School Counselors Use of Social Emotional Learning in High School:

A Study of the Strong Teens Curriculum

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Abstract

Student mental health problems often emerge in high school; however, such problems frequently go unaddressed. Using a time series design, we evaluated the effects of the Strong Teens social-emotional learning curriculum implemented by three school counselors and two school social workers with 28 high school students identified with internalizing symptoms. Decreases in students' self-reported levels of internalizing symptoms were statistically significant following the 12-week intervention, indicating moderate improvement. Participants rated the program as socially valid, though they also recommended ways to improve it. Results coincide with past studies indicating that Strong Teens may help reduce adolescents' self-reported internalizing symptoms.

Keywords: high school, mental health, resilience, school counseling, social-emotional learning

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Many mental health problems emerge in adolescence or early adulthood (McGorry, Purcell, Goldstone, & Amminger, 2011). Between 13% and 20% of youth experience serious mental health issues (Centers for Disease Control and Prevention [CDC], 2013) and the prevalence of these issues has been increasing in the United States (Olfson, Druss, & Marcus, 2015). An estimated 6% to 10% of youth ages 12 to 17 use prescribed medications to treat mental health problems (Howie, Pastor, & Lukacs, 2014). Less than half of adolescents with mental health problems receive adequate interventions, and most of these youth receive services in schools (Costello, He, Sampson, Kessler, & Merikangas, 2014).

Mental health problems in high school are a significant public health concern, as they both cause personal distress and suffering as well as limit students' ability to experience positive relationships and academic success (O'Connell, Boat, & Warner, 2009; Wahlbeck, 2015). Such problems limit the ability of youth to reach typical goals for social and educational achievement and increase the risk of further psychopathology, functional impairment, and suboptimal functioning later in life (O'Connell et al., 2009). The associated cost of youth mental disorders in the U.S. has been estimated to be $247 billion each year (CDC, 2013). As the incidence of mental health problems continues to rise (Olfson et al., 2015), the cost for addressing these problems will likely escalate.

A variety of social, economic, and environmental risk factors can negatively influence adolescent mental health (World Health Organization, 2014). For example,

strained and compromised family relationships and stressors related to discrimination, including post-resettlement and acculturative stressors, negatively affect adolescent mental health (Ellis, MacDonald, Lincoln, & Cabral, 2008). Additionally, puberty brings dramatic developmental changes physically, cognitively, and socially, including increased time spent with peers, unaccustomed secondary school environments, and new social hierarchies (Young, Caldarella, Richardson, & Young, 2012). Mental health problems can accompany these developmental changes (McGorry et al., 2011).

An area of concern during adolescence is the occurrence of internalizing disorders that can occur when individuals attempt to control or regulate their internal emotional and cognitive states in ineffective ways (Merrell & Gueldner, 2010). Common internalizing disorders include mood disorders (e.g., major depressive disorder, dysthymia) and anxiety disorders (e.g., generalized anxiety disorder, separation anxiety disorder, obsessive-compulsive disorder; Cosgrove et al., 2011). Common symptoms include impaired personal relationships, poor school performance, and problematic parental attachment (Natarajan, 2013). Unaddressed internalizing symptoms can have significant negative effects including impaired peer relations, decreased school engagement, and later problems with mental health, adult relationships, suicidality, and unemployment (Bayer et al., 2011; Eaton et al., 2013).

Resilience

Fortunately, resilience, defined as adaptive functioning in the context of risk or stress, can positively impact adolescence mental health (Zolkoski & Bullock, 2012). Resilience is an interactive construct derived from individual variations in outcomes among those who have experienced major stress or adversity (Rutter, 2012).

Preventative measures can assist teenagers in developing resilience, which may reduce the prevalence or severity of mental health problems such as internalizing disorders (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007b). A variety of factors can enhance resilience including a realistic positive sense of self, the ability for self-regulation, healthy attachments with family and friends, achievement and involvement in school, and community support (Alvord & Grados, 2005). Stress prevention and stress management interventions also promote resilience and reduce internalizing symptoms (Steinhardt & Dolbier, 2008). Resilience is important for adolescents with elevated levels of internalizing symptoms who may not actively seek out assistance.

School counselors can work collaboratively to implement preventive, comprehensive programs that promote student resilience and success (American School Counselor Association [ASCA], 2017). For many adolescents, the most accessible source for prevention and intervention is often a school counselor who focuses on helping students make the transition to becoming functional adults (Even & Quast, 2017). An area of increasing interest for school counselors is a multi-tiered approach to social-emotional learning (referred to as SEL; Merrell et al., 2007b; Weist et al., 2018).

A Multi-Tiered Approach to Social Emotional Learning

School counselors can implement multi-tiered SEL programs to improve students' resilience and long-term mental health (ASCA, 2018; Osher, Bear, Sprague, & Doyle, 2010). SEL is a framework intended to support students' positive social, emotional, and academic development. SEL programs focus on addressing maladaptive thought patterns, teaching social and emotional skills, helping students to reduce mental

health symptoms, and guiding them to develop resilience (Merrell & Gueldner, 2010; Weist et al., 2018). While these types of programs may benefit all students, the direct instruction in SEL may particularly benefit adolescents with internalizing symptoms, as they often have deficits in these areas (Weist et al., 2018).

A multi-tiered approach to SEL allows school counselors to implement programs that can be adapted to meet students' needs (Merrell et al., 2007b; Weist et al., 2018; Young et al., 2012). Tier 1, the universal intervention, includes effective core curricular strategies that focus on preventing problems before they occur by targeting entire school populations, with no student eligibility requirements or selection criteria. About 15% of students may not respond to Tier 1 interventions and thus require more intensive Tier 2 interventions that are often administered in small group settings for those with heightened levels of distress (Merrell et al., 2007b; Weist et al., 2018; Young et al., 2012). Students who demonstrate behaviors that are more persistent may also require Tier 3 interventions, which require more intensive, individually administered services (Merrell et al., 2007b; Weist et al., 2018; Young et al., 2012).

Strong Teens

One SEL program that has shown promise in helping schools address issues of adolescent mental health is Strong Teens (Merrell et al., 2007b), the adolescent version of the Strong Kids series developed by the same authors (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007a). The goal of Strong Teens is to increase students' resilience by fostering SEL through teaching skills to help manage the challenges of physical maturation, increased academic demands, and complicated social contexts (Merrell et al., 2007b). This curriculum is appropriate at any tier, in a variety of settings,

with few demands on school personnel. It is a low-cost, low-technology program, requiring few resources and limited time to prepare and implement. School counselors can learn and teach this curriculum with minimal training, as it was developed with time and implementation feasibility in mind (Merrell et al., 2007b).

Research to date suggests positive outcomes following implementation of Strong Teens. For example, a study of a culturally adapted implementation of Strong Teens found increased student knowledge of healthy social-emotional behavior along with reducing acculturative stress and increasing individuals' sense of school belonging (Castro-Olivo, 2014). Another study conducted in a residential treatment center for adolescents suggested that the program helped to increase students' knowledge of healthy social-emotional behavior, reduce self-reported internalizing symptoms, and increase social competence (Isava, 2006). Similarly, positive effects of the program on students' internalizing symptoms and resilience levels occurred following implementation by therapists in a residential treatment center for adolescent girls (Marvin, Caldarella, Young, & Young, 2017). Significant improvements in internalizing symptoms were also evident when Strong Teens was implemented with a small sample of at-risk high school students, though there is a need for additional studies (Merrell, Juskelis, Tran, & Buchanan, 2008). The current study sought to meet the need for additional investigation of Strong Teens implemented in high schools.

Study Purpose and Research Questions

Research on Strong Teens has provided some evidence that the program increases SEL knowledge, decreases levels of internalizing symptoms, and improves resilience (Castro-Olivo, 2014; Isava, 2006; Marvin et al., 2017; Merrell et al., 2008).

Given the promising results of prior studies, this study evaluated the effects of this program implemented by high school counselors and social workers as a Tier 2 intervention. There were four specific research questions: (a) Does the implementation of Strong Teens decrease internalizing symptoms in high school students with internalizing symptoms, as measured by student and teacher ratings? (b) Does the implementation of Strong Teens increase resilience in high school students, as measured by student and teacher ratings? (c) Are school counselors and social workers able to implement Strong Teens with fidelity, as measured by fidelity checklists? (d) Do school counselors, social workers, and students perceive the implementation of Strong Teens as socially valid?

Method

Setting

The site for this study was a public high school (grades 9-12) in Utah with approximately 1,920 students. The ethnic and racial composition of students in the school was Caucasian (69%), Hispanic/Latino (21%), Asian/Pacific Islander (6%), Hawaiian Native/Pacific Islander (2%), African American/Black (1%), and American Indian (1%). Approximately 41% of the students were eligible for free or reduced-price lunch. The school had no multi-tiered services for students with internalizing symptoms, other than individual counseling as requested. The high school administration decided to implement Strong Teens at a Tier 2 level for students with internalizing symptoms and worked with study authors to evaluate the effects of the intervention. Strong Teens was offered as an optional elective class for one-half of high school credit, with sessions

held in small classrooms every Monday afternoon for 12 weeks, during an "early out" time.

Participants

  Student participants. After school counselors informed parents and students about the study, they obtained both parent and student consent using school district approved consenting procedures. Of the 46 students identified as potential study participants, 28 (61%) consented to participate in the study and continued until its completion. Demographic information for the 28 participants was as follows: males 54%, females 46%; Caucasian 64%, Hispanic 32%, Asian/Pacific Islander 4%; freshmen 25%, sophomores 37%, juniors 28%, and seniors 10%. School counselors assigned students to one of three Strong Teens classes based on their grade level, with juniors and seniors combined in one class.

  Strong Teens instructors. The school administration wanted mental health professionals to work with the students who were at risk. The Strong Teens instructors were three high school counselors and two high school social workers, with no prior experience with Strong Teens. Two Caucasian female school counselors co-taught the class for juniors and seniors, frequently teaching lessons together and occasionally teaching individually if one was unavailable. A Hispanic male school counselor and a Caucasian female school social worker co-taught the sophomore class, occasionally teaching alone if needed. An African-American male social worker taught the freshman class individually.

Procedures

Student identification. School counselors coordinated a multi-step process to identify students at-risk for internalizing disorders. During a school-wide faculty meeting, all classroom teachers in the high school completed Stage 1 of the Systematic Screening for Behavior Disorders ([SSBD]; Walker & Severson, 1992), which has shown evidence of validity for use in secondary schools (Caldarella, Young, Richardson, Young, & Young, 2008; Walker & Severson, 1992). The teachers (a) studied the SSBD definitions, including examples of internalizing and externalizing behaviors, (b) recorded students in any of their classes with such behaviors, and (c) rank ordered the students on each list (i.e., internalizing and externalizing). Teachers then identified the three top-ranked students from each list and completed the Problem Behavior scale (which includes Internalizing and Externalizing subscales) of the Social Skills Improvement System Teacher Report ([SSIS-TR]; Gresham & Elliott, 2008) for each of the six students. For this study, we only considered the Internalizing subscale scores of the SSIS-TR. Teachers recommended students for Strong Teens if students had elevated scores on the Internalizing subscale. Those who scored high on Externalizing but not Internalizing were not appropriate for Strong Teens, as the program has shown to be most effective for those with internalizing symptoms: Such students received follow-up from the school counselors for other school services such as individual counseling.

Next, the school counselors compiled the list of students identified from the SSIS-TR and discussed their selections with the other members of the school's behavior team, which included the principal, assistant principals, and the special

education lead teacher. After reviewing the list, the behavior team recommended a handful of students for participation who might benefit from the program but who had not been identified by teachers. Finally, a school-wide communication was available to students and their parents informing them of the aims of the Strong Teens program. Students who thought they could benefit from the program were able to self-select, and parents could also nominate their adolescent for participation. The school administrators believed that this was important, as some students with internalizing symptoms might go unnoticed by school personnel.

While different avenues were provided to identify students with internalizing symptoms, school counselors identified most of the student participants through the screening process (86%). The behavior team only identified three student participants (10%) and only one student participant (4%) who self-selected into the study.

Training. Before the intervention began, instructors participated in an hour-long training session on the program conducted by the researchers: familiarizing them with the lessons and the course materials, as well as with SEL in general. Researchers distributed Strong Teens manuals and discussed lesson outlines. This training model is similar to the model used in other studies of the Strong Kids series (Kramer, Caldarella, Christensen, & Shatzer, 2010; Kramer, Caldarella, Young, Fischer, & Warren, 2014). Additionally, the Strong Teens manual was created to be easily used by educators (Merrell et al., 2007b). While more extensive training might have been ideal, the high school did not have additional training time available; the resulting brief training better reflected the realities of working in public high schools.

Intervention. Strong Teens consists of 12 lessons taught approximately 50 minutes once a week for 12 weeks, with one main topic discussed in each lesson. The main topics are (a) Strong Teens as emotional strength training, (b) understanding your emotions, (c) dealing with anger, (d) understanding other people's emotions, (e) clear thinking, (f) the power of positive thinking, (g) solving people problems, (h) letting go of stress, (i) behavior change by setting goals and staying active, and (j) reviewing the learned concepts. The curriculum includes vocabulary to express emotions, awareness of emotions, and ways to deal with emotions appropriately. Lessons are semi-scripted with topics, discussion points, examples, and questions, which can be adapted to fit the needs and situations of the students. During each lesson, the instructor (a) reviews the previous lesson, (b) introduces the new skill, (c) defines and discusses the topic emotion and/or skill, (d) practices situations and applications through modeling and role-playing with students, and (e) closes by briefly reviewing the main points of the lesson and distributing homework. The curriculum includes instructor-directed components, along with opportunities for student participation, discussions, and role-plays. Additionally, visual materials promote discussions and enhance learning.

Data Collection

The researchers gathered outcome measures at four different times throughout the study: (a) Pretest 1 (three weeks before Strong Teens implementation), (b) Pretest 2 (the week implementation began), (c) Posttest 1 (the week implementation ended), and (d) Posttest 2 (three weeks later). The researchers determined the length of time between assessments in collaboration with the school administration. Referring classroom teachers rated the participating students during faculty meetings or before

and after school. Students completed self-ratings individually in the school counseling office.

SSIS-Student Report (SSIS-SR). Students rated their symptoms on the Internalizing subscale of the SSIS-SR (Gresham & Elliott, 2008). This subscale is composed of 10 items on a four-point Likert-type scale (from 0 = *not true* to 3 = *very true*) on which students indicated how true a statement was of themselves (e.g., "I feel lonely," "I'm afraid of a lot of things"). Raw scores range from 0 to 30, with higher scores indicating higher levels of internalizing symptoms. Gresham and Elliott (2008) reported that scores above 15 (for ages 13-18) indicate "above average" levels of internalizing symptoms. The test manual reports internal consistency (alpha) of the SSIS-SR Internalizing subscale as .88 and test-retest reliability as .67 and provides evidence of convergent validity (Gresham & Elliott, 2008).

SSIS-Teacher Report (SSIS-TR). Teachers completed the seven-item SSIS-TR for each student they had nominated, rating the frequency of students' internalizing symptoms on a four-point Likert-type scale (0 = *never* to 3 = *almost always*). Items include "the student withdraws from others" and "says bad things about self." Raw scores range from 0 to 21, with higher scores indicating higher levels of internalizing symptoms. Gresham and Elliott (2008) report SSIS-TR Internalizing subscale scores above eight (for ages 13-18) as indicating "above average" levels of symptoms, internal consistency (alpha) as .90, and test-retest reliability as .82.

Social-Emotional Assets and Resilience Scales-Adolescent (SEARS-A). Students also completed the SEARS-A short form that has a .94 correlation with the long form (Merrell, 2011). The SEARS measures resilience defined as skills related to

self-regulation, social competence, empathy, and responsibility. The short form consists of 12 items measured on a four-point Likert-type scale (from 0 = *never* to 3 = *always*). Students rate how often a statement describes them (e.g., "I stay in control when I get angry"; "I make good decisions"). Raw scores range from 0 to 36, with higher scores indicating higher resilience. Merrell (2011) reports that scores at or below 17 (for ages 13-18) are considered "at risk," while scores at or above 18 indicate average to high functioning. The test manual reports SEARS-A internal consistency (alpha) as .82, two-week test-retest reliability at .84, and evidence of convergent validity (Merrell, 2011).

SEARS-Teacher (SEARS-T). Teachers completed the SEARS-T short form, consisting of 12 items, measured on the same four-point Likert-type scale. This short form has a .98 correlation with the long form (Merrell, 2011). Teachers indicate the degree to which each statement describes the student (e.g., "People think she/he is fun to be with"; "[The student] can identify errors in the way he/she thinks about things"). Raw scores range from 0 to 36, with higher scores representing higher resilience. Merrell (2011) indicated that scores at or below 13 (for ages 13-18) are considered "at risk," while scores at or above 14 indicate average to high functioning. The test manual reports that internal consistency (alpha) is .93, with two-week test-retest reliability at .90 and evidence of convergent validity (Merrell, 2011).

Intervention fidelity. Researchers observed 33% of the Strong Teens lessons taught and completed a fidelity checklist adapted from a previous study (Kramer et al., 2014). On a rotating basis, researchers attended one Strong Teens class each week to record fidelity, thereby observing all classes equally throughout the study.

Social validity. At the end of the intervention, instructors and students completed social validity questionnaires (adapted from Kramer et al., 2014) requesting their views of Strong Teens. Instructors responded to 27 items rating the program goals, procedures, and outcomes. Students provided ratings for 26 items (see Appendix). Quantitative ratings were on a five-point Likert scale (from 1 = *strongly disagree* to 5 = *strongly agree*). Four open-ended questions solicited feedback regarding problems with the curriculum, suggested improvements, and observed changes in students.

Research Design

We conducted this study using a time-series design (Gall, Gall, & Borg, 2007), adding a second pretest and a second posttest to reduce threats to validity (e.g., history, maturation). We also chose this design because it adapted to the high school's needs. The school administration did not want a control group, which would deny some students the potential benefits of the curriculum. The schedule and structure of the school precluded teaching the curriculum multiple times during the school year, ruling out the possibility of a waitlist control design. With a time-series design following a single-group model, participants served as controls for assessing changes in themselves over time. We also tried to control for potential bias by (a) having school counselors and social workers, rather than research staff, implement the program, (b) including student self-ratings, and (c) having referring classroom teachers rather than the Strong Teens instructors complete the teacher rating scales.

Data Analysis

Researchers compared data from pretests and posttests using repeated measures ANOVA in SPSS to examine within-group differences among students for

each outcome measure at each measurement point (Coolidge, 2012). Data met the

following assumptions for repeated measures ANOVA: continuous interval data,

matched data pairs, no significant outliers, and normal distribution. However, using the

Mauchly's test, we found that data violated the assumption of sphericity, so we used the

Greenhouse-Geisser correction. We also calculated effect sizes using Cohen's d to

determine the magnitude of effects and practical significance. We summarized social

validity Likert-type responses with descriptive statistics. Using paper-pencil methods,

responses from the four open-ended social validity questions were examined

qualitatively by the first and second authors for common patterns, constructs, and

themes that emerged using interpretational analysis. Such analysis involves segmenting

the database, developing categories, coding segments, grouping category segments,

and drawing conclusions (Gall et al., 2007).

Results

Table 1 contains descriptive data on all measures across pretest and posttest phases.

Pre-intervention comparisons indicated no statistically significant differences between

Pretest 1 and Pretest 2 on any measures: SSIS-SR (p = .640), SSIS-TR (p = .679),

SEARS-A (p = .510), and SEARS-T (p = .838). These results suggest that student

levels of internalizing symptoms and resilience were consistent over time before

beginning the Strong Teens program. Scores also indicated that the students as a

group had moderate levels of internalizing symptoms and resilience before the

introduction of Strong Teens, rather than at-risk levels (see Gresham & Elliott, 2008 and

Merrell, 2011).

Table 1

Means and Standard Deviations Across Time and Measures (n = 28)

Measure	Pretest 1		Pretest 2		Posttest 1		Posttest 2	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
SSIS-SR	12.00	6.97	11.96	7.02	8.97	6.04	9.48	5.46
SSIS-TR	8.55	3.56	7.31	4.26	7.41	4.90	7.21	4.42
SEARS-A	19.26	5.55	19.43	5.50	21.62	5.70	21.45	5.27
SEARS-T	17.55	5.25	16.04	5.70	17.52	7.77	19.03	8.31

Note. Lower scores on the *SSIS* measures indicate improved functioning, whereas higher scores on the *SEARS* measures indicate improved functioning. *SSIS-SR = Social Skills Improvement System Student Rating; SSIS-TR = Social Skills Improvement System Teacher Rating; SEARS-A = Social-Emotional Assets and Resilience Scale Student Rating; SEARS-T = Social-Emotional Assets and Resilience Scale Teacher Rating.*

To answer the first research question, we evaluated whether the implementation of Strong Teens decreased students' levels of internalizing symptoms. Analysis of the student ratings showed a significant effect on self-reported levels of internalizing symptoms after participation in Strong Teens ($F = 4.032$, $p = .046$). Researchers conducted post-intervention comparisons using t-tests and Cohen's d to determine where the significant differences occurred among the four different measurement periods. Students reported a significant decrease in internalizing symptoms, evident in comparing Pretest 2 to both Posttest 1 ($p = .031$; $d = 0.457$) and Posttest 2 ($p = .025$; $d = 0.394$), with small to medium effect sizes. Teacher ratings of students' internalizing symptoms did not reveal any statistically significant changes over time from pretest to posttest ($F = 0.141$, $p = .935$).

The second research question explored how participation in Strong Teens was associated with changes in students' resilience. Analyses indicated that levels of resilience did not improve enough to reach statistical significance ($F = 2.450$; $p = .105$).

However, there was a trend toward statistical significance in post-intervention comparisons between Pretest 2 and Posttest 2 (p = .056; d = 0.375) with a small to medium effect size. Based on teacher ratings, there were no statistically significant differences in students' resilience over time following implementation of Strong Teens (F = 0.688; p = .461).

The third research question explored whether Strong Teens instructors could implement the program in high school with fidelity. Results indicated that 87% of the lesson components were implemented fully, 6% were partially implemented and 7% were omitted. Instructors occasionally omitted a review of past lessons or summary of current lessons, noting an insufficient amount of time as the primary reason for the omissions. Lessons averaged approximately 42 minutes.

The final research question focused on the social validity of the program. Four of the five Strong Teens instructors completed the social validity questionnaire and were unanimous in supporting the program goals (see Appendix). All agreed that the structure of the program was appropriate and acceptable, though half believed they did not have enough time to teach the complete curriculum. Instructors agreed that the outcomes of the program were positive, and that Strong Teens was a good way to help students' social-emotional problems. However, 75% reported the level of student involvement and excitement for the program was low.

Student responses for the program goals indicated that they recognized the need for social-emotional competence and knowledge (see Appendix). Student views regarding the outcomes of the program varied. Many students commented that the experience resulted in positive changes: "I recognize certain emotional changes in

myself that I can now identify and work on when they happen. I'm less angry and happier during the day." "I felt like I could manage the stress and overwhelming feelings that I sometimes get from school." "I saw [classmates] around school more, and they seemed to be happy." Although 69% of the students indicated they were satisfied with the skills that they learned during the curriculum and 61% agreed that they liked Strong Teens, over 50% either disagreed or were neutral regarding being excited or actively participating in lessons. Several qualitative themes emerged as students mentioned how they would change the program, including more interactive learning, more breadth of content, and increased time for discussion. Some students suggested changing the vignettes because the examples did not relate to their situation. Others noted that the program did not go into enough depth. One student wrote, "Make [the lessons] more interesting and interactive instead of just reading." Another wrote, "I wish it were an actual class so there could be more time to understand each lesson and think about it."

Discussion

The goals of this study were to explore the effects of Strong Teens on students with elevated levels of internalizing symptoms and determine the feasibility of school counselors and social workers implementing this program at the high school level. While students reported that their internalizing symptoms moderately improved, their classroom teachers did not notice these improvements. These findings are consistent with prior studies of Strong Teens showing reduced self-reported internalizing symptoms (Isava, 2006; Marvin et al., 2017). Also consistent with the literature, teachers can have difficulty identifying students with internalizing symptoms (CDC, 2013) and may not have noticed the changes the students perceived. This finding

implies that internalizing measures completed by teachers may not accurately represent a student's experience and may help explain why many students with internalizing symptoms often go through their education without proper identification by teachers (Lane, Menzies, Oakes, & Kalberg, 2011). Thus, school staff should include student self-report measures for internalizing symptoms. High schools can conduct regular universal screenings of emotional and mental health to help administrators discover the extent of their students' distress (Kuo, Stoep, McCauley, & Kernic, 2009) and choose a program to meet their needs. Issues to consider when screening include having a supportive school leadership team, identifying appropriate screening measures, implementing screening efficiently, using screening results to plan interventions, and evaluating progress (Lane et al., 2011; Young et al., 2012).

Though some moderate improvements were evident in student resilience, changes were not statistically significant, likely due to the small number of student participants and restricted range of symptoms (as some students rated in the average resilience range when the study began). This study's finding helps validate previous research by showing a tendency towards increased resilience following implementation of Strong Teens (Castro-Olivo, 2014; Isava, 2006; Merrell et al., 2008).

Another finding from this study was that high school counselors and social workers were able to administer the program with fidelity after a brief training period, similar to past studies (Kramer et al., 2014). This brief training resulted in intervention fidelity of 87%, suggesting that the instructors were able to teach most of the components in each lesson. Instructors reported insufficient time preventing them from covering all components, and that with more time they would have been able to

increase treatment fidelity. Though instructors had an allotted 50 minutes, sessions were shorter due to the time consumed by transition and by starting late. Strong Teens appears to be a curriculum that school counselors can easily implement.

Social validity responses indicated that instructors had predominantly positive and validating views of the goals, procedures, and outcomes of Strong Teens. However, a few notable responses indicated they felt the program could benefit from some improvements. Half agreed that the allotted time was enough, while the other half disagreed. Also, instructors varied on their views of whether students were interested in or excited about the lessons and showed active participation. Students' social validity responses indicated that they primarily agreed with or were neutral about whether Strong Teens was valid regarding its goals, procedures, and outcomes. While the program showed some positive effects, responses indicated that a notable minority of the students did not find the lessons particularly enjoyable or exciting. Further research exploring ways to make lessons more "enjoyable" might be helpful, especially for high schools that plan to implement Strong Teens.

Limitations and Areas for Future Research

At the request of the school principal, we used no random selection, random assignment, or control group. To increase control for the study, we conducted a quasi-experimental study in which the participants functioned as controls for themselves by completing multiple pretests and posttests for each variable. However, without a control group, we could not learn how similar students who did not receive the curriculum would compare. Such constraints to the design of the study limit the internal and external validity of the results. For example, using the same measures multiple times threatens

internal validity as students may become familiar with them. Also, without a control group, we were not able to discern how external factors such as student maturation, family environments, or extra-curricular activities affected the outcomes. Future studies could include control or comparison conditions.

Our small sample size was a limitation to the generalizability of the results. Future studies should explore the effects of Strong Teens using larger high school samples. Although most of the students had only moderately elevated internalizing scores at pre-test, their self-ratings for internalizing symptoms still improved. This result suggests that having participants with high levels of internalizing symptoms is not a prerequisite for positive outcomes. The school administrators used teacher nominations as the primary means to identify students. Teachers, as the primary referral source, may have resulted in an under-identification of students with internalizing concerns. In future studies, direct screening of high school students using self-reports would likely be beneficial, with a referral by teachers and staff being secondary. Such screening could result in students with higher levels of internalizing symptoms to determine if symptom level affects the impact of the Strong Teens curriculum.

For this study, it was more feasible to implement Strong Teens at the Tier 2 level rather than with Tier 1 classes taught by classroom teachers. Differences were evident among the Strong Teens classes due to the number of instructors in each class and their professional backgrounds. Future studies could control for these differences. Another variation for future research would be to implement the program at Tier 1, with classroom teachers as the instructors, as this is a claimed benefit of the program (see Kramer et al., 2014), and since "social-emotional learning will be most effective when

practiced and implemented comprehensively and coherently across key levels of the

school" (Hamedani & Darling-Hammond, 2015, p. 12).

Finally, by administering social validity questionnaires, we recognized the

importance of participants expressing their thoughts about their experiences with Strong

Teens. This powerful feedback could be helpful to improve the intervention, making it

more engaging and enjoyable for adolescents. Additionally, this feedback could

encourage instructors to step out of their limited teaching mode, to understand the

importance of more fully engaging in interactive activities and discussions. We

recommend that future research include a strong qualitative component when

evaluating the effects of this curriculum, with interviews before the beginning of the

curriculum and again at the end. We also recommend using feedback to strengthen the

learning experience and make the content more relevant to teens. Instructors can adapt

the examples and scenarios in Strong Teens to fit the needs of their students.

Implications for School Counselors

This study shows how school counselors can work collaboratively to identify

students at-risk and implement multi-tiered SEL interventions designed to promote

student mental health and improve resilience (ASCA, 2017). As noted by Van Velsor

(2009) "School counselors know that effective education must extend beyond teaching

academic skills to teaching social and emotional competencies, including promoting

safe and healthy behaviors" (p. 51). School counselors are encouraged to use

empirically supported programs that have resulted in improved student outcomes as

part of multi-tiered systems of support (ASCA, 2018; Webb & Brigman, 2006). Those

seeking to help students with internalizing symptoms may find programs such as Strong

Teens beneficial in fostering social-emotional competence and resilience, particularly by engaging with students to make connections between such programs and students' real-life challenges. High schools should also consider identifying at-risk students using self-reports and then provide specialized SEL interventions for those with internalizing symptoms as part of multi-tiered prevention. Some students may also need additional individualized supports to address their social-emotional needs as they navigate the risk factors in their lives.

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Appendix

Instructor (n = 4) and Student Ratings (n = 28) of Strong Teens Goals, Procedures, and Outcomes

Goals	Instructor Agrees	Student Agrees
Students' social and emotional concerns are great enough to warrant use of a curriculum such as Strong Teens.	100%	---
Students' level of social and emotional competence is important to their academic success.	100%	88%
It is important that social and emotional knowledge and skills are taught in a school setting.	100%	73%
I feel that I have the necessary skills/training to help students with social and emotional difficulties.	100%	---
I feel that I have the necessary skills/training to navigate personal social and emotional difficulties.	---	61%
I am confident in my ability to implement (Strong Teens/Strong Teens principles.)	100%	42%
It is feasible for a regular education teacher to teach social and emotional knowledge and skills.	50%	54%
The Strong Teens curriculum was appropriate for my needs.	---	38%

Procedures	Instructor Agrees	Student Agrees
The materials provided (manual, pictures, handouts) were sufficient to teach the curriculum.	100%	61%
The materials needed for Strong Teens were easy to access.	100%	80%
I found that Strong Teens was easy to (teach/learn).	100%	73%
The teaching procedure of the program was consistent with my regular teaching procedures.	75%	---
It was reasonable to teach the curriculum as it was designed.	75%	75%
I was able to (reinforce/use) the skills taught in the Strong Teens lessons during other classroom activities.	75%	54%
The time taken to deliver the weekly lessons was acceptable.	50%	73%
The length of the lessons was appropriate for (my students/high school students).	50%	73%
I felt that the curriculum manual alone provided sufficient training to teach the lessons.	50%	---
I felt that the curriculum provided sufficient content for each lesson.	---	57%
The preparation time required to teach the lessons was acceptable.	50%	---
The preparation by the teacher for each lesson was acceptable.	---	69%

Outcomes	Instructor Agrees	Student Agrees
I was satisfied with the social and emotional skills (demonstrated by my students/that I learned) during the course of the curriculum.	100%	69%
Strong Teens was a good way to help prevent students' social and emotional problems.	100%	57%
I feel (my students/I) learned important skills from Strong Teens.	100%	57%
I enjoyed (teaching/learning) Strong Teens.	100%	54%
Most (teachers/students) would find Strong Teens (suitable/helpful) for improving social and emotional competence.	100%	54%
I would recommend the use of Strong Teens to other (teachers/students).	100%	50%
(Students demonstrated a transfer of/I can transfer the) knowledge and skills from the lessons to other school situations.	75%	50%
I feel my students/I use the skills learned from Strong Teens.	75%	54%
(My students/I) liked Strong Teens.	75%	61%
I would (like to implement/enjoy doing) Strong Teens again.	75%	54%
Students were interested in or excited for the lessons and showed active participation in them.	25%	38%

Biographical Statements

Paul Caldarella, PhD, is an associate professor in the Brigham Young University Department of Counseling Psychology and Special Education and director of the Positive Behavior Support Initiative. His research focuses on social-emotional learning and positive behavior support interventions in public schools, as well as screening and targeted interventions for at-risk students.

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