Abstract

The purpose of this paper is to present a study that can serve as a model of program evaluation for school personnel that can be used to improve services and demonstrate program efficacy to key stakeholders. The study presented in this paper evaluated the impact of a brief, bystander bullying program (STAC) on depressive symptoms and passive suicidal ideation among middle school students in a rural, low-income community ($N = 130$). This topic was selected as there is limited research examining the efficacy of bystander programs on improving mental health outcomes for students trained to intervene. Results of the study indicated students trained in the STAC program reported reductions in depressive symptoms and passive suicidal ideation at a 6-week follow-up compared to an increase in symptoms reported by students in the control group. We discuss these findings and the use of program evaluation by school personnel to support prevention programming.

Keywords: bullying, bystander, STAC, depression and suicidal ideation, rural, low-income schools

Impact of a Brief, Bystander Bullying Prevention Program on Depressive Symptoms

and Passive Suicidal Ideation: A Program Evaluation Model for School Personnel

Program evaluation data are essential for determining the effectiveness of school-based prevention programs (American School Counseling Association [ASCA], 2019). Although conducting multi-site randomized controlled trials is the "gold-standard" in research (Abel & Koch, 1999), school-specific program evaluation data provide information that can be used to improve services, demonstrate program efficacy to key stakeholders, and legitimize prevention programs (Dimmitt, 2009; Dimmitt, 2010). Without school-specific program evaluation data, schools have limited information to guide decisions about continued program implementation or discontinuation (Llosa & Slayton, 2009). Documentation of improved emotional outcomes for students participating in prevention programs provides evidence to support the continuation of these programs in the schools. However, it is generally not practical for school personnel to conduct multi-site randomized controlled studies or even conduct studies with one additional school serving as a comparison or control school.

The purpose of this paper is to present an evaluation of a school-based prevention program that can serve as a model for school personnel to evaluate the efficacy of a prevention program within their own school. Specifically, we present an evaluation testing the efficacy of a brief, bystander bullying preventive intervention on reducing depressive symptoms and suicidal ideation. The study was conducted within one school in which students were randomly assigned to either the intervention or control group. We provide information on bullying and students who witness bullying to provide the context for this study. Next, we discuss comprehensive school-wide interventions, identify barriers to implementation, and describe the STAC program that we evaluate in the current study. We then present the study methodology and results,

followed by a discussion of our findings and how school personnel can use program evaluation data to support prevention programs.

The Problem of Bullying

Bullying is a significant public health issue in the United States, with prevalence data indicating 26.7% of middle school students report being targets of bullying (U.S. Department of Education, 2019). National statistics also identify important socio-economic factors related to bullying behavior. Students in rural areas report higher rates of bullying victimization than those in urban areas and students in households with the lowest income levels report the highest rates of bullying victimization across income categories (U.S. Department of Education, 2019). Further, a growing body of research suggests that rural youth are at higher risk for bullying victimization than urban youth (Dulmas et al., 2004; Leadbeater et al., 2013; Smokowski et al., 2013). Students in rural areas are also 3-5% more likely to report bullying their peers relative to students in urban areas (Nansel et al., 2001). Additionally, students in households with the lowest income levels report the highest rates of consequences associated with bullying victimization, including negative effects on school work, relationships, feelings about oneself, and physical health (U.S. Department of Education, 2019). Further, among middle school students attending schools in low-income, rural communities, bullying victimization is associated with mental health risks such as depression, anxiety (Evans et al., 2014; Smokowski et al., 2013), decreased self-esteem, and future optimism (Evans et al. 2014).

Witnessing Bullying as a Bystander and Depression Symptoms and Suicidal Ideation

The effects of bullying extend beyond targets of bullying, with 70.6% of students reporting witnessing bullying as a bystander (Bradshaw et al., 2007). The majority of research on bullying, however, focuses on the mental health risks associated with being a target of

bullying, even though a significantly greater number of student report witnessing bullying as

bystanders (Rivers et al., 2009). Overall, the literature on negative outcomes for students

bystanders suggests that bystanders are at elevated risk for depressive symptoms. Specifically,

witnessing bullying is associated with depression (Rivers et al., 2009), sadness (Janson et al.,

2009), helplessness (Janson et al. 2009; Rivers & Noret, 2013), isolation, and guilt (Hutchinson,

2012). Research also indicates that witnessing bullying is associated with potential suicidal

ideation (i.e., thoughts of ending one's life) (Rivers & Noret, 2013). Among students in rural,

low-income communities, research indicates that witnessing bullying as a bystander is also

associated with symptoms of depression (Midgett & Doumas, 2019). Further, the relationship

between being a bystander and depression is significant even when controlling for the effects of

being a target or perpetrator of bullying (Midgett & Doumas, 2019; Rivers et al., 2009). Thus,

examining the efficacy of bystander bullying training on reducing symptoms of depression and

suicidal ideation among students participating in these programs is an important area for further

investigation. This is particularly true for middle school students in rural, low-income

communities as research indicates income is inversely associated with depression among

children (Tracy et al., 2008) and rural community youth suicide rates are nearly double that of

rates in urban areas (Fontanella et al., 2015).

Bystander Roles

Peers play an important role in the perpetuation or prevention of bullying (Espelage et al.,

2012). When students witness bullying, they can respond by acting as an "assistant" (i.e., joining

in with the perpetrators), "reinforcer" (i.e., providing positive feedback to the perpetrator),

"outsider" (i.e., disengaging and either leaving the situation or observing from a distance), or

"defender" (i.e., intervening on behalf of targets) (Salmivalli et al., 1996). Research, however,

indicates only 20% to 30% of students intervene in bullying situations, with 20% to 30% of students supporting or encouraging bullying through their actions, and 30% to 50% doing nothing (Salmivalli & Voeten, 2004). How bystanders respond to bullying is also related to symptoms of depression. Specifically, bystanders who "defend" students report higher levels of depression than students who do not intervene (Lambe et al., 2017; Wu, Luu, & Luh, 2016). One explanation for why "defenders" experience more depression is that "defenders" take an active role in bullying, thereby becoming more involved in the traumatic event than those who remain passive (Lambe et al., 2017). Additionally, students who intervene in bullying situations may use maladaptive defending behaviors (e.g., physical or verbal aggression) (Lambe et al., 2017), which may further involve the bystander in the bullying situation. In contrast, when students are taught appropriate defending behaviors, they experience increases in self-esteem (Midgett et al., 2017) and reductions in depression (Midgett & Doumas, 2019a) and internalizing symptoms (Doumas et al., 2019). These studies point to the importance of not only encouraging students to intervene when they witness bullying, but providing students with "defending" skills so that they may intervene in an appropriate manner.

School-Based Bullying Prevention Programs

Research indicates comprehensive, school-based programs are effective at decreasing bullying (Ttofi & Farrington, 2011). Many of these programs, however, do not focus on training bystanders to intervene (Gaffney et al., 2019). Further, the majority of studies examining comprehensive, school-wide programs that do include a bystander component focus on the reduction of bullying rather than program impact on students trained in the program (Janson et al., 2009). Additionally, the majority of bullying research has been conducted with urban samples and may not generalize to youth in rural communities (Smokowski et al., 2013). Urban-

rural differences may impact bullying prevalence rates, as well as the effectiveness of prevention strategies (Kawalski et al., 2017). Further, schools in rural, low-income communities may face educational and social disparities that pose obstacles to implementing comprehensive bullying programs (Peguero, 2012). Comprehensive, school-wide programs require significant resources that pose barriers to implementation including additional demands on teachers, limited access to training, lack of funding, and little or no mental health professionals at the school (Reinke et al., 2011). Relative to urban schools, rural schools face additional challenges for accessing and implementing prevention programs including a lower tax base to fund programs, training costs inflated by transportation needs, frequent staff turnover and school closures, staff overload and burnout, and lack of program advocates and local expertise in bullying prevention (Leadbeater et al., 2013). Therefore, it is important to identify effective bystander bullying programs that reduce barriers for implementation for middle schools in rural, low-income communities.

The STAC Program

The STAC program (Midgett et al., 2015; https://www.boisestate.edu/education-counselored/stac/), which stands for "stealing the show," "turning it over," "accompanying others," and "coaching compassion," is a brief, bystander bullying preventive intervention that teaches students to intervene as "defenders" when they wittness bullying. The program includes a didactic component to teach students about bullying, associated negative consequences, bystander roles, and strategies to intervene when students witness bullying. The training also includes role-plays for students to practice utilizing the four STAC strategies. The training is follwed by two, 15-minute booster sessions that were developed to reinforce learning and enhance skill acquisition. The 90-minute program was developed as a brief, bystander bullying program for schools, reducing implementation barriers for schools that do not have the resources

to adopt comprehensive, school-wide bullying programs. The program was also designed not only to decrease bullying behavior through peer intervention, but to improve the socio-emotional adjustment of bystanders. Specifically, providing bystanders with effective strategies they can use to intervene in bullying situations as "defenders" may reduce depressive symptoms, including suicidal ideation, by reducing feelings of helplessness and guilt.

The STAC program is based on social learning principles including modeling and self-efficacy. According to social learning theory, individuals model the behavior of others that 1) they perceive as influential, 2) they see are rewarded for their behavior, and 3) are similar to them (Bandura, 1977). When bystanders intentionally or unintentionally act as "reinforcers" or "assistants," they reinforce the perpetrator (Salmivalli et al., 2011). However, a single student of high status, or a group of students, acting as "defenders" can shift attention and power away from the perpetrator (Salmivalli et al., 2011), discontinuing the reinforcement, modeling pro-social behavior, and providing social support for targets. Further, observing peers successfully intervene in bullying situations increases the likelihood that student bystanders will intervene in future situations. Self-efficacy influences the decision-making process, the ability to act in the face of difficulty, and the amount of emotional distress experienced while completing a difficult task (Bandura, 2012). Self-efficacy is developed and strengthened through social modeling and mastery experiences that provide opportunities to overcome challenges.

Researchers have examined the impact of the STAC program on both bullying behavior and mental health risks and protective factors among bystanders. Research indicates the STAC program is effective in reducing bullying perpetration (Midgett et al., 2017; Midgett et al., 2018) and victimization (Midgett et al., 2018) when delivered as a school-wide prevention program. Results from a series of randomized controlled trials also support the efficacy of the STAC

program in reducing internalizing symptoms (Doumas et al., 2019) and depression (Midgett &

Doumas, 2019), as well as increasing self-esteem (Midgett et al., 2017) and sense of school

belonging (Midgett & Doumas, 2019) among student leaders trained to intervene as "defenders."

Although these findings provide support for the STAC program, STAC was developed and

evaluated in schools in urban, affluent communities and results may not generalize to students in

schools in rural, low-income communities.

        To address this gap, Midgett et al. (2020) adapted the STAC program to be appropriate

for a broader range of students, including students in rural, low-income communities.

Adaptations included broadening examples of bullying to include those experienced by students

in rural, low-income communities, as well as modifying role-plays to integrate the types of

bullying experiences reported by students in these communities. Preliminary research on the

adapted program indicates that students attending middle schools in rural, low-income

communities report high levels of program acceptability (Midgett et al., 2020), increases in

knowledge and confidence to intervene in bullying situations, and using the STAC strategies to

intervene in bullying behavior post-training (Moran et al., 2020). Further, research on the

school-wide implementation of the STAC program indicates middle school students in a low-

income, semi-rural community reported decreases in bullying victimization from baseline to a 6-

week follow-up (Moran et al., in press). These results provide support for the effectiveness of

the STAC program for middle school students in rural, low-income communities. However, to

date, the impact of the STAC program on negative emotional consequences among student

trained as "defenders" has not been examined in this population.

The Current Study

The purpose of this paper is twofold: 1) to provide an example of a program evaluation to school personnel and 2) to extend the literature by evaluating the impact of the STAC program on reducing depressive symptoms and passive suicidal ideation among middle school students in a rural, low-income community. Because most schools do not have access to a control school for a randomized controlled study, program evaluations are often conducted using a single group, pre-post study design. However, it is possible to conduct a randomized controlled study within one school by randomly assigning students to an intervention or control group. In this study, students ($N = 360$) were randomly selected for participation and randomly assigned to an intervention or assessment-only control group. Our study hypotheses were as follows: relative to student in the control group, students in the intervention group would report (a) greater reductions in depressive symptoms, and (b) greater reductions in passive suicidal ideation from baseline data collection to a 6-week follow-up assessment.

Methods

Participants

Participants were recruited from one public middle school in a rural, low-income community in the Northwest. We randomly selected 360 students using a stratified proportionate sampling procedure (see Figure 1 for the participant flow diagram). Sample characteristics by study condition are provided in Table 1. Overall, 87.7% ($n = 114$) of the 130 participants completed both the baseline and 6-week follow-up assessments. Results of chi-square analyses and an independent sample t-test indicated no differences between the groups on gender, $\chi^2(1) = 0.01$, $p = .99$, ethnicity, $\chi^2(5) = 8.67$, $p = .12$, or age, $t(128) = -.26$, $p = .79$. Additionally, there was no difference in the rate of attrition across the two groups, $\chi^2(1) = 0.07$, $p = .79$.

Measures

Demographic Variables

Participants completed a brief demographic questionnaire with questions about age, gender, grade, and race/ethnicity.

Depressive Symptoms

Depressive symptoms were measured using Depression Scale of the BASC-3 SRP-A (Reynolds & Kamphaus, 2015). The Depression Scale is comprised of 12 items measuring symptoms of depression, including feelings of unhappiness, sadness, and stress that may result in an inability to carry out everyday activities or may bring on thoughts of suicide (Reynolds & Kamphaus, 2015). Five items are rated on a dichotomous scale, 0 (*True*) or 2 (*False*). Example items include: "I don't seem to do anything right," "I just don't care anymore," and "I used to be happier." Seven items are rated on a 4-point Likert Scale ranging from 0 (*Never*) to 3 (*Almost Always*). Examples include: "I feel depressed," "Nothing about me is right," and "I feel like I have no friends." We obtained a total scale score through the BASC-3 SRP-A hand-scoring worksheet (Reynolds & Kamphaus, 2015). The BASC-3 SRP-A Depression Scale has reliability coefficient alphas ranging in the .80s for males and females, and evidence of construct validity with correlations ranging from .51 - .93 between the Depression Scale and other established measures including the BASC-2 SRP-A, ASEBA, and the Beck Youth Inventories II (BYI) (Reynolds & Kamphaus, 2015). For this sample, Cronbach's alpha was .92.

Passive Suicidal Ideation

Passive suicidal ideation was measured using one item of the Depression Scale of the BASC-3 SRP-A (Reynolds & Kamphaus, 2015). The item "I feel life isn't worth living" is rated on a 4-point Likert Scale ranging from 0 (*Never*) to 3 (*Almost Always*). This item has been used to assess passive suicidal ideation (e.g., Paykel Suicide Items; Paykel et al., 1974) and has been

shown to discriminate between middle school students with high and low suicidal ideation

(Vander et al., 2009). Use of one item from the BASC-3 SRP-A Depression Scale also parallels

research examining suicidal ideation among bystanders using a single item from the Brief

Symptom Inventory Depression Scale (BSI; Derogatis, 1994) to measure potential suicidal

ideation (Rivers & Noret, 2013).

Procedures

The research team worked with the school counselor to implement research procedures.

The team randomly selected students ($N = 360$) to participate in the study using a stratified

sampling procedure. Parents/guardians of selected students were sent a pre-notification letter, a

letter with an informed consent form and project-addressed stamped envelope, and a reminder

letter in both English and Spanish to their permanent home address. Parents/guardians were

asked to return the consent form in a project-addressed stamped envelope if they agree to their

child's participation. Additionally, students received a hand-delivered consent form to take

home. Students with a signed parental/guardian informed consent form were randomly assigned

to the intervention group or control group using a computer-generate random numbers table.

Student written assent was collected prior to baseline data collection.

All participants completed baseline and 6-week follow-up assessments during class time.

Students in the control group returned to their classrooms immediately following the baseline

data collection. After completing the baseline survey, the students in the intervention group

completed a 90-minute training program conducted by graduate students in a master's in

counseling program. Students in the intervention group also participated in two, bi-weekly 15-

minute small group booster sessions with counseling graduate students. The reserchers provided

all participants with a "pizza party" after conducting the 6-week follow-up asssesement. The

School District and the University Institutional Review Board approved all study procedures.

The STAC Program

The STAC program (Midgett et al., 2015; https://www.boisestate.edu/education-

counselored/stac/) is comprised of a 90-minute training and two, 15-minute booster sessions.

The program includes a didactic component to teach students about bullying, associated negative

consequences, bystander roles, and the four STAC strategies students can use to intervene when

witnessing bullying. The didactic component is followed by an experiential component

including role-plays so students can practice using the strategies. The training is followed by

two 15-minute booster session that are intended to reinforce students' use of the strategies and

brainstorm ways to become more effective "defenders."

Didactic Component

The didactic component of the training includes an ice-breaker exercise, an audiovisual

presentation, and hands-on activities to engage students in the learning process. The didactic

component is designed to teach students about (a) the complex nature of bullying; (b) different

types of bullying with a focus on spreading rumors, physical bullying, and name calling; (c)

characteristics of students who bully, including the likelihood they have been bullied themselves;

(d) reasons students bully including physical appearance and language; (d) negative associated

consequences of bullying for students who are targets, perpetrate bullying, and are bystanders;

(e) bystander roles and the importance of acting as a "defender;" and (f) the STAC strategies

used for intervening in bullying situations. The four STAC strategies are described below.

"Stealing the Show." "Stealing the show" involves using humor or distraction to turn

students' attention away from the bullying situation. Trainers teach bystanders to interrupt a

bullying situation to displace the peer audience's attention away from the target and from the

bullying situation so that other students do not join in or reinforce the bully.

   "Turning it Over." "Turning it over" involves informing an adult about the situation

and asking for help. During the training, students identify safe adults at school who they

perceive can be of help to them. Students are taught to always "turn it over" in the case of

physical bullying, cyberbullying, or if they are unsure as to how to intervene. Additionally,

trainers discuss the importance of immediate documentation of social media posts that are

intended to humiliate or hurt students. Students are taught how to document evidence of

cyberbullying to report it to school authorities such as the school counselor, vice-principal, or

principal.

   "Accompanying Others." "Accompanying others" involves the bystander reaching out

to the student who was targeted to communicate that what happened is not acceptable, that the

student who was targeted is not alone at school, and that the student bystander cares about them.

Trainers teach students to approach a peer after they were targeted inviting them to spend time

together. "Defenders" learn they can ask peers who were targeted if they would like to talk

about what happened or they can implement this strategy indirectly by spending time with the

student who was targeted communicating empathy and support.

   "Coaching Compassion." "Coaching compassion" involves gently confronting the

student who bullies after a bullying incident to indicate that this type of behavior is unacceptable.

Additionally, the bystander encourages the perpetrator to consider what it would feel like to be

the target in the situation, thereby raising awareness and fostering empathy toward the target.

Trainers teach bystanders to only implement "coaching compassion" when they have an

established relationship with the perpetrator, if the student who bullied is in a lower grade, and/or if bystanders believe they will be perceived as having higher-status than the perpetrator.

Role-Plays

Trainers divide students into small groups of 6 students to practice the STAC strategies. Role-plays include hypothetical bullying situations that students may encounter in rural, low-income communities. Example scenarios include: (a) "In the hallway, you overhear some girls talking about another girl's clothes and hair. You hear them make fun of the girl telling her things like, 'Can't you afford a brush? Nice clothes' with a sarcastic and mean tone. The girl looks pretty upset and does not say anything back; (b) "For the past few weeks you have noticed a group of boys who stand in the middle of the hallway and yell in another boy's ear as he walks by. You also see that group of students slam his locker closed when he is trying to get things for class; (c) "You are hanging out with some friends after school waiting for the bus, looking through Facebook. One girl decided to friend request another girl from school that she does not like, and then posted mean comments on the girl's pictures. This is not the first time you have seen this girl do something like this."

Post-Training Booster Sessions

Two bi-weekly, 15-minute booster session occur after the training. During these meetings, students discuss the types of bullying they observed, which strategies they used, and the effectiveness of these strategies. Trainers answer questions and facilitate brainstorming more effective ways to implement the STAC strategies, how to use more than one strategy to intervene, and, when appropriate, to work as a team to intervene during or after a bullying incident.

Fidelity

Graduate assistants who implemented the STAC program watched a training video and

conducted a practice presentation to obtain feedback from the Principal Investigator (PI). The PI

was present at each training where the graduate students delivered the STAC program to middle

school students. The PI rated program delivery on a dichotomous scale, *Yes* or *No,* to evaluate

whether presenters accurately taught the definition and types of bullying, the STAC strategies,

and whether they deviated from training materials. The PI also assessed whether student trainers

conducted all role-plays in the training. Both presenters were scored as adhering to the training

materials at 100%.

Analytic Strategy

Prior to analysis, we examined the outcome variable for outliers and normality.

Successful randomization was assessed with *t*-tests and chi-square tests examining baseline

measures. We used general linear model (GLM) repeated-measures analysis of variance

(ANOVA) to examine the intervention effects across time. The two fixed effects were Time

(baseline; 6-week follow-up) and Group (intervention; control). We also controlled for sex as

we found sex differences in baseline scores for the outcome variables. We calculated effect size

using partial eta squared (η^2_p), with .01 considered small, .06 medium, and .14 large (Cohen,

1969; Richardson, 2011). We considered analyses significant at $p < .05$. All analyses were

conducted in SPSS version 24.0.

Results

Preliminary Analyses

Means and standard deviations for outcome variables by Group at baseline and at follow-

up are reported in Table 2. The outcome variables were examined for skew and kurtosis at

baseline and follow-up assessments. We did not identify any outliers and all variables were

within the normal range. We also examined differences on depressive symptoms and passive

suicidal ideation, as well as demographic variables between the two study conditions at baseline

to confirm successful randomization. Analyses revealed no group differences in depressive

symptoms, $t(128) = 0.70$, p = .49, suicidal ideation, $t(128) = 1.73$, p = .09, gender, $\chi^2(1) = 0.04$, p

= .84, ethnicity, $\chi^2(1) = 2.18$, $p = .14$, or age, $t(128) = -.26$, $p = .79$.

Outcome Analysis

As seen in Table 2, for depressive symptoms, results of the GLM repeated-measures

ANOVA revealed a significant Time x Group interaction effect ($p < .02$, $\eta^2_p = .05$). Students in

the intervention group reported a significant reduction in depressive symptoms compared to an

increase in depressive symptoms reported by students in the control group. Similarly, for passive

suicidal ideation, we found a significant Time x Group interaction effect ($p < .01$, $\eta^2_p = .06$).

Students in the intervention group reported a significant reduction in passive suicidal ideation

compared to an increase in passive suicidal ideation reported by students in the control group.

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Discussion

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The purpose of this paper was to present a model for program evaluations for school

personnel. The study described in this paper examined the efficacy of a brief, bystander bullying

preventive intervention on reducing depressive symptoms and passive suicidal ideation among

students in a middle school in a rural, low-income community. This study may provide a useful

framework for school personnel who are interested in evaluating prevention programing at their

school. Findings from the current study indicate students who participated in the STAC program

reported a significant reduction in depressive symptoms and passive suicidal ideation relative to

students in a control group. Consistent with prior research (Doumas et al., 2019; Midgett &

Doumas, 2019), the effect sizes for both depression ($\eta^2_p = .05$) and suicidal ideation ($\eta^2_p = .06$)

were in the medium range. The current findings parallel research indicating that providing

students with skills to intervene as "defenders" can reduce depressive symptoms among students

in urban, affluent communities (Midgett & Doumas, 2019; Doumas et al., 2019). This study

extends the literature by replicating these findings with middle school students in a rural, low-

income community and extending the outcomes to include passive suicidal ideation. Results also

suggest that although students in the intervention group reported reductions in depressive

symptoms and passive suicidal ideation, those in the control group reported an increase in both

outcome variables. Thus, findings suggest that the STAC program may serve as a buffer against

the natural progression in depressive symptoms and passive suicidal ideation observed in the

control group.

One explanation for these findings is that bystanders who "defend" targets of bullying

report higher levels of depressive symptoms than bystanders who do not intervene potentially

due to the use of maladaptive skills (Lambe et al., 2017). Thus, in the absence of bystander

training, students may continue to use maladaptive strategies to intervene, leading to an increase

in depressive symptoms. In contrast, providing skills training and opportunities to practice

intervention strategies when witnessing bullying may provide students with appropriate

"defender" skills, thereby decreasing depressive symptoms and passive suicidal ideation. Being

a bystander is associated with feelings of helplessness (Janson et al., 2009, Rivers & Noret,

2013) and guilt (Hutchinson, 2012), which may be alleviated by successfully intervening in

bullying situations. Further, among bystanders, helplessness is predictive of potential suicidal

ideation (Rivers & Noret, 2013). Thus, it is possible that equipping students with appropriate

intervention strategies may have decreased feelings of helplessness, thereby reducing both

depressive symptoms and passive suicidal ideation.

Limitations and Directions for Future Research

While this study adds to the literature on bystander bullying preventive interventions, there are limitations. First, generalizability is limited due to a relatively small sample recruited from one middle school in the Northwest. Next, the duration of follow up in this study (i.e., 6-weeks) was relatively short. Future research with longer follow-up periods is recommended to evaluate whether or not gains are maintained over the academic year and whether or not additional boosters are needed. Moreover, we used a single item to measure passive suicidal ideation. Although the item we used assesses passive suicidal ideation (Paykel et al., 1974) and has been shown to discriminate between low and high levels of suicidal ideation (Vander Stoep et al., 2009), using a multiple-item scale would improve the reliability and validity of the measure in future research. For example, both The Scale for Suicidal Ideation (Beck et al., 1979) and the Suicidal Ideation Questionnaire (Reynolds, 1988) have been extensively used to measure suicidal ideation among adolescents and have excellent psychometric properties.

Additionally, although we designed this study as a randomized controlled study, we used an assessment-only group for the comparison condition. Thus, it is possible that factors other than program content may have impacted study outcomes. For example, students in the intervention group received attention from the trainers during the 90-minute training and the two 15-minute booster sessions. The training was designed to foster relationships and connections, as well as elicit students' sense of agency to act, which may have contributed to the changes in outcomes reported in this study. Although use of assessment-only control groups is common in school-based bullying intervention research (Chalamandaris & Piette, 2015), using an active comparison group for the control condition will enhance future research.

Further, because students were randomized within a single school, we cannot discount the possibility of contamination effects. Contamination occurs when the control group receives some or all of the intervention either passively or actively (Cook and Campbell, 1979). Specifically, it is possible that students in the intervention group shared information from the intervention with students in the control group or that students in the control group learned strategies from observing student in the intervention group act as "defenders." Additionally, students in both the intervention and control group share teachers and peers, potentially creating further diffusion between the experiences of students in the intervention and control groups. Although we found statistically significant intervention effects in this study, it is possible our effect sizes were attenuated due to contamination effects. We also note that although contamination is generally considered a negative outcome from a research perspective, within real world settings contamination can be considered as positive as the benefits of the program are transferred to individuals who did not receive the program directly (Doyle & Hickey, 2013).

Finally, examining the process by which the program impacted depressive symptoms and passive suicidal ideation was beyond the scope of this study. Future research should include possible mediators of intervention effects including changes in helplessness and self-efficacy that may lead to a reduction in depressive symptoms and improved mental health outcomes. Further, through qualitative interviews, researchers could learn more about students' experiences being trained in the program and acting as "defenders" to help inform program development.

Implications

Findings from the current study have meaningful implications for school personnel. First, although school mental health professionals may know that bullying is associated with negative consequences for both targets and perpetrators of bullying, they may not be aware of the

impact that bullying has on students who witness bullying. The majority of students witness bullying at school (Bradshaw et al., 2007) and witnessing bullying is associated with symptoms of depression (Midgett & Doumas, 2019; Rivers et al., 2009) and suicidal ideation (Rivers & Noret, 2013). Further, using maladaptive defending behaviors when intervening in bullying situations is associated with depression (Lambe et al., 2017; Wu et al., 2016). Thus, teaching bystanders appropriate "defender" skills is an important goal for school mental health professionals. Results of this study provide preliminary evidence for the positive impact of the STAC program on depressive symptoms and passive suicidal ideation.

Second, although school-wide, comprehensive programs are commonly used in bullying prevention (Tofti & Farrington, 2011), these types of programs can be difficult to implement because of the significant resources they require both in terms of time and cost (Menard & Grotpeter, 2014). This is particularly true for schools in rural and low-income communities (Leadbeater et al., 2013). Additionally, many comprehensive programs do not focus on bystander training that equips students to act as "defenders" (Gaffney et al., 2019). As such, having the option to implement a brief, bystander bullying program could serve as a practical alternative to a comprehensive, school-wide program. When reviewing anti-bullying programs for adoption, school personnel may want to consider a brief, bystander bullying program that can reduce both bullying behavior, as well as serve as a buffer against negative outcomes associated with witnessing bullying. This is particularly important for schools in rural, low-income communities as the highest rates of bullying are reported by students in rural areas and across the lowest income categories (U.S. Department of Education, 2019). Further, students in rural communities are at significantly higher risk for suicide than those in urban communities

(Fontanella et al., 2015) and low-income status is positively associated with depression (Tracy et al., 2008).

Third, because the majority of students report witnessing bullying at school (Bradshaw et al., 2007), implementing the STAC program as a school-wide prevention program may be a useful approach to engage students as part of the solution to the problem of bullying and the negative associated consequences. School mental health professionals could collaborate with teachers to implement the program. For example, the initial STAC training could be implemented within the context of classroom lessons. School mental health professionals could then conduct booster sessions to provide students with support and accountability for utilizing the strategies. As school mental health professionals conduct booster sessions, they can be informed from a student perspective regarding the most common types of bullying students experience while helping students feel empowered to act as "defender." High levels of school personnel attunement to students' social world is associated with a greater peer willingness to defend targets of bullying (Norwalk et al., 2016). Adult involvement in a meaningful way also communicates to students that school personnel are invested in addressing the problem of bullying at school. When students perceive adults at school as supportive, students are more likely to ask for help with bullying (Eliot et al., 2010).

Finally, the study presented in this paper serves as a model for school personnel who are interested in conducting program evaluation research. School personnel can work together to establish what programs to implement based on the needs of the school and then design an evaluation in which students are randomly assigned to receive the prevention program or be in the control group. Methodology should include a pre-post design, similar to the one presented in this study, to control for differences in the intervention and control groups prior to implementing

the program. Although randomization into groups theoretically controls for these differences,

samples may not be large enough to ensure successful randomization of participant

characteristics. Because school personnel may not have staff that are trained in conducting

statistical analyses or have access to statistical software, it may be beneficial to collaborate with

local university faculty who are interested in school-based program evaluation. Alternatively,

descriptive statistics can be run in programs such as Microsoft Excel and can be used to

demonstrate changes across time between intervention and control groups.

Conclusion

This paper presented an evaluation of a school-based bystander bullying preventive

intervention that can serve as a model for school personnel. Findings from this study

demonstrate the positive impact of the STAC program on depressive symptoms and passive

suicidal ideation among students attending a middle school in a rural, low-income community.

Results suggest the STAC program has the potential to improve the emotional well-being of

students. Using the current study as a model, school personnel can design program evaluations

to inform decisions regarding prevention programming at their school.

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Table 1

Sample Characteristics by Study Group

Characteristics	Control Group (*n* = 61)	Intervention Group (*n* = 69)	Total Sample (*N* = 130)
Age in years, *M* (*SD*)	12.52 (1.04)	12.49 (0.96)	12.50 (1.00)
Gender			
Male	42.6%	42.6%	42.6%
Female	57.4%	57.4%	57.4%
Race/Ethnicity			
White	67.2%	52.2%	59.2%
Hispanic	31.2%	42.0%	36.9%
Asian-American	0.0%	1.4%	0.8%
African-American	0.0%	1.4%	0.8%
Pacific Islander	1.6%	1.4%	1.5%
Other	0.0%	1.6%	0.8%

Table 2

Descriptive Statistics and Statistical Contrasts for Outcomes

	Control (*n* = 51)	Intervention (*n* = 60)	Time x Group			
	M (SD)	*M (SD)*	WL	*F*(1,110)	*p*	η^2_p
Depressive Symptoms			.95	6.05*	.02	.05
Baseline	5.57 (6.40)	6.47 (8.24)				
6-Week Follow-Up	6.69 (8.60)	5.10 (7.88)				
Passive Suicidal Ideation			.95	5.62**	.01	.06
Baseline	0.56 (0.97)	0.31 (0.51)				
6-Week Follow-Up	0.29 (0.70)	0.37 (0.75)				

Note. *WL* = Wilks' Lambda.

*p < .05. **p < .01.

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┌─────────────────────────────────┐
│   N = 360 Students Randomly      │
│           Selected               │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│  n = 142 (39.4%) Students with   │
│     Parental/Guardian Consent    │
└─────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────────┐
│ n = 130 (36.1%) Students Provide Assent│
│ and Participate (n = 12 absent at baseline)│
└──────────────────────────────────────┘
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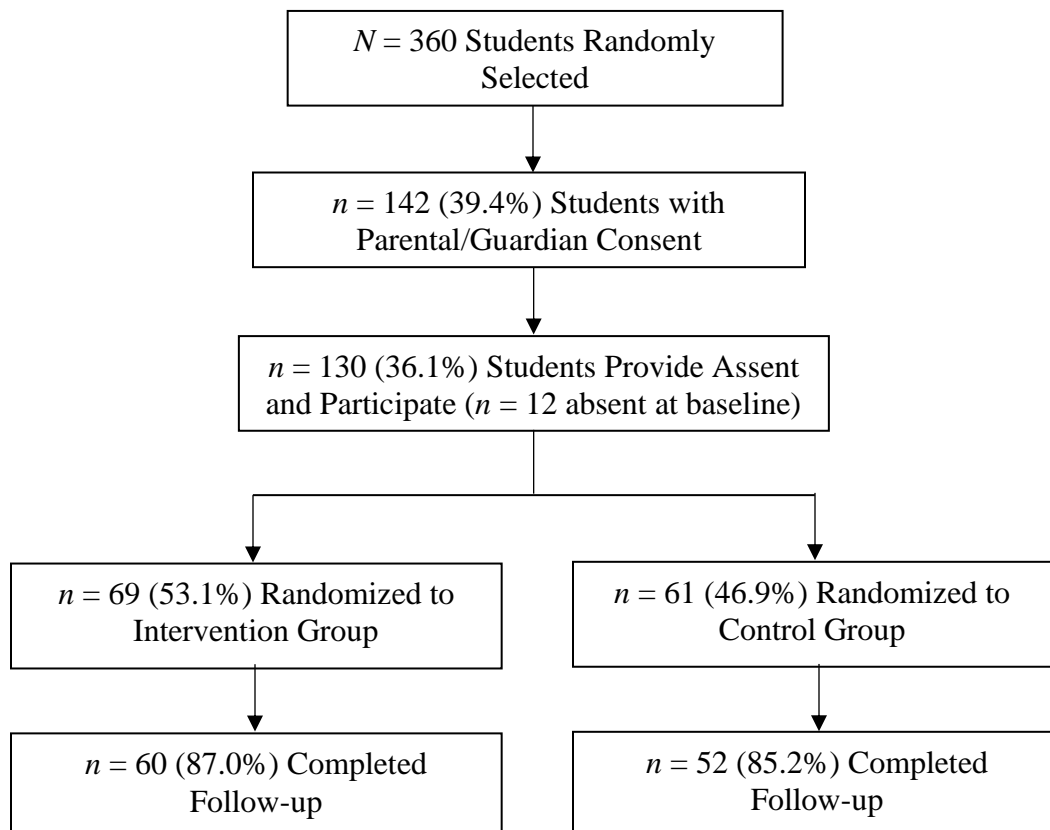| n = 69 (53.1%) Randomized to Intervention Group	n = 61 (46.9%) Randomized to Control Group
n = 60 (87.0%) Completed Follow-up	n = 52 (85.2%) Completed Follow-up

Figure 1. Participation Flow Diagram.