Bullying Prevention Across the School Years: Effectiveness Trial Outcomes of Transtheoretical Model-based Programs for Elementary, Middle and High School Students

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Background

Bullying has been identified as one of the most important behaviors threatening the health and well-being of students. As a result, school behaviors have looked for evidence-based programs that could be implemented to reduce the rates and consequences of bullying. This research describes the effectiveness trial outcome analyses of individualized Transtheoretical Model-based programs for elementary, middle (Build Respect, Stop Bullying®) and high schools (Building Respect®).

Participants

U.S. schools were recruited from different types of communities (e.g., rural, working towns, suburbs, inner-city schools, urban blue collar and urban core) with preference given to schools with higher percentages of students eligible for free lunches. Schools were matched on key variables (type of community, region of the country and percentages of students eligible for free lunch) and within each effectiveness trial (ES, MS or HS) were placed into two different groups, which were then randomly assigned to one of three groups. Statistical procedures were used to control for any baseline differences. The ES trial included 12 schools (1,807 students in 4th-9th grade), the MS trial included 12 schools (1,237 6th-8th grade students), and the HS trial included 13 schools (1,202 9th-12th grade students).

All girls comprised 48.9% (ES), 53.3% (MS), and 55.3% (HS) of the samples. Approximately 50.4% (ES), 40.5% (MS), and 58.9% (HS) of the students in the trial schools were White, 7.5% (ES), 11.5% (MS), and 13.2% (HS) were Black or African American, and 13.1% (ES), 27.4% (MS), and 15.2% (HS) were Hispanic. Approximately 40.6% (ES), 48.6% (MS), and 42.3% (HS) of the students in the schools were eligible for free lunches.

Measures

Outcome measures included:

Role Assessment. Students were asked two items to assess each of three roles:

1. Bully – treats other kids in mean ways and/or pushes, hits or kicks other kids to hurt them; 2. Victim – kids treat them in mean ways and/or push, hit or kick them to hurt them; 3. Passive Bystander – lets kids be mean to other kids and lets kids push, hit or kick others while doing nothing to prevent or discourage such behaviors.

At baseline, 48.9% (ES), 74.6% (MS), and 68.8% (HS) of students were involved in roles as bullies; 77.2% (ES), 80.2% (MS) and 71.2% (HS) as victims; and 36.6% (ES) 64.4% (MS) and 74.7% (HS) as passive bystanders. Many students participated in multiple roles.

Stage of Change. In the ES trial, students were asked a single item staging algorithm to assess stage of change for each role. Students were then assigned an overall stage based on their earliest stage of change (Precontemplation, Contemplation, Preparation, Action, Maintenance) for any of the three roles. For example, if a student was in Action for the bully role, Precontemplation for the victim role, and Preparation for the bystander role, their overall stage was determined to be Precontemplation. In the MS and HS trials, students were asked one staging question that incorporated all three roles.

Procedure

A 3 x 2 experimental design crossed three experimental groups with two assessments. The three experimental groups were: Control Group received one pre and two (MS/HS) to three (ES) post-tests. Two Intervention Groups received up to three Internet based individualized and interactive sessions, a staff guide, administrator’s guide and a family guide, as well as three post-tests. Having two identical treatment groups allowed for a replication of the interventions.

Intervention

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Analyses

Two sets of analyses were conducted for each trial: post-test only comparisons of the proportion of students who were no longer participating in any or all roles and repeated measures comparisons of the proportion of students not participating in any or all roles. For the post-test only comparisons, only those students who reported being in pre-action, or in any of the individual roles at baseline were included. Post-test only comparisons using arcsine transformation differences in proportions of movement into Action/Maintenance or movement to no bullying in each role at each post-test were performed. For the repeated measures comparisons random effects logistic models were run controlling for covariates and schools. Both complete case comparisons and complete observations, or intent-to-treat analyses, were performed. Intent-to-treat analyses examined effects in all records rather than only those who were able to be matched using the last observation carried forward (LOCF) method of replacement.

Results

All sets of analyses indicate:

Bully: A 61%/30%/40% (ES/MS/HS) reduction in bullying behavior in the intervention groups as compared to the control group at Post 1.

Victim: A 37%/53%/57% (ES/MS/HS) reduction in students reporting being bullied in the intervention groups as compared to the control group at Post 1.

Passive Bystander: A 55%/34%/41% (ES/MS/HS) increase in students who reported taking appropriate action to stop bullying in the intervention groups as compared to the control group at Post 1.

Overall Stage of Change: The odds ratio for the two intervention groups combined compared to the control group was 3.13 (ES), 4.38 (MS), and 3.89 (HS) at Post 1, meaning that the intervention groups in all trials were more than three or four times as likely as the control group to progress to Action or Maintenance and not participate in any role related to bullying.

Conclusions

Compared to current best practices, the Build Respect, Stop Bullying® and Building Respect® programs are of low intensity and easy to disseminate which is important given the effectiveness with a school-aged populations.

These programs were developed in collaboration with the Channing Bete Company and are being used in 500 schools throughout the U.S. All three programs have been rated as “effective” in the Office of Juvenile Justice and Delinquency Prevention’s (OJJDP) Model Programs Guide.

Changes in Bullying Behaviors

Baseline Percentages

Baseline Stage Distribution

Proportion Moving to Action/Maintenance at Follow-up

Baseline Role Frequencies

Changes in bullying behaviors