation of the bullying-prevention program "Bullyproof" were congruent with the general literature on aggression in youth. Thirty-five percent of the current sample was identified as victims, with 11 percent identified as bullies. A minority of students was identified as both victims and bullies (5 percent), which was comparable with the existing literature on peer-victimization (e.g., Olweus, 1978). This clearly showed that many children were victimized by substantially fewer bullies. Interventions must be sensitive to victims and their psychological difficulties, as well as teach social skills specific to enhancing interpersonal communication that address provocative victims' unique position in socialization. Future interventions also should address the needs of children identified as bullies and may emphasize the importance of parental/caregiver involvement.

Although the current study showed that the frequency of observed bullying did not change from pre- to post-program, attitudes admonishing bullying increased overall. The lack of change in the amount of observed bullying from pre- to post-program is incongruent with the existing general prevention literature (e.g., Fields & McNamara, 2003; Smith & Sharp, 1994). It is possible, however, that the lack of change was due to an increase in awareness of the types of behaviors that constitute bullying, rather than an actual lack of behavior change. As students learned about the types of behaviors that could be considered bullying, their broadened definition may have led them to identify more behaviors, which then appeared as a lack of reduction in bullying. Future studies should examine students' preconceived definitions of behaviors that constitute bullying, in order to rule out this possibility. Also, the change in attitudes from pre- to post-program may suggest a broader cultural shift that will take time to translate into actual behavior change. Indeed, the ability to detect a change in attitudes was noteworthy, considering that attitude change within Olweus's large-scale, comprehensive study was statistically weak and varied between schools (1991). At pre-program assessment, girls held significantly higher anti-bullying attitudes than boys, which corresponded to the current literature regarding bullying attitudes (e.g., Salmivalli, 2001). Finally, there was a change in attitudes regarding students' perceived power to have an effect on bullying, which suggests that the program may have long-term success if students begin to believe that they have some control over the amount of bullying in their school. Given that the reasons for the lack of behavior change remains speculative, future bullying intervention research must address questions regarding measurement, specific aims, and the degree of observed/reported behavior change.

With respect to the students' evaluation of the program, 5th-grade students rated the program the least satisfactorily. These findings may be explicated by research that suggests bullying behaviors peak near the age of puberty (Carney & Merrell, 2001),

and, of course, the 5th-grade students were older and closer to puberty age than the 4th-grade students. Therefore, their lack of pronounced benefit from the program may be due to environmental increases in bullying behavior, resulting in less perceived benefit. However, this requires additional investigation. The use of a control group to observe frequency of bullying behavior over time would be beneficial in monitoring how behaviors persist without a prevention program.

Limitations

There were several limitations to this study. No control group was used, which limits the attribution of attitudinal changes to the program. Also, the study was limited by a lack of ethnic diversity. Over 85 percent of the sample was African American, and it is difficult to generalize findings from an ethnically restricted sample. However, few studies have utilized minorities as the majority of their samples. Ideally, future research should include an equally diverse sample. Another limitation included the timing of assessments. An assessment was not administered until approximately 5 months post-program, with no immediate post-assessment. While it is imperative in outcome research to track longitudinal change, an immediate post-assessment would demonstrate the degree of intended behavioral change. Also, it became clear during the course of the assessment procedure that limited vocabulary and lower socioeconomic background created a challenge for students completing the assessments. In future studies, non-language-based assessments may need to be paired with language-based assessments, in order to increase response rates from children with limited vocabulary and learning disabilities. Incorporating a number of psychometrically sound instruments to measure change in frequency and attitudes of bullying, and including blind evaluators, is important to future studies in order to operate under the "gold standard" of intervention studies (Foa & Meadows, 1997).

Conclusions

The results of the present study are consistent with those of other investigations that found high rates of bullying behaviors in school-age children, suggesting the need for continued attention to this problem. Despite limitations of the current study, one positive finding was that anti-bullying attitudes and attitudes regarding students' perceived power to effect change in bullying behaviors increased significantly. It will be important for future studies to replicate this finding and determine whether these attitudinal shifts result in changed behaviors over the long term. The less positive evaluations of the 5th-graders may indicate a need to examine the appropriateness of this program for this grade level. Although the program was still effective in changing bullying attitudes among 5th-graders, changes in the program may be necessary to increase its perceived efficacy in this grade level. It is important for individuals directing prevention programs to choose programs and modify them as needed to enhance their suitability for the school environment, ages of students, and the socioeconomic factors that may be influencing comprehension and identification with the elements of the program. Studies such as this reflect the need for effectiveness data regarding intervention programs, as well as the need for stricter evaluative guidelines. Future outcome studies may adopt a more comprehensive campaign to stop bullying, which may yield significant changes in the tolerance level of such damaging behavior.

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