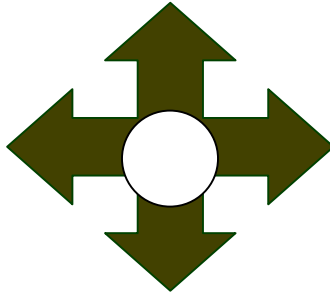

An Evaluation of the Dare to Care: Bully Proofing Your School Program¹

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ABSTRACT

This research evaluates an anti-bullying program, Dare to Care: Bully Proofing Your School, adapted from a program developed by Garrity, et al. (1997) and originated by Olweus (1978). Students in grades 4-6 ($N = 197$, 77 boys, 120 girls) from four Calgary elementary schools completed the Colorado School Climate Survey (Garrity, Jens, Porter, Sager, & Short-Camilli, 2000) and the Provicim Scale – Short Version (Rigby & Slee, 1991). The first research component was a pretest - 3-month posttest comparison between a school that was about to implement the program and one that was not planning to do so. At pretest, students in the no-program school reported significantly more positively on every variable than the school about to implement the program, making the intended across school statistical comparison inappropriate. However, within the 3-month program school, the frequency of bullying witnessed by the students significantly decreased, whereas this remained stable in the no-program comparison school. Further attitudes towards victims significantly worsened in the no-program school, but remained stable in the program school. The second research component compared three schools that had implemented the anti-bullying program for various lengths of time: two years, one year, and three months. Students in the schools with the longer program duration reported significantly more positive attitudes towards victims than schools with shorter program duration. These results raise questions about evaluating and implementing anti-bullying programs.

INTRODUCTION

School bullying is not a new phenomenon, however, with the recent tragedies in Columbine in the United States and Taber, Alberta in Canada, concerns about the safety of students have reached new levels. Bullying is commonly defined as repetitive aggression directed at a peer who is unable to defend him or herself (Smith et al., 1999). Bullying is typically categorized according to whether the victim directly or indirectly experiences an attack from the aggressor (Olweus, 2001). Direct forms of aggression include physical and verbal bullying: indirect forms include behaviors such as actively isolating an individual from the peer group (exclusionary) and spreading rumors. The victims of bullying include children who are directly targeted as well as children who witness others being bullied. These bystanders or onlookers typically experience considerable discomfort when observing bullying incidents (Ziegler & Pepler, 1993).

The extent to which bullying occurs in schools has been the focus of recent research. Across several studies, approximately 20% of students report being bullied by others (Bentley & Li, 1995; Ziegler & Rosenstein-Manner, 1991), although some researchers report even higher rates (Farrington, 1993). In a recent survey conducted in several elementary schools in Calgary, for example, just over half of the students in grades 1-6 reported experiencing bullying at least sometimes (Beran & Tutty, in press). The relatively high frequency of bullying, coupled with teacher's concerns about managing such behaviors, has led many school administrators to implement anti-bullying strategies (Pepler, Craig, Ziegler & Charach, 1994).

A minority of anti-bullying programs consist of strategies aimed specifically at children identified as bullies and victims (for example, the Method of Suggestive

Command and the Method of Shared Concern (Pikas, 1989); other programs target the entire student population (Pepler et al., 1994; Smith, 1997). Most, if not all school-wide anti-bullying programs are modified versions of Olweus' intervention program (Olweus, 1978; 1993). The four main strategies within Olweus' program are training school staff members, developing a discipline policy, informing parents, and teaching pro-social values from a curriculum (e.g. Pepler, et al., 1994; Smith, 1997). Anti-violence prevention programs that move beyond simply teaching children skills, to focus on changing the school system's response by including staff and parents in examining policies and procedures are relatively rare, yet more likely to achieve lasting change (Thurston, Meadows, Tutty & Bradshaw, 1999).

Although numerous anti-bullying programs have been developed in the past decade, surprisingly few have been rigorously evaluated (Olweus, 1999). The results of the evaluations of the effectiveness of these programs have been mixed. Olweus (1991) provided evidence of extensive positive change in numerous schools in Norway that implemented his intervention program for an 8-month and 20-month duration. In addition to finding a significant reduction in verbal, physical and exclusionary types of bullying, he reported improvements on indicators of school climate, such as more positive social relationships.

Other researchers, however, have reported little to no improvement, and in some cases, found an increase in bullying (Eslea & Smith, 1998; Fonzi, et al., 1999; Stevens, De Bourdeaudhuij, & Van Oost, 2000). In England, after implementing a school-wide anti-bullying program for two years, Eslea and Smith (1998) noted that the reports of being bullied decreased in two schools, remained stable in one school and increased in

another. Fonzi et al. (1999) found that being bullied decreased but bullying others increased after three months of intervention in six classes in a school in Italy. In Finland, Stevens and his colleagues (2000) evaluated the Flemish anti-bullying intervention they had developed in accordance with Olweus' (1992) program. While levels of bullying others decreased significantly, reports of experiencing bullying remained stable (Stevens et al., 2000). In Canada, Pepler and colleagues (1994) reported that the rate of being bullied decreased after implementing an adaptation of Olweus' Norwegian program for 18 months, but the rate of bullying others increased. In the United States, Epstein, Plog, and Porter (2000) concluded that physical and verbal bullying decreased at the end of a four-year program but exclusionary behaviors did not decrease until one year following the intervention.

Several possible explanations account for these inconsistent evaluation results. One possibility is that the programs as currently conceptualized, are not effective or are not powerful enough, most being implemented for relatively brief periods of time, often less than two years. As noted by Pepler et al. (1994) and Tattum (1993), creating stable changes to a school system typically requires several years. It is reasonable to expect, then, that longer as compared to short-term programs would have a greater impact on decreasing peer aggression.

The frequency of bullying may naturally increase or decrease over the school year, independent of anti-bullying intervention and in such a way that compromises evaluations. Most studies conducted to date have not included a control or wait-list comparison condition that might identify fluctuations in bullying behaviour over the school year in schools without anti-bullying programs.

The effectiveness of anti-bullying programs is most often assessed by the use of self-report data of victimization (for example, Epstein et al., 2000; Olweus 1991; Stevens et al., 2000). Children's reports of being bullied, however, may not be the most valid indicator of such behaviors. Research comparing methods (Schuster, 1996; Pellegrini & Bartini, 2000) has suggested that self-reports are not significantly correlated with observations of victimization or teacher reports and are only moderately correlated with peer nominations. Thus, in addition to soliciting student's perceptions of their own experiences of victimization, it may be important to include peer reports of the frequency of bullying at school.

Another objective of most anti-bullying programs is to increase caring behaviors towards the victims of bullying. However, measures to assess pro-social and caring behaviours and attitudes have seldom been utilized in program evaluations; and could add an additional, useful dimension. Finally, children's behaviors and attitudes, in and of themselves, capture only some of the goals of school-wide programs. Given the programs goals of involving teachers and parents in ensuring that policies regarding bullying are more effective, another outcome of effective school-wide bullying programs may include a more positive school climate.

In summary, although numerous modifications of Olweus' school-wide intervention to reducing the frequency of bullying at school have been used in various countries, the efficacy of such approaches remains unsubstantiated. Differences in the results across studies may be attributable to the varied length of program implementation, lack of comparison groups and a narrow focus on children's self-reports of bullying

behaviours. An examination of how these factors contribute to the results of an evaluation of a school-wide anti-bullying program is warranted.

The Dare to Care Program – Bully Proofing Your School Program

One program that exemplifies a school-wide comprehensive approach to bullying is the Dare To Care Bully Proofing Your School program. It is a modification of the “Bully Proofing Your School” program developed by Garrity and her colleagues (1997), which, in turn, was modeled after Olweus’ core intervention program (1978). The Dare to Care version has been implemented in numerous schools in Calgary since 1998 and is unique in its emphasis on clinical support to victims and bullies in the form of individual and group counseling, as well as its collaboration with community services.

The major goals of this program are to reduce bullying behaviors and create safe and secure school environments. The main focus is on climate change in schools and developing a caring school culture. Training and support to school personnel and parents are provided to ensure that the program’s principles are reflected in the overall curriculum and sustained over time. Children are also taught skills and strategies to avoid victimization. The essence of this program is to raise awareness about bullying and to encourage accountability for creating solutions among all parties involved in the educational system.

The first author initiated the evaluation process several years ago while implementing the Dare to Care program in numerous schools in Calgary. The program was selected for its relatively novel approach to addressing bullying in schools and the willingness of the program personnel to assess its efficacy.

In light of the methodological limitations noted in the foregoing review, the present study was designed to address several of these problems. As self-report information on student's behaviour is only one indicator of the success of a school-wide program, we also included measures of school climate and attitudes towards and behaviors directed at victims of bullying.

METHOD

Students in four Calgary elementary schools participated in the research. Only students in Grades 4 to 6 were invited to participate, to ensure that they could read and understand the content of the standardized measures. Students needed signed consent from their parents to be involved in the study.

We tested two schools pre- and post: one school before and after the program was initially introduced and a comparison school in which the administrator was not, at the time, interested in implementing an anti-bullying prevention program. Further, to examine possible differences over time in schools that had utilized the program, we tested students in two additional schools: one after one year of implementation and another at two years. The four schools included both Catholic (comparison school and 2-year program school) and public school systems (3-month and 1-year program schools). The schools were selected from the same geographic community to match general student characteristics such as socio-economic status and ethnicity across schools.

We hypothesized that (a) attitudes towards victims and perceptions of the school's climate would improve over time in the program schools in comparison to the non-program school, and (b) schools that had implemented program strategies for a longer duration would exhibit more positive outcomes.

Measures

Since a primary goal of the Dare to Care program is to create a safe and caring school environment and is, thus, intended to affect the “feel” or climate of the school, it was considered important to include a measure of school climate. The Colorado School Climate Survey (Garrity, et al., 2000) was designed to measure several aspects of the school environment. For the present study, four subscales were used: bullying experienced, bullying witnessed, student’s responses to witnessing bullying as well as student’s perceptions of the school climate. Students rate the frequency that they are bullied on a 5-point Likert-type scale from ‘never’ to ‘five or more times per week’. The types of bullying behaviors listed include, for example, hitting, teasing, excluding and threatening. In the present study, the Alpha coefficient of bullying behaviors was .80 ($n = 99$) at pretest and .79 ($n = 185$) at post-test, providing evidence of good internal consistency.

Respondents are also asked to indicate what strategies they use when they are bullied or witness other students being bullied. Both positive strategies (e.g., ‘I asked for help from an adult at school’), and negative strategies (e.g., ‘I hit, kicked, or pushed the kid’) are included. A summary score for the use of strategies is derived by subtracting the total number of negative strategies from the total number of positive strategies reported. Values on this subscale range from -3 to 9 , with high scores reflecting the use of a number of positive strategies.

Finally, student’s perceptions of school climate were assessed using 14 items, each with four response categories including ‘never/hardly ever true’ to ‘always/almost always true’. The school climate score is the sum of all the items and ranges from 14 to

56, with a high score reflecting a positive school climate. In the present study, the Alpha coefficient on the school climate subscale was .86 ($n = 96$) at pretest and .81 ($n = 168$) at post-test suggesting strong internal consistency.

The Provictim Scale – Short Version (Rigby & Slee, 1991) consists of 10 items measuring students' attitudes towards bullies and the victims of bullying. Students indicate whether they agree, disagree, or are unsure about such statements as, "A bully is really a coward." A high score indicates more accepting attitudes towards victims of bullying, with a maximum score of 10. Rigby and Slee (1991) reported strong internal consistency for the scale (Alpha coefficient = .78) and evidence of construct validity (students who supported intervention held more positive attitudes towards victims than students who did not support intervention).

RESULTS

The final sample comprised 197 students from Grades 4 to 6 (77 boys, 120 girls). The percentage of students from the four schools who returned signed parent consent forms ranged from 17% - 98% with a mean of 50%.

The first analysis compared the pretest data on the school that was about to implement the anti-bullying program and the school that was not interested in doing so. A univariate analysis of variance (ANOVA) was conducted on each dependent variable (bullying experienced, bullying witnessed, helping strategies, school climate and victim attitudes) with school as the independent variable to determine differences between schools on baseline measures. This analysis was to ensure that the two schools were similar at pretest, a condition for further pretest/posttest comparisons (Campbell & Stanley, 1963)(see Table 1).

Insert Table 1 about here

The results showed significant differences between the two schools on all but one of the outcome measures at pre-test, such that students in the comparison school reported significantly more positive perceptions of their school and less bullying than students in the school in which the Dare to Care Program was to be implemented shortly. These unanticipated differences at pretest precluded the use of multivariate analyses of covariance to determine program effects between pre-test and posttest across the two schools. Because the schools were not equivalent at pretest, we used paired samples t-test procedures separately with the data for each school to assess pre-test/post-test differences on the outcome measures in a more exploratory manner.

The frequency of being bullied and the number of strategies used to help victims remained stable between pre- and post-test for both the 3-month program school and the comparison school (see Table 2). The frequency of witnessing bullying, however, significantly decreased for the 3-month program school. That is, students in the program school witnessed less bullying in June than in March. Also, attitudes towards victims became significantly less positive from March to June for those students in the comparison school but remained stable for students in the 3-month program school.

Insert Table 2 about here

Because the comparison school differed significantly from the 3-month program school on all the outcome measures, it seemed likely that this school was dissimilar to those schools implementing the Dare to Care program. It was, therefore, excluded from the subsequent analyses of post-test differences among schools. In this final analysis, a

MANOVA was used to compare the outcome measures across the three program schools at post-test (see Table 3).

Insert Table 3 about here

There were no statistical differences among the three schools on four variables: the amount of bullying experienced, the number of helping strategies used to assist victims of bullying, perceptions of school climate and attitudes towards victims. However, the amount of bullying witnessed was significantly different: a Tukey's post hoc test indicated that in June, students in the 2-year program school reported witnessing significantly less bullying than students in the 3-month program school. There was also a trend for children in the 2-year program school to hold more positive attitudes towards victims than did children in the 3-month school, although this fell short of statistical significance.

DISCUSSION

This study addresses several methodological difficulties apparent in evaluations of similar anti-bullying programs by including multiple measures, a comparison school and schools that varied according to the length of time they had implemented the Dare to Care: Bully Proofing Your School program. It also raises important issues with respect to evaluating such programs. The comparison school was significantly different from the school was about to implement the anti-bullying program on most of the variables at pre-test, suggesting that utilizing a school that did not perceive the need for an anti-bullying program was probably not appropriate. Rather, a school that was intending to use the program in future would have made a more relevant comparison as a wait-list condition. The students in the comparison school reported less bullying, used more helping

strategies, and held more positive perceptions of their school and of victims. These results validate the principal's perception that their school did not warrant a special program to address bullying.

Several patterns emerged in the comparison school that are worth noting. The frequency of being bullied and witnessing bullying, the number of positive strategies to help victims and perceptions of the school climate remained stable over the 3-month time period, but attitudes towards victims significantly decreased. This finding may reflect not only a pattern over the school year that is relatively "normal", but one that could affect the results of evaluations of anti-bullying programs. That is, stability in attitudes towards victims over the program period may suggest that the program had little impact, when, in fact, the program may have prevented a decline in attitudes towards victims. This possibility underscores the importance of including a wait-list comparison school in future program evaluations.

Further, it would be valuable to study the pattern of bullying over the school year even in schools that have not incorporated anti-bullying interventions. Tutty (2001) recently completed an evaluation of a peer mediation program in a city relatively close to Calgary. The pre-post data analysis for 1958 students from grades 4 to 9, most of whom did not utilize the peer mediation program, found that in the spring, students reported significantly less positive views of their school climate, more fighting, more bullying and less appropriate conflict resolution skills and attitudes than in the fall. Two variables that remained stable from fall to spring were the student's self-esteem and the number of self-reported caring behaviours. Although conducted over a longer time period than the

current research, it reports similar trends of students behaving and having more negative attitudes towards victims towards the end of the school year.

The present study provides some evidence of the effectiveness of the Dare to Care program. From March to June, students in the 3-month program school improved their perceptions of school climate to almost the level of statistical significance, while these perceptions remained stable in the comparison school. School climate is constituted by a variety of factors such as teacher satisfaction, principal leadership, and academic expectations (Ma & Klinger, 2000), and these may have had a more direct influence on children's perceptions of the school than the specific strategies of the anti-bullying program. In future research, it may be important to examine how school-wide approaches that promote a safe and caring school culture may impact other school climate factors.

Reports of the frequency of witnessing bullying decreased from March to June in the 3-month program school while they remained stable in the comparison school. Children's reports of being bullied, however, did not decrease. Three explanations for this result seem plausible. Perhaps the frequency of bullying did decrease but the victims maintained consistent perceptions of their victimization despite experiencing fewer attacks. Indeed, victims may experience social-cognitive deficits that include negative self-perceptions and limited problem solving strategies that may influence their perceptions of the bullying (Bernstein & Watson, 1997; Olweus, 1989). It is also possible that the number of bullying incidents remained stable but that peers chose not to stay and watch. Pepler and Craig (1995) found that when peers stay to observe bullying incidents, they positively reinforce the bully. Hence, a decision to walk away may indirectly support victims. A less optimistic explanation for the decrease in bullying witnessed may

be that students pretend not to notice the victimization in an effort to reduce their sense of responsibility or obligation to intervene. A closer inquiry into the cognitive and behavioral responses of witnesses to bullying who are participating in an anti-bullying program will elucidate these program results.

While the reports of witnessing bullying decreased between March and June in the 3-month program school, in June the students in the 2-year program school reported witnessing significantly less bullying than the 3-month school. However, because we have no pretest data for the 2-year or 1-year school we cannot assume that these levels have improved within each setting or whether the Dare to Care program can be credited for the lower levels of witnessed bullying. In addition, students in the 2-year program school held somewhat more positive attitudes towards victims than did students in the school with a shorter duration of the program (although this fell short of statistical significance). The number of strategies peers used to help victims did not differ between schools, which may be due to having relatively few opportunities to demonstrate helping behaviors towards victims of bullying afforded by students as a result of witnessing fewer incidents of bullying. It is also possible, however, that students feel inhibited in demonstrating pro-social behaviors towards victims, especially in the presence of bullies (Craig & Pepler, 1995).

Limitations of the Current Evaluation

The relatively small size of several of the school samples, including, in particular, the 3-month and 1-year program schools limits the generalizability of the findings. Although students were reminded on several occasions to take home and return parent consent forms, a significant number did not do so, resulting in a smaller than anticipated

sample size. Further, the responses of the students participating in the evaluation may not accurately represent those of the other students in the school. We do not know, in addition, whether the students who completed outcome measures for the evaluation participated throughout the duration of the program.

It is possible that the Dare to Care program does have a significant impact on student's attitudes towards victims, perceptions of school climate and reports of the frequency of bullying that was not detected by this evaluation. Because Dare to Care does not have a standardized set of procedures, the program was likely implemented differently across schools. While lack of program uniformity is problematic for evaluation purposes, it does allow decision makers flexibility in determining the most suitable means of program implementation. Finally, we could not determine the extent to which the demographic characteristics of students varied across schools and the possible influence of this on the program outcome.

On a more positive note, the attempt to include a comparison school was noteworthy and the comparison of schools that had implemented the program for different time periods was informative, but would have been more powerful with pretest data from each school. Utilizing variables beyond self-reports of being bullied and witnessing bullying expanded the evaluation to examine the program's impact on attitudes and the wider impact on school climate.

The most consistent finding in the present study's evaluation of the Dare to Care: Bully Proofing Your School program was that students reported witnessing less bullying after short-term implementation of the program. The program may well achieve its primary goal - that of reducing school bullying, but this interpretation must be tentative,

and we recommend replication using a stronger research design. Also, the duration of program implementation must be considered when planning evaluations, particularly as school-wide change is a long-term process (Pepler et al., 1994; Tattum, 1993). Finally, an appropriate wait-list comparison group is necessary to determine whether changes on outcome measures are attributable to program implementation or occur as a result of regular fluctuations throughout the course of the school year.

The recent widespread availability of anti-bullying programs has been compelling for teachers, parents, school administrators and students. Unfortunately, providing clear evidence of the effectiveness of prevention programs is a difficult task, yet one that we must pursue to ensure a safe school learning environment for children.

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Table 1

Mean Differences Between Schools on Outcome Measures at Pre-test

Measures	School		F	p
	Program (<u>n</u> =25)	Comparison (<u>n</u> =77)		
Bullying experienced	5.63	3.66	3.93	.05
Bullying witnessed	12.29	6.61	18.77	.0001
Helping strategies	.64	1.61	4.77	.03
School climate	36.77	43.74	17.13	.0001
Attitudes to victims	5.83	8.06	23.01	.0001

Table 2

Pre- Post Test Differences Within Schools on Outcome Measures

	School							
	3-Month		t	p	Comparison		t	p
	pre	post			pre	post		
Bullying experienced	5.77	5.36	0.35	.73	3.60	3.41	0.56	.58
Bullying witnessed	13.10	10.38	3.84	.001	6.41	5.47	1.45	.15
Helping strategies	.89	1.37	-1.23	.24	1.58	1.16	2.23	.30
School climate	35.06	38.35	-1.89	.08	43.66	43.13	0.95	.35
Attitudes to victims	5.78	6.00	-0.60	.55	8.03	6.76	5.79	.0001

Table 3

Mean Differences Among Schools on Outcome Measures at Post-Test

	School			F	p
	2 Year (n=70)	1 Year (n=20)	3 Month (n=25)		
Bullying experienced	4.40	4.00	5.63	0.54	.59
Bullying witnessed	7.95	10.00	12.16	3.11	.05
Helping strategies	1.22	0.92	1.47	0.35	.70
School climate	41.04	38.23	38.58	1.38	.26
Attitudes to victims	7.09	6.15	6.16	2.74	.07