

# Principals' Perceptions and Practices of School Bullying Prevention Activities

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The purpose of this study was to examine principals' perceptions and practices regarding bullying prevention. A survey instrument was developed to assess principals' stages of change and perceived barriers regarding selected bullying prevention activities as well as the effectiveness of bullying prevention activities. Of a national random sample of 700 principals to which the survey was mailed, 55% responded. None of the school-based bullying prevention activities were being done by more than one in five schools even though principals perceived there to be no barriers regarding these activities. Characteristics that affected the offering of these activities included number of perceived barriers to implementing the activity, whether the principal had received violence/bullying prevention training, perceptions regarding the extent of bullying, and the number of bullying problems reported to them. The findings suggest that preprofessional training and continuing education are needed to educate principals regarding this area.

**Keywords:** *bullying; bullying prevention; violence prevention; principals; elementary schools*

Within the past three decades, school bullying has gained increased attention in the U.S. due to focused media attention on homicide or suicide cases where bullying was a precipitating factor. A report by the U.S. Secret Service investigated characteristics of students involved in school shootings in the United States.<sup>1</sup> Of 37 different school shootings, two-thirds of them involved attackers who "felt persecuted, bullied, threatened, attacked, or injured by others prior to the incident" (p. 7). It was evident that "a number of the attackers had experienced bullying and harassment that was longstanding and severe. In those cases, the experience of bullying appeared to play a major role in motivating the attack at the school" (p. 7). Issues such as this have led researchers to try to understand this problem. Although the pioneering research in school bullying is from Scandinavian countries and researchers from many other countries have followed this lead, the United States has only recently begun investigating this phenomenon. There is a dearth of literature from the United States that has examined the extent and intricacies of the school bullying problem.

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Bullying can take various forms including direct physical aggression (hitting, kicking), direct verbal aggression (name calling, teasing), and indirect aggression (psychological, relational).<sup>2,3</sup> The prevalence of being bullied in elementary schools worldwide varies from 11.3%<sup>4</sup> to 49.8%,<sup>5</sup> and the only study from the United States on bullying in elementary schools found the prevalence estimate for elementary grade students to be 19%.<sup>6</sup>

The literature is replete with research that identifies negative consequences of school bullying. School bullying has been linked to individual problems such as depression,<sup>7-9</sup> suicidal ideation,<sup>10</sup> mental disorders,<sup>11</sup> eating disorders,<sup>8</sup> decreased self-esteem,<sup>5,12</sup> sleeping problems,<sup>13</sup> bedwetting,<sup>13</sup> headaches,<sup>13</sup> stomachaches,<sup>13</sup> alcohol or tobacco use,<sup>14,15</sup> fighting,<sup>15,16</sup> weapon carrying,<sup>14</sup> vandalism,<sup>16,17</sup> stealing,<sup>14,16,17</sup> and having trouble with the police.<sup>17</sup> It has also been linked with interpersonal issues such as lack of social acceptance<sup>18,19</sup> and difficulty in making friends.<sup>20,21</sup>

Because student bullying takes place primarily in the schools, research studies have focused on characteristics related to school issues. Although school characteristics (class size or school size) have not been found to be related to bullying behaviors in students,<sup>22</sup> personal characteristics associated with schools are related. Academic achievement was found to be lower for students involved in all forms of bullying behavior.<sup>18,23</sup> School adjustment (following rules, good performance on schoolwork) and school bonding (satisfaction at school, taking school seriously) were also found to be less likely to occur in students who were engaged in school bullying behaviors.<sup>24</sup> School absenteeism and avoidance were also significantly related to experience with peer victimization.<sup>23,25</sup>

With all of the negative issues associated with school bullying, it follows that schools would want to prevent such problems from occurring. Prevention of school bullying has been attempted in a variety of ways. Research has failed to find reduced bullying problems based on interventions focusing only on peer involvement<sup>26</sup> or “silver bullet” interventions such as video presentations.<sup>27</sup> The most effective approach is a “whole school approach” that incorporates multiple activities in order to decrease bullying problems. The most cited of these programs is the Norwegian Bullying Prevention Program, which was found to reduce bullying by as much as 50%.<sup>28</sup> The Bullying Prevention Program is the only such program that has been recommended by the Center for the Study and Prevention of Violence (based in Colorado) in their *Blueprints for Violence Prevention*.<sup>29</sup> This means that the program has met strict criteria set by the center including strong research design, replication of findings, and significant effects (immediately and 1 year postintervention). Because of the effectiveness of the Bullying Prevention Program, the schoolwide prevention activities that represent the core of the program are used as the basis of this investigation.

A comprehensive review of the literature failed to find any studies that had investigated bullying prevention activities in U.S. elementary schools. Therefore, this study was conducted to identify which stages of change U.S. elementary schools were in regarding bullying prevention activities recommended by the Bullying Prevention Program. Principals' perceived barriers to implementing these bullying prevention activities and their perceptions of effectiveness of these and other activities were also investigated. Stages of change was selected as the theoretical foundation for this study because it has been used in organizational settings to predict changes in organizational activities.<sup>30</sup>

## METHOD

### Participants

Participants for this study were selected from the Common Core of Data (CCD) of the U.S. Department of Education's National Center for Educational Statistics (NCES), which lists all of the public elementary and secondary schools in the United States ( $N = 96,570$ ). This comprehensive list was narrowed down to include only those schools located in the 50 states (none of the outlying areas were included); that were classified by the NCES as regular schools (as opposed to special education, vocational, or alternative education schools); and that included grades pre-K, K, or Grade 1 through Grades 5 or 6 (elementary schools). Elementary schools were selected because school bullying primarily begins in elementary school and prevention efforts should be put into place before the problem reaches its peak. After removal of schools that failed to meet these criteria, 36,846 remained. To reduce any potential effects from extreme school sizes, the list was limited to two standard deviations from the mean school size, resulting in 35,160 potential schools from which to draw the study sample.

Based on an a priori power analysis, it was determined that data from 384 schools would be needed for generalizing the results to the population of elementary schools.<sup>31</sup> A published study on a similar topic using similar methods found that 56% of principals responded.<sup>32</sup> Using this response rate as a basis for determining sample size, 685 surveys ( $384/0.56$ ) would need to be mailed to achieve 384 responses. Thus, a random sample of 700 schools was selected from this list. To determine how similar the random sample of 700 schools was in comparison to the entire list of 35,160 schools, sizes of schools (as measured by number of students) and locations of schools were compared. An independent-samples  $t$  test found no significant difference in the mean size of schools between the study sample and the potential population ( $t = 1.53$ ,  $df = 35,772$ ,  $p = .126$ ). A chi-square analysis for known distributions was calculated and found no significant differences between the sample and the potential population in proportion of schools falling into each of the eight geographic categories as identified by the NCES ( $\chi^2 = .17$ ,  $df = 7$ ,  $p = .999$ ). This study design and protocol was approved by a University Human Subjects Research Review Committee prior to conducting the study.

### Instrument Development

A survey instrument was developed based on the stages of change component of the transtheoretical model and the barriers component of the health belief model. The stages of change items related to schoolwide activities that were recommended by the Norwegian Bullying Prevention Program. Perception items regarding additional bullying prevention activities were also obtained from the Norwegian Bullying Prevention Program.

The four-page questionnaire contained 33 items. The survey items included 3 closed-format stages of change items, each of which were followed by a list of barriers from which the respondent could check all that apply. The first stages of change item related to whether the school administered a survey of the students to assess the extent of bullying in the school; the second related to whether the school had a "bullying prevention committee" to coordinate antibullying efforts at the school; and the third pertained to the school having a conference day for students, parents, and community members to raise awareness of bullying prevention efforts. Respondents could select the description of the stage that best represented their school. The questionnaire also contained items pertaining to

the principals' perceptions of the extent of bullying in U.S. elementary schools (7-point Likert-type scale, *no problem to major problem*), the extent of bullying in their elementary school (7-point Likert-type scale, *no problem to major problem*), the level of violence in the neighborhood surrounding their school (7-point Likert-type scale, *very low to very high*), and the number of school-bullying problems that have been reported to them in the previous 2 years (fill in the blank). The last page of the survey included 9 background and demographic items.

To establish face validity, items for the survey instrument were selected from the Norwegian Bullying Prevention program as described in *Blueprints for Violence Prevention: Bk. 9. Bullying Prevention Program*.<sup>29</sup> Additional items were included based on a comprehensive review of the literature. To establish content validity, the survey instrument was sent to an expert panel (based on their publication record) for review ( $n = 7$ ). Minor revisions were made to the instrument based on the recommendations of the panel.

Stability reliability of the instrument was established through testing and retesting a convenience sample of principals ( $n = 14$ ). The principals were mailed the questionnaire with a cover letter and a stamped, self-addressed envelope. A week after completing the first survey, they were mailed the second questionnaire. Percentage agreement and Pearson product-moment correlation coefficients were then calculated. Stability reliability measures for the questionnaire were 88.8% agreement for the barrier items and  $r = .64$  for the perceptions of effectiveness items. The internal reliability of the questionnaire was calculated on the responses to the questionnaire from the full mailing. Internal reliabilities for the barrier items were .71 (K-R 20) and  $\alpha = .91$  for the perception of effectiveness items.

### Procedures

Several techniques were used in this study to maximize response rates. These included having a four-page survey instrument, printing the questionnaire on colored paper, and placing the demographic/background items at the end of the survey instrument. In addition, procedural steps were taken to maximize response rates. These included mailing the survey with a hand-signed cover letter ensuring confidentiality; providing a stamped, self-addressed envelope in which respondents could mail the survey back; and using first-class postage stamps rather than bulk mailing. Additionally, a \$1.00 incentive was included with the first-wave mailing.<sup>33,34</sup> Two weeks after the first-wave mailing, a second wave was sent using the same techniques to maximize response rates with the exception of the \$1.00 incentive. Two weeks following the second-wave mailing, a color-matched postcard was sent to all nonrespondents urging their participation.

### Data Analysis

Data were analyzed using SPSS 11.0. Descriptive statistics (frequencies, means, standard deviations) were used to describe responses to questionnaire items as well as the demographic/background characteristics of the respondents. For inferential statistics,  $t$  tests, analyses of variance tests (ANOVAs), chi-square ( $\chi^2$ ) tests, and Pearson product-moment correlation coefficients were calculated. To help reduce the chance of Type I errors,  $p$  values were set at .01. Pairwise deletion was used for inferential statistics where some data were missing. None of the variables had greater than 4% of principals failing to answer the item.

## RESULTS

### Response Rate

Of 700 questionnaires sent to principals, 15 were undeliverable for a potential sample size of 685. A total of 378 principals responded (55.2% = 378/685). School size and location of nonrespondents were compared to respondents using the information available from the CCD. Using an independent-samples *t* test, the mean number of students per school was compared between responding principals ( $M = 445.6$ ,  $SD = 187.8$ ) and nonrespondent principals ( $M = 472.0$ ,  $SD = 203.2$ ). There was no significant difference ( $t = -1.788$ ,  $df = 698$ ,  $p = .074$ ). A chi-square analysis was done to assess if there was a difference between geographic location of responding principals versus nonresponding principals. A significant difference was found ( $\chi^2 = 10.112$ ,  $df = 2$ ,  $p < .01$ ) where principals from suburban and rural schools were more likely to respond than principals from urban schools.

### Demographic and Background Characteristics of Respondents

A majority of responding principals were female (57.7%), White (85.4%), held a master's degree (63.6%), and taught in urban schools (61.6%). A plurality were between the ages of 50 and 59 (44.7%) and came from the South (34.9%). The mean number of students per school of responding principals was 446 ( $SD = 188$ , range = 86-979). On the average, principals had worked full time as a school principal for 8.6 years ( $SD = 6.9$ ) and for 13.0 years ( $SD = 6.8$ ) as a full-time teacher prior to becoming principal (Table 1).

### Administration of a Survey to Assess the Extent of Bullying

Descriptive statistics regarding the stages of change and the barriers to the administration of a survey to assess the extent of bullying can be found in Table 2. Chi-square analysis found that principals who received bullying prevention training were more likely than those who had not received such training to administer a survey of the students to assess the extent of bullying (26.0% vs. 7.7%) ( $\chi^2 = 19.751$ ,  $df = 1$ ,  $p < .01$ ). Furthermore, schools that had an existing bullying prevention program were significantly more likely to survey the students regarding the extent of bullying than schools with no bullying prevention program (32.1% vs. 6.4%) ( $\chi^2 = 19.751$ ,  $df = 1$ ,  $p < .01$ ). There was also a significant relationship between the perceived number of barriers to having such an activity and the stage of change regarding that activity ( $F = 11.293$ ,  $df = 5$ ,  $p < .01$ ). The lowest number of perceived barriers was in those schools in the maintenance stage ( $M = 0.28$ ,  $SD = 0.51$ ). This number continually increased to the precontemplation stage where the mean number of barriers was 1.36 ( $SD = 1.10$ ). A  $2 \times 3$  chi-square analysis (Administer Survey/Does Not Administer Survey  $\times$  Geographic Regions) found no significant differences ( $\chi^2 = 1.474$ ,  $df = 2$ ,  $p = .48$ ).

### Establishing a "Bullying Prevention Committee"

Descriptive statistics regarding the stages of change and the barriers to establishing a bullying prevention committee can be found in Table 3. A series of ANOVAs were calcu-

Table 1. Demographic/Background Characteristics of Principals and Their Schools ( $N = 378$ )

Characteristic	<i>n</i>	%
Sex		
Female	218	57.7
Male	158	41.8
Race/ethnicity		
African American	34	9.0
Asian	2	0.5
Hispanic	9	2.4
White	323	85.4
Other	3	0.8
Highest level of education		
Bachelor's	5	1.3
Master's	239	63.6
Specialist	102	27.1
Doctorate	27	7.2
Age		
Younger than 30	4	1.1
30-39	52	13.8
40-49	134	35.4
50-59	169	44.7
60+	17	4.5
Received training regarding		
Violence prevention	300	79.4
Bullying prevention	206	54.5
Neither of these	48	12.7
Metropolitan statistical area (MSA)		
Urban		
Large central city <sup>a</sup>	42	11.1
Midsized central city <sup>b</sup>	64	16.9
Urban fringe of large city <sup>c</sup>	92	24.3
Urban fringe of midsized city <sup>d</sup>	35	9.3
Suburban		
Large town <sup>e</sup>	5	1.3
Small town <sup>f</sup>	33	8.7
Rural		
Rural, outside MSA <sup>g</sup>	59	15.6
Rural, inside MSA <sup>h</sup>	48	12.7
Region of the United States		
Midwest	114	30.2
Northeast	54	14.3
South	132	34.9
West	78	20.6
	<i>M</i>	<i>SD</i>
Years worked as full-time principal (in any school)	8.6	6.9
Years taught full-time before becoming principal	13.0	6.8
Number of students enrolled in the school	445.6	187.8

(continued)

Table 1 (continued)

Characteristic	<i>M</i>	<i>SD</i>
Approximate racial distribution of school		
Percentage White	71.0	31.2
Percentage Black	14.8	23.6
Percentage other	14.5	22.2

NOTE: Numbers may not add to 100% due to missing data.

- a. Central city of an MSA with a population greater than or equal to 250,000.
- b. Central city of an MSA with a population less than 250,000.
- c. Place within an MSA of a large central city and defined as urban by the U.S. Census Bureau.
- d. Place within an MSA of a midsize central city and defined as urban by the U.S. Census Bureau.
- e. Town not within an MSA, with a population greater than or equal to 25,000.
- f. Town not within an MSA and with a population less than 25,000 and greater than or equal to 2,500 people.
- g. A place with less than 2,500 people and coded rural and outside an MSA by the U.S. Census Bureau.
- h. A place with less than 2,500 people and coded rural and inside an MSA by the U.S. Census Bureau.

lated and found that stage of establishing a bullying prevention committee varied by the principals' perception of the extent of bullying in U.S. elementary schools ( $F = 4.389$ ,  $df = 5$ ,  $p < .01$ ). Post hoc  $t$  tests with Bonferroni correction found that principals in the precontemplation stage perceived the extent of bullying to be less of a problem in U.S. elementary schools than principals in the action stage ( $M = 4.61$ ,  $SD = 1.16$  vs.  $M = 5.56$ ,  $SD = 0.89$ ). This activity also varied by the principals' perception of the extent of bullying in their elementary school ( $F = 7.188$ ,  $df = 5$ ,  $p < .01$ ). Post hoc Bonferroni  $t$  tests found that principals in the precontemplation stage perceived the extent of bullying to be less of a problem in their elementary school than principals in the action stage ( $M = 2.89$ ,  $SD = 1.44$  vs.  $M = 4.15$ ,  $SD = 1.23$ ). The number of reported bullying problems also had a significant relationship ( $F = 7.188$ ,  $df = 5$ ,  $p < .01$ ). Post hoc Bonferroni  $t$  tests found that principals in the precontemplation stage ( $M = 2.43$ ,  $SD = 2.24$ ) received fewer reports of bullying episodes than principals in the action ( $M = 5.33$ ,  $SD = 3.58$ ) and maintenance ( $M = 4.36$ ,  $SD = 3.42$ ) stages. Additionally, stage of establishing a bullying prevention committee varied by the number of perceived barriers to doing this activity ( $F = 13.533$ ,  $df = 5$ ,  $p < .01$ ). The lowest number of perceived barriers was for those schools in the maintenance stage ( $M = 0.15$ ,  $SD = 0.44$ ). This number continually increased to the precontemplation stage ( $M = 1.49$ ,  $SD = 1.33$ ).

Chi-squares were calculated and found that stage of establishing a bullying prevention committee varied by whether the principal had received training regarding violence prevention ( $\chi^2 = 10.508$ ,  $df = 1$ ,  $p < .01$ ). Principals who had received violence prevention training were 5 times more likely to have a bullying prevention committee than those who had not received training (20.2% vs. 3.9%). Principals who had received bullying prevention training were almost 6 times more likely to have a bullying prevention committee than those who had not had any training (27.1% vs. 4.7%) ( $\chi^2 = 29.525$ ,  $df = 1$ ,  $p < .01$ ). Schools that had existing bullying prevention programs were 74 times more likely to have a bullying prevention committee than schools with no existing program (36.9% vs. 0.5%)

Table 2. Stages of Change Regarding the Administration of a Survey to Students to Assess the Extent of Bullying in the School and Principals' Perceived Barriers to the Administration of Such a Survey ( $N = 378$ )

	<i>n</i>	%
<b>Stages</b>		
Have not seriously thought about administering a survey to the students to assess the extent of bullying in the school (precontemplation)	199	52.6
Have started discussions about administering a survey to the students to assess the extent of bullying in the school (contemplation)	66	17.5
Are currently taking steps to administer a survey to the students to assess the extent of bullying in the school (preparation)	27	7.1
Last year was the first time a survey to the students was administered to assess the extent of bullying in the school (action)	26	6.9
Have been administering a survey to the students to assess the extent of bullying in the school for 2 or more school years (maintenance)	40	10.6
Previously administered a survey to the students to assess the extent of bullying in the school but no longer do so (relapse)	16	4.3
<b>Barriers<sup>a</sup></b>		
There would be no barriers	162	42.9
This is not a priority relative other problems with which we deal	95	25.1
Bullying is not a problem in our school	57	15.1
We would not know how to develop such a survey	53	14.1
Lack of time for survey administration	52	13.8
Students would not answer honestly	44	11.6
We do not have the resources to address the problems identified in the survey	25	6.6
Administering a survey about bullying would give the school a poor image	15	4.0
Gaining parental consent would be too difficult	15	4.0
Parents would be opposed to such a survey	7	1.9
The superintendent would be opposed to such a survey	3	0.8
The school board would be opposed to such a survey	3	0.8
Other	33	8.7

a. Respondents could select all that apply.

( $\chi^2 = 79.212$ ,  $df = 1$ ,  $p < .01$ ). A  $2 \times 3$  chi-square analysis (Have a Committee/Do Not Have a Committee  $\times$  Geographic Regions) found no significant differences ( $\chi^2 = 2.449$ ,  $df = 2$ ,  $p = .29$ ).

### Having a Conference Day About Bullying Prevention Efforts

Descriptive statistics regarding the stages of change and the barriers to having a conference day about bullying prevention efforts are in Table 3. Stage of having a conference day varied by the number of perceived barriers to doing this activity ( $F = 3.783$ ,  $df = 5$ ,  $p < .01$ ). The greatest number of perceived barriers were for those in the preparation stage ( $M = 2.67$ ,  $SD = 1.67$ ). This was followed by those in the precontemplation and contemplation stages ( $M = 1.78$ ,  $SD = 1.61$ ;  $M = 1.68$ ,  $SD = 1.73$ , respectively). The fewest

Table 3. Stages of Change Regarding Establishing a "Bullying Prevention Committee" to Coordinate Antibullying Efforts at the School and Principals' Perceived Barriers to Establishing Such a Committee ( $N = 378$ )

	<i>n</i>	%
<b>Stages</b>		
Have not seriously thought about establishing a bullying prevention committee to coordinate antibullying efforts at the school (precontemplation)	223	59.0
Have started discussions about establishing a bullying prevention committee to coordinate antibullying efforts at the school (contemplation)	46	12.2
Are currently taking steps to establish a bullying prevention committee to coordinate antibullying efforts at the school (preparation)	34	9.0
Last year was the first time the school had a bullying prevention committee that coordinated antibullying efforts (action)	27	7.1
Have had a bullying prevention committee that coordinates antibullying efforts at the school for 2 or more school years (maintenance)	36	9.5
Previously had a bullying prevention committee that coordinated antibullying efforts at the school but no longer have one (relapse)	5	1.3
<b>Barriers<sup>a</sup></b>		
There would be no barriers	157	41.5
This is not a priority relative to other problems with which we deal	111	29.4
Lack of time for committee training	106	28.0
Lack of money to support such a committee	80	21.2
Teachers are not interested in such a committee	35	9.3
Lack of knowledge on how to form such a committee	31	8.2
Parents are not interested in being part of this effort	17	4.5
Committee work does not result in effective solutions	13	3.4
The superintendent would be opposed to establishing such a committee	2	0.5
The school board would be opposed to establishing such a committee	2	0.5
Other	34	9.0

a. Respondents could select all that apply.

number of barriers were for those in the maintenance stage with zero barriers. A  $2 \times 3$  chi-square analysis (Have Conference Day/Do Not Have Conference Day  $\times$  Geographic Regions) found no significant differences ( $\chi^2 = 0.603$ ,  $df = 2$ ,  $p = .74$ ).

### Perceptions Regarding Bullying and Level of Violence

On a scale from 1 (*no problem*) to 7 (*major problem*), principals perceived the extent of bullying in U.S. elementary schools ( $M = 4.83$ ,  $SD = 1.17$ ) to be significantly greater than the extent in their own schools ( $M = 3.17$ ,  $SD = 1.24$ ) ( $t = 28.7$ ,  $df = 371$ ,  $p < .01$ ). Independent-samples  $t$  tests were calculated to examine the relationship between principals' perceptions of the extent of bullying in their elementary school and whether their school offered the aforementioned schoolwide bullying prevention activities. No significant relationships were found between perceived extent of bullying in their elementary

Table 4. Stages of Change Regarding Having a School Conference Day for Students, Parents, and Community Members to Raise Awareness of Bullying Prevention Efforts at the School and Principals' Perceived Barriers to Having Such a Conference Day ( $N = 378$ )

	<i>n</i>	%
<b>Stages</b>		
Have not seriously thought about having an antibullying conference day at the school (precontemplation)	137	36.2
Have started discussions about having an antibullying conference day at the school (contemplation)	193	51.1
Are currently taking steps to have an antibullying conference day at the school (preparation)	12	3.2
Last year was the first year the school had an antibullying conference day (action)	8	2.1
Have had antibullying conference days at the school for at least the past 2 school years (maintenance)	7	1.9
We previously had antibullying conference days at the school but no longer have them (relapse)	12	3.2
<b>Barrier<sup>a</sup></b>		
There would be no barriers	89	23.5
Lack of trained staff to effectively coordinate an antibullying conference day	93	24.6
Having an antibullying conference day is a low priority relative to other issues	91	24.1
Lack of money to hold such a conference day	83	22.0
Not enough time in the school year	68	18.0
Parents would not attend	65	17.2
Bullying is not a problem in our school	42	11.1
Our school does not have a clear definition of what bullying behavior entails	33	8.7
Teachers would not attend	30	7.9
The superintendent would be opposed to such a conference day	6	1.6
The school board would be opposed to such a conference day	4	1.1
Other	19	5.0

a. Respondents could select all that apply.

schools and administering a survey to the students to assess bullying ( $t = -1.011$ ,  $df = 366$ ,  $p = .31$ ) or having a conference day about bullying prevention activities ( $t = -0.154$ ,  $df = 363$ ,  $p = .88$ ). However, it was found that in schools that had an established bullying prevention committee, the principals perceived a significantly greater extent of bullying in their elementary school ( $M = 3.72$ ,  $SD = 1.27$ ) than schools with no such committee ( $M = 3.03$ ,  $SD = 1.17$ ) ( $t = -4.147$ ,  $df = 364$ ,  $p < .01$ ).

Principals' perceptions of the level of violence in the neighborhood surrounding the school was also investigated. On a scale from 1 (*very low*) to 7 (*very high*), principals ( $M = 1.68$ ,  $SD = 1.62$ ) perceived the level of violence in the neighborhood surrounding the school to be low. Principals also reported that the average number of school-related bullying problems was 3.07 ( $SD = 2.7$ ).

### Perceptions of the Effectiveness of Various Bullying Prevention Activities

In addition to the three aforementioned schoolwide prevention activities, principals' perceptions of the effectiveness of 11 other activities described in the Bullying Prevention Program were examined. These additional activities pertained to activities other than schoolwide bullying prevention activities (classroom-based activities, individual discussions, improved supervision). The respondents were requested to identify what effect they perceived each of the activities would have on bullying. Responses were scored from 1 (*no reduction*) to 7 (*major reduction*). Principals' perceived effectiveness for the bullying prevention activities had a fairly narrow range (3.31 to 4.94). The activity perceived as the most effective was contacting the parents of the bully to make them aware of the situation. The activity perceived as least effective was holding a school conference day for students, parents, and community members to raise awareness of bullying prevention issues. A qualitative examination of these 14 items found that several of the items were related to one another. To investigate this, principal components analysis with varimax rotation was performed, and the 14 bullying prevention activities were reduced to 3 factors. These factors were loaded on three different factors with eigenvalues ranging from .493 to .909. The factors were identified as follows: Factor 1: Post-Bullying Activities (establishing negative consequences for students who bully others; when a bullying situation arises, having serious talks with the bully about stopping the behavior; when a bullying situation arises, having serious talks with the victim about ways to prevent further episodes; contacting the parents of the bullies to make them aware of the situation; contacting the parents of the victims to make them aware of the situation; holding a meeting with the bully, the victim, and their parents to discuss the situation and potential solutions). Factor 2: Environmental Bullying Prevention Activities (establishing a bullying prevention committee to coordinate antibullying efforts, holding a school conference day to raise awareness of bullying prevention efforts, having parent-teacher meetings to increase awareness of bullying prevention efforts, establishing classroom rules specifically against bullying, establishing positive consequences for students who help prevent bullying problems). Factor 3: Improved Student Supervision (improving supervision of outdoor school environment, improving supervision in hallways, improving supervision during lunch or break).

Principals perceived postbullying activities to be the most effective means of reducing bullying problems. This was followed by improved student supervision and finally by environmental bullying prevention activities. Perceived effectiveness of postbullying activities did not significantly differ based on any of the background/demographic variables of the principal. This is in contrast to environmental bullying prevention activities. Principals perceived environmental bullying prevention activities as more effective as their perceptions regarding any of the following increased: the extent of bullying in U.S. elementary schools ( $r = .318, p < .01$ ), their perception regarding the extent of bullying in their own school ( $r = .273, p < .01$ ), their perception regarding the level of violence in the neighborhood surrounding their school ( $r = .197, p < .01$ ), or the number of reported bullying incidents in their schools ( $r = .249, p < .01$ ). Females were more likely than males ( $M = 21.48, SD = 6.97$  vs.  $M = 18.88, SD = 6.45$ ) to perceive environmental bullying prevention activities as effective ( $t = 3.442, df = 327, p < .01$ ). Those who had received bullying prevention training perceived environmental bullying prevention activities as more effective than those who had not received such training ( $t = 2.673, df = 328, p < .01$ ).

Regarding improved student supervision, principals perceived these activities as more effective as their perceptions regarding any of the following increased: the extent of bullying in U.S. elementary schools ( $r = .140, p < .01$ ), their perception regarding the extent of bullying in their own school ( $r = .202, p < .01$ ), their perception regarding the level of violence in the neighborhood surrounding their school ( $r = .197, p < .01$ ), or the number of reported bullying incidents in their schools ( $r = .272, p < .01$ ).

### LIMITATIONS

The results of this study should be viewed within the context of several limitations. The response rate was 55.2%. Although this response rate is lower than ideal, it is typical of mailed surveys to school principals.<sup>31</sup> However, it is possible that nonrespondents may have responded differently than respondents, a potential threat to external validity. Because no more than 18% of the schools were engaging in the selected bullying prevention activities, it is likely that the nonresponding principals were less likely to have these bullying prevention activities in their schools. If so, then the results are an optimistic estimate of such activities in elementary schools. Bullying prevention activities were self-reported rather than assessed through direct observation. Therefore, principals answering in an untruthful manner (i.e., socially desirable) cannot be ruled out. If so, this would be a threat to the internal validity. Such a possibility increases as responses to some questions are perceived as potentially making a principal or his or her school look bad. The survey instrument was primarily closed format and did not allow the opportunity for principals to provide additional information. It is possible that additional insights could have been gained through a different research design. Future studies may want to use a more inductive approach to collecting this type of data even though it would dictate a more limited sample size. Finally, the monothematic nature of this survey instrument may have placed principals in a mind-set that may not be indicative of their true perceptions or practices. If so, this represents another potential threat to the internal validity. To have created a nonmonothematic questionnaire on this subject would have resulted in an excessively long instrument, possibly reducing reliability.

### DISCUSSION

No published study to date has investigated principals' perceptions or practices regarding bullying prevention. The current study found that components of a "whole school approach" to bullying prevention was rarely being done in elementary schools. Although principals largely stated that there would be no barriers to any of these activities, the barriers identified included a lack of priority relative to other problems, lack of training, or lack of resources. It is apparent that efforts must be made to educate principals regarding the magnitude of bullying problems in elementary schools and methods to reduce the bullying episodes. Although additional resources may be difficult to obtain to support activities such as school conference days, surveying students and establishing a bullying prevention committee should take minimal resources.

The results of this study show that schools are distributed across the various stages of the stages of change model. This suggests that various activities need to take place to help schools begin engaging in the activities. Using the processes of change component of the

stages of change model<sup>35</sup> helps to suggest what can occur to move schools through the stages. Education about the magnitude of the problem and steps necessary to alleviate the problem are examples of actions to move schools from the precontemplation to contemplation stage. Getting schools to realize that changes in their own school can help to make a safer environment for learning, and to make a commitment toward that change will help move schools from contemplation to the preparation and action stages. Finally, once schools have taken action to reduce the problems of bullying in their school, the key is for them to maintain those changes in the long term. This may be accomplished through the creation of helping relationships with the school regarding the problem of bullying. In other words, continued parent involvement and interest in the school changes is essential to move the schools from the action stage to the maintenance stage. Another activity that would help schools move toward the maintenance stage would include continued self-assessment to see that the social norms are changing toward an atmosphere where students perceive bullying to be an unacceptable behavior.

It is interesting to note principals' perceptions of the extent of bullying in U.S. elementary schools and in their own schools. Principals perceived the extent of bullying in their own school to be less than the extent in U.S. elementary schools in general. Of 378 responding principals, only 2 (0.5%) perceived the extent of bullying in their school as worse than the extent in schools as a whole. It is unlikely that a national random sample of schools would result in only schools that were below the national average regarding bullying. Why did nearly all of the principals perceive the problems as worse outside of their school? It may be because they perceived the extent of bullying in the United States as greater than it truly is and have realistic perceptions about their school. This may be due to increased media coverage of bullying issues and coverage of severe ramifications (e.g., homicides and suicides) that have resulted from bullying episodes. Another potential reason for this finding is that school professionals are poorly informed regarding the extent of bullying in their own schools. This would make sense if principals were unaware of bullying situations occurring in their schools. A study by Melton and colleagues conducted in South Carolina found that 27% of students reported being bullied several times during the past month.<sup>36</sup> If this is a typical prevalence, and the average school size in the current study was 445 students, 27% of this would be 120 students who were bullied several times in the previous 3 months or at least once per month. The reported 3 episodes of bullying per month is far from the 120 per month that may be occurring. It may be difficult for principals to admit they have worse than average bullying problems in their school and that their school was not involved in reducing the problem.

Regarding the effectiveness of the three factors of bullying prevention activities, principals perceived postbullying activities as the most effective and environmental bullying prevention activities as the least effective. This suggests that principals perceive after-the-fact activities such as calling parents as a better means of reducing further bullying problems than preventive measures such as bully prevention committees and reward systems for students who help prevent bullying. Unfortunately, this is much of the same that has been occurring for years; when a problem happens, call the parents and discipline the students. Although this may be a necessary action, it is unlikely to prevent bullying problems in general. The literature is clear in that the only effective means of decreasing school bullying is through a "whole school approach" that would include many of the activities that made up the environmental bullying prevention factor.

This study found that school principals who received bullying prevention training were more likely to perceive these primary prevention activities as effective. Thus, with principals being key decision makers in the schools, appropriate training regarding effec-

tive bullying prevention measures is essential. In addition, until such training becomes common, health educators need to educate local school administrators regarding this issue and lobby for adoption of effective bullying prevention programs. Furthermore, only one published bullying prevention program has been rigorously evaluated as effective (Norwegian Bullying Prevention Program). Health education researchers need to become involved with quality evaluations of the numerous other bullying prevention programs that exist.

## IMPLICATIONS

The findings of this study present some potentially serious implications. Very few schools implement school-based activities that have been shown to reduce the problems of school bullying. It could be argued that bullying prevention is just as important an issue to address as substance abuse prevention, which most elementary schools (89%) address.<sup>37</sup> It would be difficult to argue that problems associated with bullying such as depression, suicidal ideation, mental disorders, fighting, weapon carrying, vandalism, stealing, difficulty in making friends, poor performance in school, absenteeism, cheating on tests, and behavioral misconduct are less important than problems associated with substance abuse. Furthermore, it has been found that 60% of students who were identified as bullies in Grades 6 through 9 had at least one criminal conviction by the age of 24.<sup>28</sup> The various problems associated with bullying combined with the estimated prevalence of 5.7 million children in Grades 6 through 10 who are victimized moderately to frequently supports the magnitude of this problem in the United States.<sup>15</sup>

As part of the safe schools initiative, some states are starting to require antibullying policies to be developed and implemented. At least 15 states currently have such legislation.<sup>38</sup> Although this legislation is an important step in reducing school bullying problems, in some states it is met with resistance. In Washington State, an antibullying bill stalled in the legislature after Christian conservatives argued that it amounted to a gay rights measure.<sup>39</sup> The bill would have required school districts to set up policies against harassment, bullying, and intimidation. Many who lobbied against the measure claimed that it censored their right to condemn homosexuality and threatened their right of free speech. It is evident that advocacy needs be done in states that do not currently have existing antibullying legislation. Bullying crosses all demographic boundaries, and students need to be protected whether gay or straight, White or racial minority, boys or girls, popular or unpopular, perceived as attractive or unattractive.

This perspective is also working its way into the courtroom. In March 2002, a girl in British Columbia, Canada, was convicted of criminal harassment and uttering threats. It was found that she had been repeatedly verbally bullying a classmate. The victimized girl committed suicide and stated in her suicide note that suicide was her only escape from the bullying.<sup>40</sup> Lawsuits are also starting in the United States. In November 2002, a federal lawsuit was filed against a rural school district in central Pennsylvania for allegedly ignoring a bullying problem that was occurring in the school. Although there was no suicide that occurred as the result of the bullying, the student reported numerous episodes of being bullied, and the complaints of the student and the parents went unanswered by the school.

From a purely litigious aspect, it would benefit principals to take a proactive approach to reducing bullying rather than a reactive one. The passive denial of bullying problems or the perception that it is a rite of passage through adolescence will simply not be defend-

able any longer. Children have a right to learn in a safe school environment, and parents are likely going to continue to fight for this right even if it means suing the school district. Implementing bullying prevention activities and appropriately addressing bullying situations will help decrease the extent of youth bullying in the United States; will help protect schools from expensive lawsuits; and will decrease the extent of physical, social, and psychological trauma that schoolchildren experience in relation to bullying.

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