

All Theses and Dissertations

2017-05-01

Evaluation of a Social and Emotional Learning Curriculum Integrated into a Middle School Health Classroom

Stephanie Susan Skiba Brigham Young University

Follow this and additional works at: https://scholarsarchive.byu.edu/etd



Part of the Counseling Psychology Commons

BYU ScholarsArchive Citation

Skiba, Stephanie Susan, "Evaluation of a Social and Emotional Learning Curriculum Integrated into a Middle School Health Classroom" (2017). All Theses and Dissertations. 6896. https://scholarsarchive.byu.edu/etd/6896

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen amatangelo@byu.edu.

Evaluation of a Social and Emotional Learning Curriculum Integrated into a Middle School Health Classroom

Stephanie Susan Skiba

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Educational Specialist

Paul Caldarella, Chair Melissa A. Heath Jared S.Warren

Department of Counseling Psychology and Special Education

Brigham Young University

Copyright © 2017 Stephanie Susan Skiba

All Rights Reserved

ABSTRACT

Evaluation of a Social and Emotional Learning Curriculum Integrated into a Middle School Health Classroom

Stephanie Susan Skiba Department of Counseling Psychology and Special Education, BYU Educational Specialist

Although approximately one-fourth of adolescents have a mental health disorder only half of them receive treatment. The goal of this study was to determine if Strong Kids, a social and emotional learning curriculum, implemented over a 4-week period could help decrease internalizing symptoms and increase resilience in middle school students, something not previously investigated. This study also measured social and emotional knowledge as measured by the Strong Kids questionnaire. Additionally, treatment fidelity and social validity were measured. The study used a non-equivalent, control group design. The sample consisted of 148 students: 70 in the treatment group and 78 in the control group. This study was completed using existing data from a title one middle school that implemented Strong Kids. The school had a relatively diverse population and was relatively low SES, with 66% of students receiving free or reduced price school lunch. The Strong Kids curriculum was taught by the school's health teacher to half of the eighth grade students, while the other half received normal state curriculum. Pre and post rating scales were completed by teachers and students on measures of resilience, internalizing symptoms, and social-emotional knowledge. Since there were some differences at pre-test, a 2-by-2 mixed-design analysis of variance and an analysis of covariance were used to analyze results. Results suggested that teacher was able to implement the curriculum with fidelity, with moderate social validity among students and the teacher, and some benefit for at-risk students. While the differences only approached statistical significance, it was likely due to the small sample size of at-risk students. The lack of significant differences between treatment and control classrooms were likely due to confounds. Further, this study suggests that the state curriculum implemented may be effective for general education students. SEL programs like Strong Kids could be used as a targeted approach for students who are at-risk or struggling with internalizing symptoms. Future studies should include randomly assigned students, parent and student ratings, different measures for resilience, a longer intervention period, and follow up data points if implemented over a shorter time frame.

Keywords: social and emotional learning, middle school, health classroom, internalizing symptoms, resilience

ACKNOWLEDGMENTS

First, I would like to acknowledge and thank my committee, Paul Caldarella, Melissa Heath, and Jared Warren, for their support and encouragement with my research. From the onset of this project they helped channel my enthusiasm with ideas that shaped and improved my research and writing. Next, I would like to acknowledge Paul Caldarella, my committee chair and faculty advisor. Without his patience and guidance I would not have been able to complete this project. Week in and week out he continually provided needed encouragement and support especially when things did not turn out as planned or we encountered bumps in the road. I appreciate the many hours he spent working on this project and could not imagine a more caring, diligent, and helpful advisor.

I would also like to thank the school administrator and teacher who taught the curriculum for graciously using their time to collaborate with us on this project. They performed much of the work of this project in hopes of producing better outcomes for students.

Last, I would like to thank my parents and family for their unwavering support throughout this whole process. Without their love and support this journey through graduate school would not have been possible.

TABLE OF CONTENTS

TITLE PAGE	i
ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER ONE: INTRODUCTION	1
CHAPTER TWO: LITERATURE REVIEW	4
Mental Health in Adolescence	4
Internalizing and Externalizing Disorders	7
Social and Emotional Learning	9
A Prevention Model	10
Strong Kids: A Preventative Approach	11
Strong Kids at the Middle School Level	13
CHAPTER THREE: METHODS	
Participants and Setting	19
Independent Variable	19
Dependent Measures	20
Treatment Fidelity	21
Social Validity	21
Procedure	22
Research Design and Analysis	24
CHAPTER FOUR: RESULTS	26
Treatment Fidelity	31

Social Validity	32
CHAPTER FIVE: DISCUSSION	38
Limitations and Future Research	43
Conclusion	45
REFERENCES	47
APPENDIX A: STRONG KIDS KNOWLEDGE TEST	56
APPENDIX B: TREATMENT FIDELITY CHECKLIST APPENDIX	60
APPENDIX C: SOCIAL VALIDITY STUDENT QUESTIONNAIRE	92
APPENDIX D: SOCIAL VALIDITY TEACHER INTERVIEW	95
APPENDIX E: PASSIVE CONSENT FORM	96

LIST OF TABLES

Table 1	SSIS Pretest and Posttest Means with Group x Time Interactions	27
Table 2	SEARS Pretest and Posttest Means with Group x Time Interactions	28
Table 3	Strong Kids Knowledge Test Pretest and Posttest Means with Group x Time Interactions	29
Table 4	SSIS Risk Pretest and Posttest Means with Group x Time Interactions	30
Table 5	SEARS Risk Pretest and Posttest Means with Group x Time Interactions	31
Table 6	Strong Kids Knowledge Test Pretest and Posttest Risk Means with Group x Time Interactions	31
Table 7	Acceptability of Strong Kids Procedures	33

LIST OF FIGURES

г. 1	T1 D 4 T1	ee Tier Approach	1 .
HIOHITA I	The Prevention Three	Pe lier Δnnroach	I .
I IZUIC I		.c i ici / ippioacii	1

CHAPTER ONE: INTRODUCTION

Adolescence can be a challenging time especially in regards to mental health. Although one-fourth of adolescents have a mental health disorder, only half of them receive treatment (Merikangas, Nakamura, & Kessler, 2009). Many factors contribute to mental health difficulties in adolescence including social changes, academic pressures, and biological changes (Young, Caldarella, Richardson, & Young, 2012). Schools are an appropriate place for adolescents to receive mental health treatment and may help increase the number of students who can be reached (Becker, Buckingham, & Brandt, 2015).

Two ways that mental health disorders often manifest are externalizing disorders and internalizing disorders. Externalizing disorders are characterized by behaviors that are outwardly displayed (Liu, Chen, & Lewis, 2011). For instance, Attention Deficit Hyperactivity Disorder (ADHD) is an externalizing disorder. Inattention or impulsiveness are symptoms of ADHD that can be observed by others. Internalizing disorders on the other hand are focused on inward emotions or cognitions (Liu et al., 2011). Some examples of internalizing symptoms include depression and anxiety. Symptoms of depression such as loneliness or feelings of worthlessness often cannot be readily observed; they are occurring within a person. Because of this difference, internalizing disorders are often under recognized (Marchant, Brown, Caldarella, & Young, 2010).

One possible solution to help address internalizing disorders is for schools to offer Social-Emotional Learning (SEL) programs. SEL teaches social and emotional competence, fosters resilience, and helps address adolescent mental health needs (Greenberg et al., 2003). One evidence based SEL program is *Strong Kids*. This program is divided into five developmentally-based curricula for specific age groups: *Strong Start* Pre-K, *Strong Start* K-2, *Strong Kids* 3-5,

Strong Kids 6-8, and Strong Teens 9-12. This program has been found to be feasible in school settings and it has proven to have significant positive effects (Castro-Olivo, 2014; Kramer, Caldarella, Young, Fischer, & Warren, 2014; Merrell, Juskelis, Tran, & Buchanan, 2008), is low cost, and takes very little training (Merrell, 2010). The implementation of this program has resulted in decreased rates of internalizing behaviors (Caldarella, Christensen, Kramer, & Kronmiller, 2009; Gunter, Caldarella, Korth, & Young, 2012) and increased social-emotional knowledge (Merrell et al., 2008).

While the existing research supports the *Strong Kids* SEL program, more research is needed. This is particularly true at the middle school level where only five published studies have focused on this particular age group (Castro-Olivo, 2014; Feuerborn, 2004; Gueldner & Merrell, 2011; Levitt, 2010; Merrell et al., 2008). Only one of these middle school studies included an ethnically diverse population of students (Castro-Olivo, 2014). Additionally, in all but one of these studies social economic status (SES) was either not reported or included a higher SES demographic. The one exception was Castro-Olivo's study (2014). The *Strong Kids* curriculum needs to be studied in more diverse populations so that generalizability of effects can be evaluated. Further, none of the current studies simultaneously examined effects on internalizing symptoms and resilience.

The present study conducted with an economically and ethnically diverse population, examined the effects of implementing the *Strong Kids* curriculum in a middle school setting. This study addresses the following research questions:

1. Did the implementation of the *Strong Kids* program result in a decrease of internalizing symptoms in middle school students as measured by student and teacher ratings on the *Social Skills Improvement System* (SSIS; Gresham & Elliott, 2008)?

- 2. Did the implementation of the *Strong Kids* program result in an increase of resilience in middle school students as measured by teachers and students on the *Social Emotional Assets and Resilience Scales* (SEARS; Merrell, 2011)?
- 3. Did the implementation of the *Strong Kids* program result in an increase of social and emotional knowledge as measured by the *Strong Kids Knowledge Test* (Merrell, 2007)?
- 4. Did treatment group students who were at-risk for social emotional problems (based on self-report or teachers' pre-test ratings of students' internalizing symptoms or resilience) experience different outcomes in internalizing symptoms, resilience, or SEL knowledge after the *Strong Kids* intervention compared to students not at-risk?
- 5. Was the *Strong Kids* program implemented with fidelity in treatment classrooms as measured by treatment fidelity checklists?
- 6. Was the *Strong Kids* program perceived as socially valid by students and the teacher as measured by student questionnaires and teacher interview?

CHAPTER TWO: LITERATURE REVIEW

Mental Health in Adolescence

Mental health can be challenging during adolescence. The prevalence rate of mental health disorders among adolescents is roughly 25% (Merikangas et al., 2009). Even more disheartening is that only 50% of youth with mental disorders receive treatment (National Institute of Mental Health [NIMH], 2012). This means that approximately half of those between 8 and 15 years old do not receive the treatment and help that they need. Mental health treatment rates are even lower among minorities (Merikangas et al., 2011).

Anxiety disorders, behavioral problems, mood disorders, and substance abuse are the most common mental health disorders among adolescents (Merikangas et al., 2009). According to the National Institute of Mental Health (NIMH), approximately 8% of teenagers age 13-18 have anxiety. Further, approximately 8% have symptoms of ADHD (Attention Deficit Hyperactivity Disorder) and 4% meet criteria for depression (NIMH, 2012). According to the trends, the prevalence of Major Depressive episodes rises from 3.7 % at age 12 to 11.8% at age 15 (NIMH, 2012). It is concerning that prevalence increases as children get older. Certainly, many factors are at work with these increasing numbers. Some possible contributions are changes in social structure, increased academic pressure, and changes in biology among adolescents.

Social changes and peer influence. Adolescence can be a stressful time due to many social changes (Young et al., 2012). This time is a period that marks leaving elementary school and entering a middle school or junior high. No longer are students in one familiar classroom environment with one teacher during the day, but they move from class to class. This scholastic change of structure greatly affects adolescents' social structure as well. This change of structure

leads to increased social interactions. During adolescence ongoing social interactions help to teach adolescents what is expected of them and what needs to be changed in order to become part of adult society (Wentzel & Battle, 2001). While these social interactions have important functions they can also be a source of stress for many adolescents.

Not only does the new school environment have a role in social interactions among adolescents, but also the goals that adolescents bring with them can affect outcomes. Shim, Cho, and Wang (2013) found that adolescents who have different types of social goals often produce different outcomes. Specifically, students who have social development goals, which focus on building social skills and improving relationships, have more positive outcomes on social satisfaction. On the other hand, goals that focus on others' negative perceptions of self (e.g., not being a "loser") had negative effects, such as social worry. These authors also found that social development goals were linked to emotional engagement in the school curriculum. Thus, not only does how a student approaches their social environment affect their social outcome, but it also affects their scholastic involvement.

Social interactions become increasingly complex during adolescence when the importance of peers becomes more robust (Lam, McHale, & Crouter, 2014). The benefits of having a friend during adolescence are linked to academic achievement, prosocial behavior, and lower levels of emotional distress (Wentzel, Barry, & Caldwell, 2004). In fact, positive peer acceptance is correlated with academic achievement in adolescence (Kingery, Erdley, & Marshall, 2011). Conversely, adolescents tend to have lower academic achievement when surrounded by friends who engage in problem behaviors (Véronneau & Dishion, 2010). Unfortunately, social relationships between students are not always positive. For example, bullying often leads to higher prevalence of depression and suicidal ideation among adolescents

(Fleming & Jacobsen, 2010). Clearly, whether positive or negative, social interactions have an effect on middle school students.

Academic pressure. Another aspect that changes during this time is academic expectations and environments. Going from elementary school to middle school comes with the change from having only one teacher to having six or seven. This change can be difficult for students because there is no longer one teacher responsible to remind them of homework and other daily responsibilities (Bernstein, 2002). It can also be difficult for students to transition from one trusted authority figure to several throughout the day (Bernstein, 2002). Chung, Elias, and Schneider (1998) conducted a study among 99 students transitioning from elementary to middle school and found increased levels of psychological distress and decreased levels of academic achievement subsequent to the transition. Furthermore, in interviews with various faculty members, McKeon (2015) found that increased homework and higher academic expectations often pose academic challenges for new middle school students.

Biological and cognitive changes. Adolescence is filled with many biological and cognitive changes and challenges as well. Youth experience puberty at different times. Boys and girls enter puberty roughly 18 months apart from each other (Rand, 2013). Not only do they start puberty at different times, but changes can also occur at different tempos (Whitman, Merluzzi, & White, 1999). Some adolescents will begin and finish puberty before others have even begun the process. These gaps in physical development can make peer relationships more complicated (Rand, 2013).

For boys, early maturation is generally beneficial: they excel in athletics and in social situations (Rand, 2013). However, early maturation in girls is linked with body image concerns, earlier age of sexual intercourse, higher levels of depression, and higher levels of substance

abuse (Biro & Dorn, 2006). Throughout puberty boys gain muscle mass and decrease in body fat, while girls increase in body fat (Susman & Rogol, 2004). In general girls who mature earlier experience more adjustment challenges (Rand, 2013).

Brain growth and development that occurs in adolescence also contributes to the many changes that adolescents encounter. For example, the affective node, which includes areas such as the amygdala, hypothalamus, and ventral striatum areas related to the processing of rewards and punishment, matures during adolescence (Shirtcliff, 2009). Males in particular tend to have a large increase in the volume of the amygdala, whereas females during this time tend to have an increase in volume in the hippocampus (Shirtcliff, 2009). These and other changes seem to contribute to adolescents' sensitivity to rewards and increases in risk behavior (Shirtcliff, 2009). The pre-frontal cortex, which is responsible for executive function, is still developing during this time and into adulthood (Keating, 2004). Additionally, changes in cognition arise during adolescence. For example, adolescents begin to think more abstractly and they gain increased decision-making skills (Keating, 2004). While adolescents gain increased cognitive abilities, they also engage in riskier behaviors (Keating, 2004) including substance use, risky sexual activity, and self-harm (Rae, Sullivan, Razo, & Garcia de Alba, 2009). Such risky behaviors can develop into mental health concerns.

Internalizing and Externalizing Disorders

Mental health concerns are often separated into two categories: externalizing disorders and internalizing disorders. Externalizing disorders are generally outwardly displayed behaviors that are more readily observable (Liu et al., 2011). Some common externalizing disorders are Oppositional Defiant Disorder, ADHD, and Conduct Disorder. Typical symptoms can include aggressive behavior or rule breaking (Seeley, Severson, & Fixsen, 2014). These symptoms of

externalizing behavior are disruptive in the classroom. Additionally, school violence can be an outcome of externalizing disorders (Furlong, Morrison, & Jimerson, 2004). Often in the school setting parents, teachers, and administrators are aware of students who have externalizing disorders or behavior because they are easier to observe. For instance, it is often easier to notice a student who is constantly disrupting and talking out of turn because of ADHD (externalizing) than a child who is quiet and keeps to themselves because they are depressed (internalizing). This may be part of the reason those with externalizing behaviors are more often referred for mental health treatment by teachers to student's parents or to the school counselor (Pearcy, Clopton, & Pope, 1993). Further compounding this problem is that many children with internalizing problems are overlooked (Marchant et al., 2010).

Both externalizing and internalizing disorders include impairment in behavior, cognition, and functioning (Seeley et al., 2014). However, internalizing disorders are focused on inward emotional and physiological states (Liu et al., 2011). Fear, worry and anxiety are common symptoms of internalizing disorders (Seeley et al., 2014). These attributes can lead to depression, anxiety disorders, and suicide (Heled & Read, 2005; Poland & Kornfeld, 2015). Because behaviors resulting from internalizing disorders are often within an individual they can be more difficult to observe (Pearcy et al., 1993).

Students with behavioral problems (i.e., externalizing disorders) receive treatment at much higher rates than students with emotional problems (i.e., internalizing disorders) (Ghandour, Kogan, Blumberg, & Perry, 2010). Moreover, there appears to be a gap in treatment for racial and ethnic minorities. For example, lower rates of treatment for internalizing disorders are frequently observed amongst minorities (Merikangas et al., 2011). There are many factors that may contribute to this discrepancy including cultural factors, lack of financial resources, or

lack of self-recognition (Merikangas et al., 2011). Helping adolescent students receive help is vital, particularly for minority students who suffer with internalizing disorders. Social and emotional learning (SEL) programs are a good resource to help strengthen adolescents during this critical period.

Social and Emotional Learning

The Collaborative for Academic, Social, and Emotional Learning (CASEL) describes SEL as a process in which children or adults develop social and emotional competencies (CASEL, 2012). They further divide SEL into five categories: self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making. Greenberg and colleagues (2003) asserted that implementing SEL programs should be a part of education at all grade levels. Such programs are needed to teach students life skills, help improve academic performance, and foster resilience (Greenberg et al., 2003).

Many factors contribute to adolescent struggles and resilience. Some of these include poverty, abuse, dysfunction within the family, and difficult life circumstances (Doll & Lyon, 1998). According to Doll and Lyon (1998), being subjected to such adversities can produce either negative life outcomes or resilience in a person. For example, a longitudinal study followed 698 infants who were born on the island of Kauai, Hawaii (Werner, 1989). The children were followed for over 30 years and data were collected that documented their life circumstances and achievements. Over time some of these children struggled and some proved to be very resilient. Two factors seemed to be protective against risk; individual characteristics and support from the community (Werner, 1989). While at the school level we may not be able to change students' individual characteristics, we can be a resource for support. Schools provide opportunities for children to learn not only academic skills, but also social and emotional

competence: the feeling of competency seems to be closely linked to resilience (Doll & Lyon, 1998). Learning these skills can help children develop resilience and ultimately work against risk factors they may face.

A Prevention Model

Not only is it important to help those students who are struggling with mental health problems, but also it is important to strengthen all students. Taking a preventative approach helps to fortify students before they reach a point of serious problems. In a school setting, the Three-Tier Approach of Prevention is often applied (see Figure 1). This approach categorizes interventions into three categories: primary, secondary, and tertiary (Glover & Vaughn, 2010). At the primary level, all students receive intervention or prevention methods. When related to the medical model this is thought of as a vaccine for all whether healthy or weak (Greenwood, Kratochwill, & Clements, 2008). At the secondary level targeted or at-risk populations receive treatment. The medical comparison for this would be elderly and young children receiving a flu shot because they are more at risk for sickness than other populations. The tertiary level is for students who are currently identified as needing intervention of some kind. In the medical field this could be compared to someone who has already received a diagnosis and is receiving treatment.

In schools, the majority of resources are often applied at the tertiary level with students who have more serious, preexisting problems. Certainly, those who are struggling need to be helped. However, this small group only makes up only about 5% of the population. Instead of just treating such problems a larger role needs to be focused on preventing them (Greenwood et al., 2008). For those currently not at risk, a universal treatment, if given to all students, can help prevent future negative outcomes (Walker et al., 1996). A preventative approach can provide at-

risk students with help earlier. Additionally, for those with already existing problems, universal treatment, such as SEL, can help prevent small problems from becoming more serious (Greenwood et al., 2008).

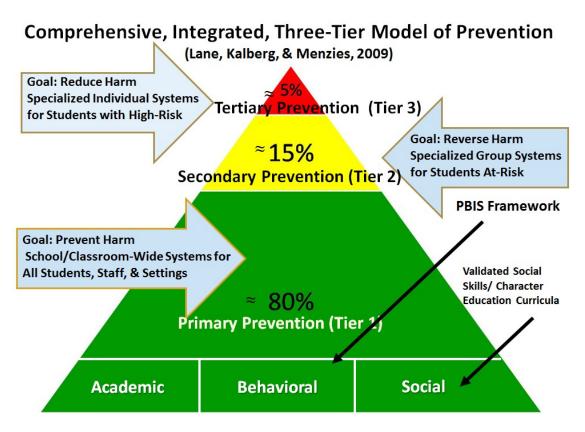


Figure 1. The Prevention Thee Tier Approach. This chart and contents are more fully described in Lane, Kalberg, & Menzies (2009).

Strong Kids: A Preventative Approach

Strong Kids is an SEL program with a preventative focus. While it can be used at all levels of the prevention model, it is most suitable for implementation at the primary level and with at-risk students at the secondary level (Merrell, 2010). The curriculum can be used with high-risk students, but may not be sufficient for all their needs. The Strong Kids curriculum is focused on helping those with internalizing symptoms. The curriculum is designed to teach social-emotional skills, increase resilience, and increase coping skills. The curriculum consists of 10-12 lessons. The program is suitable for students from preschool through twelfth grade. There

are five separate books based on age; *Strong Start* Pre-K, *Strong Start* K-2, *Strong Kids* 3-5, *Strong Kids* 6-8, *Strong Teens* 9-12. This breakdown between age groups allows for developmentally appropriate activities at each age level (Constable & Grattan, 2008). General topics covered across all the ages include understanding and recognizing feelings, understanding others feelings, dealing with anger, problem solving, and practicing basic social skills.

One of the strengths of *Strong Kids* is that it is relatively brief and low cost (Merrell, 2010). This is important when implementing in a school setting, as funding is generally limited. In addition, each lesson takes 45 to 50 minutes making it feasible to teach during a class period. Each lesson is organized into several steps that are semi-scripted. This makes it possible for a general education teacher to be able to teach the curriculum without specific mental health training. Further, teachers can adjust examples in the text to those that would be relevant for their students making the curriculum more meaningful. This can be helpful when working with different age groups or different cultures. For example, Olivo-Castro (2014) adapted the *Strong Kids* curriculum when teaching Latino students which adaptation proved to result in significant gains for students' level of resilience.

Another major benefit of *Strong Kids* is that it is an evidence-based program. Schools have many options when looking to implement an SEL program. It is important to choose one that is evidence-based. The *Strong Kids* program has been supported with research studies at each level of the curriculum: *Strong Start, Strong Kids*, and *Strong Teens*. Implementation of the *Strong Start* program was associated with significant decreases in internalizing symptoms (Caldarella et al., 2009; Gunter et al., 2012) and increased social-emotional knowledge (Whitcomb & Merrell, 2012). The *Strong Kids* 6-8 program also produced an increase of social-emotional knowledge (Feuerborn, 2004; Merrell et al., 2008) and a decrease in internalizing

symptoms (Kramer et al., 2014). Implementation of the *Strong Teens* program was associated with higher levels of resilience (Castro-Olivo, 2014) in addition to lower levels of problem symptoms, and increased social-emotional knowledge (Merrell et al., 2007). While the *Strong Kids* curriculum is evidence-based, there is a need for it to be studied in settings that are more diverse. One area that has only been briefly researched is the middle school setting. A synopsis of *Strong Kids* research in the middle school setting will follow.

Strong Kids at the Middle School Level

At the middle school level only five studies of *Strong Kids* have been conducted. One of these studies focused on teaching style and took measurements on the teachers' experience (Levitt, 2010). While it was implemented at the middle school level, Levitt did not measure the effectiveness of the curriculum for students. This study focused on six teachers who were all implementing the *Strong Kids* curriculum. The teachers were put in two conditions; the treatment group of teachers received regular consultation and feedback while the control group did not. Both groups generally rated the program positively in that they felt the program was not only important to implement, but feasible.

Outside of Levitt's (2010) study, only four studies (Castro-Olivo, 2014; Feuerborn, 2004; Gueldner & Merrell, 2011; Merrell et al., 2008) have been conducted that specifically examined the effects of the curriculum on middle school students. While each of these studies made strides in the research, they each contained limitations. In 2004, Feuerborn conducted a study in which *Strong Kids* was implemented among eighth graders and fourth graders in two separate schools. While the fourth grade portion does not pertain to the population of middle school, the eighth grade population provides valuable knowledge. Both of these populations were general education students, and the treatment was administered at a universal support level. The population of this

study was small, just seven participants in the treatment group and seven in the control group. Recruiting for this study occurred in a leadership class in which the students could elect to participate in the study. Unfortunately, because so few students choose to participate in the study, all of the students who gave assent were used in the treatment group. Many students failed to give assent because leadership class required no homework or assignments compared to *Strong Kids*, which requires both. Due to these circumstances, Feuerborn recruited students from the leadership class to be in the control group where they would not be required to complete homework for the *Strong Kids* curriculum. Random assignment to control and treatment groups did not occur because of this. Results indicated that the treatment group's scores of problem symptoms decreased significantly compared to the control group. Additionally, the treatment group gained in social-emotional knowledge according to the *Strong Kids* knowledge test. While students did decrease in some maladaptive behaviors, cognitions, and emotions, they did not increase in adaptive behaviors, cognitions, or emotions. Further, teachers reported lower levels of problem behavior.

While the Feuerborn (2004) study proved to have significant gains in some aspects, it lacked significant gains in others areas. Because of the very small, self-selected sample size of seven it is possible that no results were detected when a real effect could have taken place (Type II error) and conversely that in some tests significant results were detected when there was not a true significant difference (Type I error). This small sample size is likely the greatest limitation of the study. Another factor that could have interacted with the results is the fidelity of the program. At the eighth grade level treatment fidelity to the *Strong Kids* program was only 70% by observation and rated at 80% through teacher self-report. These numbers were mainly due to insufficient time and incomplete homework. This is an area that could be improved in future

studies. In addition to this, the treatment group was entirely Caucasian and female, which means that any findings could only be generalized to a similar population. Furthermore, random assignment to control and treatment groups was not feasible in the study because of low participation numbers.

In 2008, another study with the Strong Kids curriculum was conducted in the middle school setting by Merrell, Juskelis, Tran, and Buchanan. The setting was a junior high with 65 seventh and eighth graders. All of these students were part of general education classrooms. Similar to Feuerborn (2004), this study was also completed as a universal treatment. Random assignment did not occur because there were only treatment groups. Furthermore, in the same manner as the previous study, the population of this study lacked diversity. In this study all of the participants were Caucasian. While the SES was not established the researchers noted that the community was primarily middle and working-class. The curriculum was taught by study skills class teachers. A pre-test post-test design was used. Measurements of the students' socialemotional knowledge and current levels of internalizing symptoms were gathered through selfreport. The results showed that there was a statistically significant increase in social-emotional knowledge as well as a significant decrease in internalizing symptoms. While it is valuable that significant results came from implementing the curriculum, it would have been beneficial to also include a measure of resiliency in addition to social-emotional knowledge and internalizing symptoms as had been used in other Strong Kids studies (Castro-Olivo, 2014; Harlacher & Merrell, 2010; Wedam, 2013). Also, not only having students self-report, but additionally obtaining a measure from an outside source such as a teacher or parent would help increase validity. Furthermore, it would be helpful to have randomized, control, and treatment groups to ensure validity of the results.

Gueldner and Merrell (2011) examined the impact of *Strong Kids* with a middle school population. This study like the previous two, was also conducted at the universal level. The sample consisted of 125 sixth graders from three regularly formed Language Arts classes at the middle school that were randomly assigned to comparison, treatment, or treatment plus consultation support groups. This was a quasi-experiment because classes, not students, were randomly assigned (Gueldner & Merrell, 2011). Within the experiment, Gueldner and Merrell found no significant treatment difference between the comparison group and other groups on internalizing symptoms. However, significant gains were found from the *Strong Kids* knowledge test in the treatment group. Additionally, treatment fidelity was high with 94% or above in each classroom.

This study established more support for the *Strong Kids* curriculum in the middle school setting. However, it also had some limitations. One of the largest limitations within this study was that the population was 90% Caucasian. This means that while some beneficial results were obtained, these results can only be generalized to a similar population. It would be advantageous if a similar study was conducted with a more diverse population. No data were taken on the social economic status (SES) of the students, but information was provided through school data. Approximately 33% of the students were receiving free or reduced price lunch at school. This is not necessarily conclusive data on SES, but a good indicator. In the future it would be beneficial to implement *Strong Kids* with a lower SES population so that the results could be generalized to different populations. Additionally, just as with Merrell, Juskelis, Tran, and Buchanan (2008), all of the measures taken were obtained from self-report. The validity of the finding could be increased by having another measure of student outcomes.

The most recent implementation of the *Strong Kids* curriculum at the middle school level was conducted by Castro-Olivo (2014). This study was unique in that it used the curriculum with English Language Learners (ELLs) from a Latino community: 102 participants were recruited from the middle and high school level. Approximately 75% of the participants were from the middle school level. The results are not separated between high school and middle school groups. It is important to take into consideration that this sample is not solely representative of middle school students. The *Strong Kids* program was translated into Spanish for implementation with the treatment group. The study was executed as a quasi-experimental design with four of eight participating classes being randomly assigned to the treatment group condition. The other four classrooms were assigned to a wait list control group. Two bilingual teachers taught the *Strong Kids* curriculum. Since not all of the regularly assigned teachers of the four intervention classrooms were bilingual, one of the teachers taught three of the four treatment groups.

The *Strong Kids* curriculum seemed to have a significant positive effect on the population sampled. In the intervention group there were significant increases in SEL knowledge and resiliency after the curriculum was instituted. Additionally, on measures of social validity, the students perceived the program as useful and culturally valid. One of the strong aspects of this study was the cultural diversity as 59% of the students were born in Mexico or another Latin American country. Additionally, 94% of the students in the study were receiving free or reduced price school lunch. This is a very important contribution to the *Strong Kids* literature in the middle school setting because before this study it had not been tested with a more culturally, low SES, diverse population. As part of the cultural adaption, the program included adding culturally relevant curriculum to the program such as ethnic pride, learning skills to cope with acculturative stress, and acculturation gap within the family. While this study certainly helped fill a gap in the

literature, it also came with limitations. One of the limitations of this study was that there was no measure of internalizing symptoms or problem behaviors. Also, all of the measures were obtained through self-report. The validity would be improved if another measure was used to rate students, such as a teacher or parent report.

Each of the five studies added to the current body of work on *Strong Kids* in the middle school setting. Unfortunately, none of the studies contained a measure of both internalizing symptoms and resilience. It would be beneficial for both of these measures simultaneously monitored during administration of the *Strong Kids* curriculum in a middle school since the curriculum is designed to help with both (Merrell, 2010). From Feuerborn (2004) it was emphasized that having a large sample size and ensuring treatment fidelity are important aspects for future researchers. In Gueldner and Merrell's (2011) study and Merrell et al. (2008) study, both populations were 90 to 100% Caucasian. Castro-Olivo's (2014) study was used with a diverse population, but had no measure of internalizing symptoms. Combining a diverse population while also measuring internalizing symptoms and resilience would help to further establish support for the *Strong Kids* curriculum. Additionally, having these measures obtained with a teacher report in addition to self-report would increase validity.

CHAPTER THREE: METHODS

Participants and Setting

This study was completed using existing data from a title one middle school. The school had a relatively diverse population comprised of 58% Caucasian, 35% Hispanic, 1% Black, and 6% not specified. The school was relatively low SES with 66% of students qualifying for free or reduced price school lunch. All students in the study were in eighth grade. The school principal designated a health teacher (a female, Hispanic) to teach the curriculum, as a practical approach to delivering the *Strong Kids* lessons to all students. The teacher who implemented the curriculum was a fourth year teacher with a Bachelor of Science in Health Education. Of her six classes, half were randomly assigned to the treatment group and half were randomly assigned to the control group. This sample of treatment and control was comprised of 148 students: 70 in treatment classes and 78 in control classes.

Independent Variable

The independent variable was the implementation of the *Strong Kids* (Merrell et al., 2008) curriculum in the health classroom. Specifically, *Strong Kids* Grades 6-8 was used as it was age appropriate for the eighth graders. This curriculum consists of 12 lessons. *Strong Kids* is a social and emotional learning curriculum designed to help increase resilience and decrease internalizing symptoms in students. The 12 lessons cover topics such as identifying emotions, empathy, anger management, clear thinking, stress management, problem solving, and goal setting. The lessons include direct instruction from teacher, role-play scenarios, group discussions, and worksheets for practicing skills.

Dependent Measures

Three dependent variables were measured in the evaluation: resilience, internalizing symptoms, and social and emotional knowledge. For measuring resilience, the *Social Emotional Assets and Resilience Scales - Adolescent* (SEARS-A; Merrell, 2011); was used for student report and the teacher form (SEARS-T) was used for teacher report. The short forms of both scales were used and are comprised of 12 items such as "Makes friends easily;" "Cares what happens to other people;" and "Knows how to identify and change negative thoughts." Each item was rated on a 4-point Likert type (from 0 = never to 3 = always) scale. According to the test manual (Merrell, 2011), internal consistency is .80 to .98 for both teacher and student forms. Test retest reliability is .63 to .89 for the student form and .84 to .94 for the teacher form. The scales were normed on U.S. population of 1,700 for the student scale and 1,400 for the teacher scale.

Merrell (2011) found no significant differences in SEARS scores based on gender or ethnicity.

Internalizing symptoms were measured with a subscale of the *Social Skills Improvement System-Student* (SSIS-S; Gresham & Elliot, 2008) for student self-report and the teacher version (SSIS-T) for teacher report. The SSIS is used to measure student social behaviors. As reported in the test manual, a norming sample of 4,700 was used that contained proportionate numbers of children with disabilities. Four components are measured on the SSIS: social skills, problem behaviors, academic competence, and an Autism Spectrum scale. Specifically, the school used the internalizing subscale, which falls under the problem behavior scale of the SSIS. This subscale contains 7 items on the SSIS-T and 12 items on the SSIS-S, each rated on a 4-point Likert type (from *never* to *always*) scale. Sample items include "Withdraws from others;" "Acts sad or depressed;" and "Acts anxious with others." According to the test developers, internal

consistency reliability ranges from .75 to .96 for the Teacher form and from .79 to .95 for the Student form, as shown in normative studies (Gresham & Elliott, 2008).

Social and emotional knowledge was measured by the *Strong Kids Knowledge Test* (see Appendix A) similar to other *Strong Kids* studies (Castro-Olivo, 2014; Feuerborn, 2004; Gueldner & Merrell, 2011; Merrell et al., 2008). This 20-item questionnaire measures understanding of concepts such as dealing with anger, emotions, and recognizing thinking errors. Merrell (2007) conducted pilot research on this questionnaire that produced an internal consistency coefficient from .60 to .70. This measure has been proven to be a sensitive instrument in studies of the *Strong Kids* curriculum (see Merrell et al., 2008).

Treatment Fidelity

In order to ensure fidelity to the *Strong Kids* curriculum researchers observed 78% of the lessons taught. As done in other studies of *Strong Kids* (Feuerborn, 2004; Gueldner & Merrell, 2011; Kramer et al., 2014), researchers used a checklist (see Appendix B) that contained the main objectives and activities for each lesson. The number of objectives and activities varied with each lesson. Researchers marked each objective as completed or not completed. Additionally, they tracked start and stop times of each lesson.

Social Validity

Social validity is important to measure because it influences whether or not the program will be used in the future (Gueldner, 2008). Further, the buy-in of the implementers such as teachers or administrators helps to ensure success of the intervention (Marchant, Heath, Miramontes, 2013). Additionally, other studies of the *Strong Kids* curriculum have measured social validity (Castro-Olivo, 2014; Gueldner, 2008; Levitt, 2010). Most studies have examined social validity among teachers (Gueldner, 2008; Kramer et al., 2014; Levitt, 2010) and a few

have included social validity among students (Castro-Olivo, 2014). Among these, Castro-Olivo (2014) measured social validity among middle school students using a nine-item questionnaire. In this study social validity was measured among both students and the teacher.

To measure social validity with the students a questionnaire was administered (see Appendix C), similar to the approach used in other studies of *Strong Kids* (Caldarella et al., 2009; Kramer et al., 2014). This questionnaire contained 19 items rated according to a five-point scale (1 = *strongly disagree* to 5 = *strongly agree*). Additionally, five open-ended questions were included. This questionnaire sought to understand students' perceptions of the *Strong Kids* curriculum. Specifically, the questions addressed what students liked and disliked about the program content, opinions about how it was taught, and what changes students observed in themselves. The students completed these questionnaires just before the last *Strong Kids* lesson.

In order to collect social validity data from the teacher, a list of open-ended questions (see Appendix D) was created and an interview was conducted. The teacher's responses were recorded and coded for analysis. The teacher survey included questions to understand which portions of the *Strong Kids* curriculum were beneficial to the teachers, which portions were difficult to teach, the relevancy of the curriculum to her students, and what changes she would make to the program.

Procedure

The teacher was selected by the school principal to implement the *Strong Kids* curriculum in her 8th grade health classes. The principal chose health class to implement *Strong Kids* because health classes already contained a mental health unit, which covered some similar topics in the *Strong Kids* curriculum (e.g., emotions, anger, dealing with stress). The classes were randomly assigned to either control or treatment groups. At the beginning of the school term

students in the teacher's health class were sent home information about the *Strong Kids* curriculum and were given passive consent forms by the school principal which parents could return if they did not want their child to participate (see Appendix E). The forms and information were provided by the school in both English and Spanish to accommodate parents. No parents opted for their child to be withdrawn from the curriculum.

Prior to implementation of the curriculum all students completed self-ratings on the SSIS-S and the SEARS-A. Additionally, teachers completed ratings on each student using teacher versions of the same forms. Due to the large number of participating students, it was not feasible for the teacher implementing the curriculum to complete scales for each of the students. Instead, homeroom teachers completed SSIS-T and SEARS-T scales for each of their students who participated in the health teacher's classroom. Homeroom teachers were chosen because students were with the same homeroom teacher in the previous year and thus had an already established relationship. Teachers were provided time during faculty meetings to complete these scales.

Over a period of five weeks, half of the health classes received the *Strong Kids* curriculum and half received regular state health curriculum (control condition). Both of these conditions fell under a Mental Health teaching unit in the classroom. While the curriculum is traditionally taught as a 12-week class, the classroom teacher opted to teach the curriculum during her mental health unit which was a five week period. This change was supported by the literature; in 2007 Tran adapted the *Strong Kids* program to six weeks with significant decreases in internalizing symptoms. The *Strong Kids* curriculum was taught 2 to 3 days a week to the treatment group while the control group received regular state curriculum about mental health. Following the completion of the *Strong Kids* curriculum, all students completed posttest measures and social validity questionnaires, and the teacher social validity interview was

conducted. Additionally, homeroom teachers also completed posttest scales for students. A social validity interview was conducted with the health teacher. Pretesting and post-testing were completed six weeks apart.

Research Design and Analysis

This study used a non-equivalent, control group design (Johnson & Christensen, 2013), the quasi-experimental design most commonly used in educational research (Gall, Gall, & Borg, 2007). While the classrooms were randomly assigned to treatment and control groups, students were not. Prior to the experiment being conducted, students were already in set classrooms.

Quantitative data were analyzed by first calculating means and standard deviations for control and treatment groups on the SEARS and SSIS measures, followed by t-tests and Cohen's d effect sizes to compare the groups prior to $Strong\ Kids$ being implemented. A 2-by-2 mixed-design analysis of variance (ANOVA), which compares changes over time according to group membership, was conducted to evaluate the first four research questions, with effect sizes calculated using partial eta squared (η_{p^2}). Cohen's (1988) guidelines were used to interpret partial eta squared as follows: .01 constitutes a small, .06 a medium, and .14 a large effect. Both a 2-by-2 mixed-design analysis of variance (ANOVA) and an Analysis of covariance (ANCOVA) were used to analyze results and evaluate the six research questions since some differences were present between treatment and control groups as pretesting. In order to answer the fourth research question, at risk students were identified by their teacher and self-rating pretest scores on the SEARS and SSIS. Student raw scores on the SEARS-T that fell at or below 13, or at or below 17 on the SEARS-A, are considered to be at-risk, based on results of normative studies (Merrell, 2011). Student raw scores on the SSIS-T that fell at or above 8, or at or above

14 on the SSIS-S, were considered at-risk based on results of normative studies (Gresham & Elliot, 2008).

Qualitative data received from the social validity questionnaires and interview were analyzed. Student responses were categorized and grouped together to identify similarities. The teacher interview was transcribed and analyzed for themes. The qualitative data analysis used check-coding (Miles & Huberman, 1994), which involved reviewing comments, noting where opinions differed, and discussing differences until arriving at consensus. The primary investigator, a School Psychology Ed.S. Candidate, and a high school teacher with an M.S. teaching degree coded the qualitative data.

CHAPTER FOUR: RESULTS

Independent sample t-tests were performed between treatment and control groups at pretest to identify if significant differences were present prior to implementation of the $Strong\ Kids$ curriculum. For the SEARS-T [t(137) = -.999, p = .32], SSIS-T [t(132) = 1.109, p = .269], and SSIS-S [t(137) = .725, p = .470] no significant differences were found between treatment and control groups at pre-test. On the SEARS-A [t(132) = 1.979, p = .05] and the $Strong\ Kids$ knowledge test [t(131) = 2.29, p = .024] however, significant differences were present at pre-testing. This suggested that treatment and control groups were not sufficiently similar on self-rated resiliency as measured by the SEARS-A and social and emotional knowledge as measured by the $Strong\ Kids\ K$ nowledge test prior to treatment implementation. Within the treatment group a comparison of at-risk students and non-at-risk students resulted in significant differences between groups on the SEARS-T, SEARS-A, SSIS-T, and SSIS-S as expected.

When interpreting results an increase in scores on the SEARS-T and SEARS-A indicates an improvement in resiliency, whereas an increase in scores on the SSIS-T or SSIS-S scale indicate an increase of internalizing symptoms. An increase in scores on the *Strong Kids*Knowledge test indicates an increase in social and emotional knowledge.

The first research question evaluated if implementation of the *Strong Kids* curriculum resulted in a decrease of internalizing symptoms as measured by student and teacher ratings on the SSIS. On teacher scales, analysis indicated that the main effect for time was significant F(1, 137) = 8.41, p = .004. However, there was not a significant interaction between time and treatment group F(1, 137) = 1.10, p = .296. The main effect for treatment group was also not significant F(1, 137) = 254.10, p = .212. Results indicated that both treatment and control groups experienced statistically significant improvements over time, but that there were not significant

differences between treatment groups (see Table 1). Student scales showed similar results. The main effect for time was significant F(1, 132) = 6.03, p = .015. A significant interaction between time and treatment group was not detected F(1, 132) = 2.15, p = .145. The main effect for treatment group was not significant F(1, 132) = .42, p = .518.

Table 1
SSIS Pretest and Posttest Means with Group x Time Interactions

	Treatme	nt (<i>n</i> =64)	Control (<i>n</i> =75)		Group x Time Interaction	
Measure	M	SD	M	SD	F	p
SSIS-T						
Pretest	5.14	3.80	4.68	3.68	1.10	.296
Posttest	4.69	3.50	3.71	3.63		
SSIS-S						
Pretest	8.45	5.59	7.41	5.25	2.15	.145
Posttest	7.27	5.85	7.11	5.68		

The second research question examined whether implementation of the *Strong Kids* curriculum resulted in an increase of resilience in middle school students as measured by teachers and students on the Social Emotional Assets and Resilience Scales (SEARS; Merrell, 2011). On teacher scales, a significant effect for time was found F(1, 137) = 23.16, p = .000. A significant interaction between time and treatment group was not present F(1, 137) = 2.29, p = .133. The main effect for treatment group was also not significant F(1, 137) = 1.50, p = .223 (see Table 2). On student scales, an ANCOVA was performed due to significant differences between treatment and control groups prior to implementation of *Strong Kids*. There was not a significant

difference between treatment groups in terms of post-test resilience scores after eliminating the effect of pre-test scores F(1, 131) = 2.86, p = .093. Treatment group was a significant covariate F(1, 131) = 159.24, p = .000.

Table 2
SEARS Pretest and Posttest Means with Group x Time Interactions

	Treatment (<i>n</i> =64)		Control (<i>n</i> =75)		Group	Group x Time Interaction	
Measure	M	SD	M	SD	F	p	
SEARS-T							
Pretest	21.48	7.65	22.70	6.79	1.50	.223	
Posttest	23.16	8.27	25.53	7.36			
SEARS-A							
Pretest	23.47	6.10	25.49	5.69	2.86	.093	
Posttest	23.57	6.19	26.13	5.08			

The third research question evaluated whether the implementation of the *Strong Kids* program resulted in an increase of social and emotional knowledge as measured by the *Strong Kids* Knowledge Test (Merrell, 2007). Since there were significant differences at pretest, *Strong Kids* Test scores were analyzed with ANCOVA. There was not a significant difference between treatment groups at post-test after eliminating the effect of pre-test scores F(1, 130) = 2.28, p = 0.133. Pre-test scores were a significant covariate F(1, 130) = 85.66, p = 0.000 (See Table 3).

Table 3
Strong Kids Knowledge Test Pretest and Posttest Means with Group x Time Interactions

	Treatmen	nt (<i>n</i> =63)	Contro	l (<i>n</i> =70)	Group	x Time Interaction
Strong Kids Knowledge T	Test M	SD	M	SD	F	p
Pretest	13.13	3.69	14.46	4.08	2.28	.133
Posttest	14.93	4.08	15.08	2.51		

The fourth research question evaluated if treatment group students who were at-risk for social emotional problems (based on their or their teachers' pre-test ratings of internalizing symptoms or resilience) experienced different outcomes in internalizing symptoms, resilience, or SEL knowledge after the *Strong Kids* intervention compared to students not at-risk. For the SSIS-T (teacher scales) analysis indicated that the main effect for time was not significant F(1, 62) = 1.71, p. 196. Further, there was not a significant interaction between time and at-risk status F(1, 62) = 1.54, p = .219. Conversely, the main effect for at-risk status was significant F(1, 62) = 17.59, p = .000 (See Table 4). On the SSIS-S (student version) the main effect for time proved to be significant F(1, 62) = 8.82, p = .004. The interaction between time and at-risk status approached significance F(1, 62) = 3.27, p = .076. (See Graphic 1 in Appendix F). Lastly, the main effect for time was also significant F(1, 62) = 14.99, p = .000.

Table 4

SSIS Risk Pretest and Posttest Means with Group x Time Interactions

	At-Risk (<i>n</i> =27)		Non At-Risk (<i>n</i> =37)		Group x Time Interaction	
Measure	M	SD	M	SD	F	p
SSIS-T						
Pretest	7.22	4.51	3.62	2.24	1.54	.219
Posttest	6.19	3.87	3.59	2.76		
SSIS-S						
Pretest	11.70	6.08	6.08	3.80	3.27	.076
Posttest	9.59	6.81	5.57	4.40		

For the SEARS-T (teacher scales) analysis indicated that the main effect for time was significant F(1, 62) = 7.17, p = .009. However, there was not a significant interaction between time and at-risk status F(1, 62) = 1.32, p = .254. The main effect for at-risk status was significant F(1, 62) = 17.02, p = .000 (See Table 5). On the student version of the SEARS scale the main effect for time was not significant F(1, 62) = .16, p = .694. A significant interaction between time and at-risk status was not detected F(1, 62) = 1.94, p = .169 (see Graphic 2 in Appendix F). The main effect for at-risk status was significant F(1, 62) = 14.62, p = .000.

On the *Strong Kids* Knowledge test the main effect for time was significant F(1, 61) = 20.31, p = .000. However, the interaction between time and at-risk status was not significant F(1, 61) = .18, p = .670 (see Appendix F, graphic 3). Further, the main effect for at-risk status was also not significant F(1, 61) = 3.20, p = .725 (See Table 6).

Table 5

SEARS Risk Pretest and Posttest Means with Group x Time Interactions

	At-Ris	k (<i>n</i> =27)	Non At-Risk (<i>n</i> =37)		Group x Time Interaction	
Measure	M	SD	M	SD	F	p
SEARS-T						
Pretest	16.98	8.04	24.76	5.44	1.32	.254
Posttest	19.56	8.67	25.78	6.98		
SEARS-A						
Pretest	20.11	6.84	25.91	6.98	1.94	.169
Posttest	21.13	6.90	25.35	5.00		

Table 6
Strong Kids Knowledge Test Pretest and Posttest Risk Means with Group x Time Interactions

G 77. I	At-Risk (<i>n</i> =27)		Non At-Risk (<i>n</i> =36)		Group x Time Interaction	
Strong Kids Knowledge Test	M	SD	M	SD	F	p
Pretest	12.85	4.15	13.35	3.34	.18	.670
Posttest	14.85	4.17	15.00	4.08		

Treatment Fidelity

The fifth research question evaluated if the *Strong Kids* curriculum was implemented with fidelity in treatment classrooms as measured by treatment fidelity checklists. Twenty-five out of thirty-six lessons were observed for a total of 69% of *Strong Kids* lessons observed.

According to treatment integrity checklists, on average lessons covered 93% of components with fidelity. The average lesson time was 41 minutes. Elements that were frequently omitted included reviewing the previous lesson and reviewing the previous homework. Previous homework may have been less likely to be reviewed since students were given time in class to complete homework and did not complete these assignments at home.

Social Validity

The sixth research question evaluated if the *Strong Kids* curriculum was perceived as socially valid by students and teacher as measured by student questionnaires and teacher interview. Quantitative and qualitative results are summarized below.

Quantitative. According to the five-point Likert scale questionnaire, students had an average score of 4.15 for goals suggesting that they were in agreement with the goals of the curriculum. Additionally, students seemed to be in agreement with the procedures of the curriculum with an average score of 4.18 on procedures. On outcomes, students had average scores of 3.46 suggesting a neutral to slight agreement with curriculum outcomes. In our study, sixty-nine percent of students agreed that "My social and emotional abilities are important enough to use a program such as *Strong Kids*," 29% felt neutral, and 6% of students disagreed with this statement. Under procedures, 76% of students agreed that "The materials (I) used for *Strong Kids* were easy to understand," while 19% of students felt neutral about this, and 5% disagreeing with this. In the outcomes category, 61% of students agreed with the statement, "I could use my knowledge and skills gained from the lessons in other school situations," 31% felt neutral, and 8% disagreed with it. The lowest level of agreement was for the statement, "My peers in the group enjoyed participating in *Strong Kids*." This had only 24% agreement, 57% neutral, and 19% of students in disagreement (see Table 7).

Table 7

Acceptability of Strong Kids Procedures

	Disagree (%)	Neutral (%)	Agree (%)
Goals			
It is important that social and emotional knowledge and skills be taught in a school setting.	6	23	71
My social and emotional abilities are important enough to use a program such as <i>Strong Kids</i> .	2	29	69
My social and emotional learning is important enough to use a program such as <i>Strong Kids</i> Procedures	7	45	48
	5	19	76
The materials that I used for <i>Strong Kids</i> were easy to understand.	3	19	76
I found that <i>Strong Kids</i> was easy to learn.	6	23	71
The length of lessons was appropriate	6	26	68
for middle school students.	v	20	00
The time taken to participate in the <i>Strong Kids</i> lessons was acceptable.	8	32	60
I feel good when I use the skills taught in the <i>Strong Kids</i> lessons during other school activities.	11	45	49
Outcomes			
I could use my knowledge and skills gained From the lessons in other school situations	8	31	61
I am satisfied with the social and emotional knowledge and skills that I am using.	10	29	61
I feel I learned important skills from <i>Strong Kids</i> .	8	40	52
Strong Kids was a good way to help me prevent social and emotional problems.	13	40	47
I would recommend the use of <i>Strong Kids</i> to other students.	19	36	45
Most students would find <i>Strong Kids</i> helpful for improving social and emotional learning skills.	10	47	42
I use the skills that I learned from <i>Strong Kids</i> .	27	34	39
I was interested and excited in the lessons, and showed active participation in them.	29	39	32
I liked Strong Kids.	21	48	31
I would like to participate in <i>Strong Kids</i> again.	40	34	26
My peers in the group enjoyed participating in Strong Kids.	19	57	24

Qualitative. The first open-ended question asked students what problems they had with *Strong Kids*. In response to this question 49 students or 70% of the treatment group responded. Out of the respondents, 61% of students said that they had no problems with *Strong Kids* while

39% said that they did have problems with the curriculum. Of those who had problems, the most common were that the curriculum was boring, too hard to understand, or was too personal. For instance, one student wrote in regards to curriculum being boring, "It was boring, and it didn't seem like they really knew what kids are going through, so it was hard to relate to our lives." A student explained her experience with the curriculum as, "It wasn't always easy to remember to do the things that would help me. Sometimes things were hard to understand." Lastly, a student explained how the program was too personal for them by saying, "I did not like having to share or go into groups with other people I did not know."

The second open-ended question asked students whether they would change the way that curriculum was taught. In response to this question 47 students or 67% of the treatment group responded. From this group, 62% would not change how the curriculum was taught. In citing reasons they would not want change one student said, "No, because everything was taught to me clearly." On the other hand, 32% of respondents felt that some kind of change would be beneficial. The changes that student thought would be beneficial were to make the curriculum more fun, have activities, and to make it more hands on. The idea of being more fun and hands on was generally remedied by the suggestions to add activities. One student said, "The lessons, I believe, should have had more activities to make people more engaged. It was hard to pay attention to it because it seemed boring."

The third question asked what changes students would make to the programs content. For this question, 48 students or 69% of the treatment group answered. Out of those who answered, 63% of students felt that no change was need while 37% thought the program could be changed in some way. Answers to questions two and three contained similar themes of students wanting the program content to include activities. A student stated that the program would be improved

by adding "More explanatory content and more fun activities." Additionally, students also thought the content should be less repetitive. In relation to the repetitive nature a student said that the lessons should have "Less of the same type of thing over and over. Like the ones where you write a situation. We did this like 5 times."

The fourth question asked what changes the students observed in themselves. For this question, 44 students or 63% of the treatment group responded. Out of the students who answered the question, 61% of these students saw positive changes in themselves, while 38% saw no change. The most common changes reported by students included feeling less stressed, gaining more understanding, feeling less angry, and feeling happier. One student described being less stressed by saying, "I used to care a lot about what others would say. Now I'm so different. Living a life of happiness and being free." Gaining better understanding was shown by one student's experience in which she said, "I know more about my feelings and how to control them." Another student talked about how the program helped with emotional control by saying, "I was less angry, worried, and sad because I did the things to help." A student described his change in happiness as, "Happier attitude, better mental health."

The last question left a spot for additional comments for students. The majority of students left this space blank. Only 20 responses or 29% of the treatment group left an answer for this question. The few comments that were left had a broad range of positive and negative views on the program. They included things like "Good program", "It was a waste", "I will use this often", and "Make it more interesting."

Teacher qualitative interview. In the teacher interview several themes were identified. The teacher had both positive reactions to the *Strong Kids* curriculum as well as criticisms. Her

overall opinion was that the program was beneficial and she was able to see student growth. She stated that,

I think there was a lot of benefit to it. I liked being able to hear kids' personal thoughts and feelings about things and watching them kind of evolve and remember things. I think it was really helpful in helping kids to reflect because they struggle with that.

In addition to reflection, the teacher noted that students also were able to share their thoughts and discuss sensitive topics. She stated that the nature of the curriculum gave students a setting to talk about difficult subjects. These discussions enabled the teacher and students to strengthen relationships. She described this process by stating,

I don't know that if I had just taught my normal mental-emotional health unit that I would've gotten to know them as well as I did. Especially some of the girls that are really quiet. But just because that class was so quiet, kind of forced them to participate, which I like... In that class it worked. It made everyone come out of their shell.

One of the *Strong Kids* lessons that stood out to the teacher was on thinking errors. In the classroom she saw students applying these concepts. She described this experience by saying,

I think something I did notice is that it did help a lot of kids brush things off and not make such a big deal out of things anymore. I think that especially with the thinking errors and the negative thinking going to positive thinking it helped a lot of kids to just come to think more positive.

While the teacher's overall perception of the curriculum was positive, she noted that certain aspects of the curriculum would be helpful to change. One of the biggest complaints was the structured nature of the curriculum. Specifically, she wanted more activities embedded into

the curriculum and for better examples to use that would be more appropriate for teenagers. She described this limited flexibility as follows:

You didn't have to read the script word for word, but you kind of did in order to get the point across and so there are a lot of things that I would have taught a little different than how the book taught it. I still kind of fit in some of my own things here and there, but I just felt really limited into my imagination as a teacher of how I could teach something. In contrast to the restriction limited flexibility, she also saw the structure as a benefit, in that it was organized and created flow. She said, "In the book I always felt like I could tie the lesson into another lesson that we had talked about."

Finally, the teacher reported that the students were mixed in their perceptions of the program as illustrated in comments below.

Half of them liked it...thought it was great and nice to learn about that stuff—thought it was interesting, could apply it to their lives...With the half that didn't like it there were two main reasons. One, a lot of them didn't like talking about that stuff ...And then the other half are just very kinesthetic learners and didn't like it because they didn't like that it was just discussions and lessons and not any activities or fun stuff.

CHAPTER FIVE: DISCUSSION

The purpose of this study was evaluate the effects of the *Strong Kids* curriculum integrated into a middle school health classroom. This study was the first to integrate *Strong Kids* into a health curriculum. It was also the first study in a middle school setting to simultaneously examine the curriculum's effect on both resilience and internalizing symptoms.

The first research question examined whether there was a decrease in teacher and student ratings of internalizing symptoms on the SSIS following implementation of the Strong Kids curriculum. Both control and treatment groups significantly decreased in internalizing symptoms over time on student and teacher ratings. There was not a significant difference between changes in treatment and control groups. It is possible that because the curriculum was adapted to a shortened length of four weeks instead of the traditional 12-week program it was difficult to demonstrate a true difference in such a short amount of time. While Tran (2007) adapted the Strong Kids program to six weeks with significant decreases in internalizing symptoms, four weeks may have not been long enough for change to occur and manifest. Since the program is preventative in nature it could take years for true differences between the control and treatment group to manifest. Another reason for improvement in both groups may be that students in the control group were not actually a true control group receiving no intervention. Studies with a control group present a much stronger experimental design (Johnson & Christensen, 2013). In the current study, students in the control group were also enrolled in a health curriculum that included a mental health unit. The same teacher taught both the control and treatment group. While the control group's curriculum was not the same as *Strong Kids*, it had areas of overlap. These included identifying emotions, anger, and stress. Since both groups received emotional training it could explain why they both showed decreases in internalizing symptoms.

Additionally, there is the possibility that the teacher could have inadvertently incorporated some of the concepts from Strong Kids since she was teaching both the treatment and control groups, which could have altered the results.

The second research question examined whether implementation of the Strong Kids curriculum increased resilience as measured by the SEARS teacher and student rating scales. On the teacher scales, both control and treatment groups significantly increased resilience over time, however there was not a significant difference between groups. This may also be due to the lack of a "true" control group that received no treatment. On the student ratings the treatment group scores were significantly lower in resilience prior to implementation of the curriculum. Once this difference was accounted for, it was found that there was not a significant difference between outcomes for treatment and control groups. The Strong Kids curriculum has been previously adapted for Latino middle school students producing outcomes of increased resilience (Castro-Olivo, 2014). Outside of the current study, only one other study has measured resilience changes in the middle school population while implementing Strong Kids (Castro-Olivo, 2014). Further, Castro-Olivo used a different scale to measure change in resilience, the Behavioral and Emotional Rating Scale, 2nd edition (BERS-2). More research will need to be conducted to determine whether the SEARS rating scales are best suited to measure the effects of the *Strong Kids* curriculum with middle school students.

The third research question examined whether the *Strong Kids* curriculum resulted in an increase of social and emotional knowledge as measured by the *Strong Kids* Knowledge Test.

Once again, both the treatment and control group had significant increases in social and emotional knowledge, but no significant difference between groups. Student scores of emotional knowledge were significantly different between treatment and control groups prior to

implementation. Once this pre-test difference was accounted for, there were no significant differences in treatment and control group for social and emotional knowledge on the *Strong Kids* questionnaire. While there was not a difference between the groups, both treatment and control groups significantly increased from pretest to posttest in their social and emotional knowledge. The lack of difference is likely to be attributed to both groups receiving some form of mental health instruction, as previously discussed. When compared to past research this study is conflicting to other studies that showed more significant increases in social and emotional knowledge in treatment groups compared to control groups (Castro-Olivo, 2014; Feuerborn, 2004; Gueldner & Merrell, 2011).

The fourth research question examined whether students who were at-risk for social emotional problems (based on their or their teachers' pre-test ratings of internalizing symptoms or resilience) experienced different outcomes in internalizing symptoms, resilience, or SEL knowledge after the *Strong Kids* intervention compared to students not at-risk. At-risk students did not experience significantly different outcomes for internalizing symptoms as measured by teacher rating scales. On student internalizing rating scales there was also not a significant difference, but the difference was approaching statistical significance. Because the at-risk population was a relatively small sample, it was more difficult to produce a statistically significant finding (Marszalek, Barber, Kohlhart, & Holmes, 2011). Additionally, there may have been differences between teacher and student-rating scales because when measuring internalizing symptoms teacher and student rating scales have a low level of agreement (Groff, 2015). On the SEARS rating scales, at-risk students did not increase at a significantly greater level than non-at-risk students on teacher or parent rating scales. On the *Strong Kids* Knowledge test, students' level of social and emotional knowledge did not increase at significantly different

rate for at-risk students compared to students not at-risk. Other studies *Strong Kids* studies in middle schools have not included a comparison between at-risk and not at-risk populations.

The fifth research question examined whether the *Strong Kids* program was implemented with fidelity in treatment classrooms as measured by treatment fidelity checklists. According to treatment fidelity checklists, 93% of the curriculum content was covered in observed lessons. Only two other studies with *Strong Kids* in the middle school observed treatment fidelity (Feuerborn, 2004; Gueldner & Merrell, 2011). Compared to Feuerborn (2004) the current study had much higher treatment fidelity, 93% compared to 70%. When comparing to Gueldner and Merrell (2011) the current study was very similar, 93% compared to 94% fidelity. The current study had stronger treatment fidelity than the Feuerborn (2004) study and was in a similar range with the Gueldner and Merrell (2011) study. These results suggest that middle school teachers are able to implement the curriculum with fidelity.

The sixth research question examined whether the *Strong Kids* curriculum was perceived as socially valid by students and the teacher as measured by student questionnaires and teacher interview. Among the other studies of *Strong Kids* implemented in a middle school only one other examined social validity (Castro-Olivo, 2014): found strong social validity among students who participated in the program. In the current study, students were given a questionnaire that assessed the social validity of the program's goals, procedures, and outcomes. Students were generally in agreement or neutral about the goals, procedures, and outcomes of the curriculum. On a five-point Likert scale students indicated that they generally agreed with the goals of the program. Additionally, students agreed with the curriculums procedures. On the measure of student outcomes, there was neutral to slight agreement. In this area questions about students being able to use skills they learned, using the skills in school situations, and using *Strong Kids*

as a prevention tool for social and emotional problems all had a high level of social validity. Some of the questions in the outcomes category that lowered the overall social validity score were: if students were interested and engaged in the lessons, if the students' peers enjoyed *Strong Kids*, and if the students would want to participate in *Strong Kids* again. It is unclear why social validity ratings were lower in the current study as compared to the Castro-Olivo (2014) study. Castro-Olivo had questions more focused on program outcomes and found slightly higher rates of agreement with a range of 88% to 93% of students agreeing with the different outcomes of the program implemented. Their assessment also included information about cultural adaptation, which was not included in our study since we did not make any cultural adaptations of the program.

On the qualitative portion of the student social validity survey, the students identified many positive changes that they observed in themselves: the majority of students noticed positive changes. Some of these changes included feeling happier, less stressed, less angry, and increased emotional insight. When students were asked if they had any concerns, the majority reported no concerns with the *Strong Kids* curriculum. Of the students who did have concerns, the most common were being too boring, hard to understand, or too personal. When asked if they would change the way the curriculum was taught, most students said that they would not change it. Students who wanted changes expressed that they would appreciate if the program was more fun and more had activities. It is important to note that the newest version of the *Strong Kids* curriculum, which was published in 2016 after the study was conducted, includes more activities. These results are similar to Castro-Olivo (2014) who also found high social validity of the *Strong Kids* curriculum with middle school age students.

From the teacher social validity interview both strengths and weaknesses of the program were identified. The teacher noted that the curriculum allowed students to discuss sensitive and important emotional themes. The teacher also noted that the structure of the curriculum was beneficial because topics flowed logically, but also that the structure brought limited flexibility. While she saw her students applying the skills from *Strong Kids*, she noted that some of the students seemed to enjoy the curriculum while others did not care for it.

Limitations and Future Research

Implementation of the *Strong Kids* curriculum in the present study came with limitations and threats to internal validity and generalization. Because students were already in health classes prior to the study we were not able to randomly assign students to a treatment or control condition. Instead, we randomly assigned classrooms instead of students, which meant that there was no true randomization in the experimental design.

Another limitation was that treatment and control classrooms had some overlap of mental health topics. This could have impact results since both treatment and control students were taught the skills and concepts in this chapter. Additionally, the state curriculum covered topics such as: emotions, anger, stress, decision-making, how to increase self-esteem, goal setting, ways to build resiliency, and suicide prevention. Many elements of each of these lessons overlapped with the concepts taught in the *Strong Kids* curriculum. Since the control group was also given mental health instruction it was not a true control group receiving no treatment. In the future it would be more effective to have some students receive the *Strong Kids* curriculum while others take another class that is not related to mental health.

While both a teacher and student rating were used in the study, a parent form may have produced a more complete picture. Particularly for internalizing symptoms, a parent measure can

have high agreement with student or child forms (Kamin et al., 2015). This is in contrast to teachers and students tending to have low agreement on scales for internalizing symptoms (Groff, 2015). While a student measure certainly would be appropriate for internalizing symptoms, future researchers may want to consider using a parent measure instead of a teacher measure to determine changes in students' internalizing symptoms. In addition, the SEARS is a relatively new measure and may not have accurately measured symptoms of resilience in students. In the future, researchers may want to consider using another measure for resilience. Further, it may be beneficial for future researchers to measure other outcomes based on the students' qualitative comments of how the curriculum helped them be less stressed, less angry, happier, in order to get a more holistic view of the curriculum's effects.

Another factor that could have added to the lack of significant results was the shortened time frame during which the curriculum was implemented. One result of this shortened time frame was that some elements of the program were omitted such as homework for each lesson. Homework provides a second exposure to curriculum and can increase learning through practicing skills (Tam & Chan, 2016). Overall learning outcomes could have decreased due to omitted homework. Additionally, only one other study in the literature mentions implementing *Strong Kids* with a shortened time frame (Tran, 2007): In this study the curriculum was implemented over a six-week period and a significant decrease in problem symptoms was found. The four-week time frame during which this study was implemented may have been too short for students to show meaningful changes, even if they did occur. Due to the lack of follow up data, particularly with the at-risk students, limits the conclusions that can be drawn about the curriculum's effectiveness. Future studies may want to consider implementing the curriculum with the traditional 12-week schedule outlined by the developers. Furthermore, if other

researchers were to implement the curriculum with a shorter time frame, they could take follow up data following implementation of the curriculum. This would allow a measurement to determine whether a shorter time was in fact effective and had significant changes over time.

One final limitation in our study was that the teacher who taught the treatment group also taught the control group. This presented a possible confound since treatment fidelity was not taken in the control group, there is no way of knowing whether some of the concepts or language of *Strong Kids* was also taught to the control group. Because the teacher was teaching the *Strong Kids* curriculum there is a possibility that she could have inadvertently taught some of the concepts to the students in the control group.

Conclusion

We know that middle school is a time of transitions and adjustment biologically, cognitively, and developmentally (Young et al., 2012). Because adolescence comes with many challenges, SEL is important to help with this transition (Greenburg et al., 2003). *Strong Kids* is an evidenced based SEL curriculum that can help with the transitions that occur in adolescence. In the current study, the results suggested that teacher was able to implement the curriculum with fidelity, with some benefit for at-risk students. While the differences only approached statistical significance, it was likely due to the small sample size of at-risk students. Additionally, the lack of significant differences between treatment and control classrooms were likely due to confounds mentioned previously. Further, this study suggests that the state mental health curriculum implemented may be effective for general education students. SEL programs like *Strong Kids* could be used as a targeted approach for students who are at-risk or struggling with internalizing symptoms. While we did not find statistically significant difference, we think that *Strong Kids* is still a curriculum worthy of future study in middle schools. Future studies should include

randomly assigned students, parent and student ratings, different measures for resilience, a longer intervention period, and follow up data points if implemented over a shorter time frame.

REFERENCES

- Becker, K. D., Buckingham, S. L., & Brandt, N. E. (2015). Engaging youth and families in school mental health services. *Child and Adolescent Psychiatric Clinics of North*America, 24(2), 385–398. doi:10.1016/j.chc.2014.11.002
- Bernstein, E. (2002). *Middle school and the age of adjustment: A guide for parents*. Westport, CT: Bergin & Garvey.
- Biro, F. M., & Dorn, L. D. (2006). Puberty and adolescent sexuality. *Psychiatric Annals*, *36*(10), 685–690.
- Caldarella, P., Christensen, L., Kramer, T. J., & Kronmiller, K. (2009). Promoting social and emotional learning in second grade students: A study of the strong start curriculum. *Early Childhood Education Journal*, *37*(1), 51–56. doi:10.1007/s10643-009-0321-4
- Castro-Olivo, S. M. (2014). Promoting social-emotional learning in adolescent Latino ELLs: A study of the culturally adapted Strong Teens program. *School Psychology Quarterly*, 29(4), 567–577. doi:10.1037/spq0000055
- Chung, H., Elias, M., & Schneider, K. (1998). Patterns of individual adjustment changes during middle school transition. *Journal of School Psychology*, *36*(1), 83–101. doi:10.1016/S0022-4405(97)00051-4
- Constable, S., & Grattan, A. (2008). Strong Start: A social & emotional learning curriculum—Grades K–2; Strong Kids: A social & emotional learning curriculum—Grades 3–5; Strong Kids: A social & emotional learning curriculum—Grades 6–8; Strong Teens: A social & emotional learning curriculum—Grades 9–12 (Book review). *Journal of Developmental and Behavioral Pediatrics*, *29*(5), 438. doi:10.1097/DBP.0b013e31818af9be

- Doll, B., & Lyon, M. A. (1998). Risk and resilience: Implications for the delivery of educational and mental health services in schools. *School Psychology Review*, *27*(3), 348–363.
- Collaborative for Academic, Social, and Emotional Learning (CASEL). (2012). *Effective social and emotional learning programs*. Chicago, IL: Author.
- Feuerborn, L. L. (2004). Promoting emotional resiliency through instruction: The effects of a classroom-based prevention program. *Dissertation Abstracts International Section A*, 65, 2086.
- Fleming, L. C., & Jacobsen, K. H. (2010). Bullying among middle-school students in low and middle income countries. *Health Promotion International*, *25*(1), 73–84. doi:10.1093/heapro/dap046
- Furlong, M. J., Morrison, G. M., & Jimerson, S. R. (2004). Externalizing behaviors of aggression and violence and the school context. In R. B. Rutherford, M. M. Quinn, S. R. Mathur, Rutherford, M. M. Quinn, & S. R. Mathur (Eds.), *Handbook of research in emotional and behavioral disorders* (pp. 243–261). New York, NY: Guilford Press.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Boston, MA: Pearson/Allyn and Bacon.
- Ghandour, R. M., Kogan, M. D., Blumberg, S. J., & Perry, D. F. (2010). Prevalence and correlates of internalizing mental health symptoms among CSHCN. *Pediatrics*, *125*(2), 269–277. doi:10.1542/peds.2009-0622
- Glover, T. A., & Vaughn, S. (2010). The promise of response to intervention: Evaluating current science and practice. New York, NY: Guilford Press.

- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, *58*(6–7), 466–474. doi:10.1037/0003-066X.58.6-7.466
- Greenwood, C. R., Kratochwill, T. R., & Clements, M. (2008). *Schoolwide prevention models:*Lessons learned in elementary schools. New York, NY: Guilford Press.
- Gresham, F. M., & Elliott, S. N. (2008). *Social Skills Improvement System: Rating Scales*[Measurement instrument]. Bloomington, MN: Pearson Assessments.
- Gueldner, B. A. (2008). The effectiveness of a social-emotional learning program with middle school students in a general education setting and the impact of consultation support using performance feedback. *Dissertation Abstracts International Section A*, 68, 3279.
- Gueldner, B., & Merrell, K. (2011). Evaluation of a social-emotional learning program in conjunction with the exploratory application of performance feedback incorporating motivational interviewing techniques. *Journal of Educational & Psychological Consultation*, 21(1), 1–27. doi:10.1080/10474412.2010.522876
- Gueldner, B. A., & Merrell, K. W. (2011). Interventions for students with internalizing behavioral deficits. In M. A. Bray, T. J. Kehle, M. A. Bray, & T. J. Kehle (Eds.), *The Oxford handbook of school psychology* (pp. 411–427). New York, NY: Oxford University Press.
- Gunter, L., Caldarella, P., Korth, B. B., & Young, K. R. (2012). Promoting social and emotional learning in preschool students: A study of Strong Start Pre-K. *Early Childhood Education Journal*, 40(3), 151–159. doi:10.1007/s10643-012-0507-z

- Harlacher, J. E., & Merrell, K. W. (2010). Social and emotional learning as a universal level of student support: Evaluating the follow-up effect of strong kids on social and emotional outcomes. *Journal of Applied School Psychology*, 26(3), 212–229. doi:10.1080/15377903.2010.495903
- Heled, E., & Read, J. (2005). Young peoples' opinions about the causes of, and solutions to, New Zealand's high youth suicide rate. *Suicide and Life-Threatening Behavior*, *35*(2), 170–180. doi:10.1521/suli.35.2.170.62881
- Johnson, R. B., & Christensen L. B. (2013). *Educational research: Qualitative, quantitative, and mixed approaches* (5th ed.). Los Angeles, CA: Sage.
- Keating, D. P. (2004). Cognitive and brain development. In R. M. Lerner, L. Steinberg, R. M. Lerner, & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed.; pp. 45–84). Hoboken, NJ: John Wiley & Sons.
- Kingery, J. N., Erdley, C. A., & Marshall, K. C. (2011). Peer acceptance and friendship as predictors of early adolescents' adjustment across the middle school transition. *Merrill-Palmer Quarterly*, *57*(3), 215–243. doi:10.1353/mpq.2011.0012
- Kramer, T., Caldarella, P., Young, K., Fischer, L., & Warren, J. (2014). Implementing Strong Kids school-wide to reduce internalizing behaviors and increase prosocial behaviors. *Education and Treatment of Children, 37*(4), 659–680.
- Lam, C. B., McHale, S. M., & Crouter, A. C. (2014). Time with peers from middle childhood to late adolescence: Developmental course and adjustment correlates. *Child Development*, 85(4), 1677–1693. doi:10.1111/cdev.12235

- Lane, K. L., Kalberg, J. R., & Menzies, H. M. (2009). *Developing schoolwide programs to prevent and manage problem behaviors: A step-by-step approach*. New York, NY: Guilford Press.
- Levitt, V. H. (2010). Promoting social emotional competency through quality teaching practices:

 The impact of consultation on a multidimensional treatment integrity model of the

 'Strong Kids' program. *Dissertation Abstracts International Section A*, 70, 4241.
- Liu, J., Chen, X., & Lewis, G. (2011). Childhood internalizing behaviour: Analysis and implications. *Journal of Psychiatric and Mental Health Nursing*, *18*(10), 884–894. doi:10.1111/j.1365-2850.2011.01743.x
- Marchant, M., Brown, M., Caldarella, P., & Young, E. (2010). Effects of Strong Kids curriculum on students with internalizing behaviors: A pilot study. *Journal of Evidence-Based Practices for Schools*, 11(2), 123–143.
- Marchant, M., Brown, M., Caldarella, P., & Young, E. (2010). Internalizing behavior problems: Strong Kids curriculum responds to the hidden challenge. *Journal of Evidence-Based Practices for Schools*, 11(2), 144–148.
- Marchant, M., Heath, M. A., & Miramontes, N. Y. (2013). Merging empiricism and humanism:

 Role of social validity in the school-wide positive behavior support model. *Journal of Positive Behavior Interventions*, *15*(4), 221–230. doi:10.1177/1098300712459356
- McKeon, B. (2015). Middle school transition: Faculty and parent perceptions of the academic, procedural, and social changes that occur between elementary and middle school.

 *Dissertation Abstracts International Section A, 75 (7-A) (E).

- Merikangas, K. R., He, J., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., . . . Olfson, M. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: Results of the national comorbidity survey-adolescent supplement (NCSA). *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(1), 32–45.
- Merikangas, K. R., Nakamura, E., & Kessler, R. (2009). Epidemiology of mental disorders in children and adolescents. *Dialogues Clinical Neuroscience*, 11(1), 7–20.
- Merrell, K. W. (2007). *Strong Kids Knowledge Test* [Measurement instrument]. Retrieved from http://strongkids.uoregon.edu/tools.html
- Merrell, K. W. (2010). Linking prevention science and social and emotional learning: The Oregon Resiliency Project. *Psychology in the Schools*, *47*(1), 55–70.
- Merrell, K. W. (2011). *Social Emotional Assets and Resilience Scales* [Measurement instrument]. Lutz, FL: Psychological Assessment Resources.
- Merrell, K. W., Carrizales, D., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2007). *Strong kids—Grades 6–8: A social and emotional learning curriculum*. Baltimore, MD: Paul H. Brookes Publishing.
- Merrell, K. W., Juskelis, M. P., Tran, O. K., & Buchanan, R. (2008). Social and emotional learning in the classroom: Evaluation of "Strong Kids" and "Strong Teens" on students' social-emotional knowledge and symptoms. *Journal of Applied School Psychology*, 24(2), 209–224.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Pearcy, M. T., Clopton, J. R., & Pope, A. W. (1993). Influences on teacher referral of children to mental health services: Gender, severity, and internalizing versus externalizing problems. *Journal of Emotional and Behavioral Disorders*, 1(3), 165–169. doi:10.1177/106342669300100304
- Poland, S., & Kornfeld, C. (2015). Suicide prevention and intervention. In R. H. Witte & G. S. Mosley-Howard (Eds.), *Mental health practice in today's schools: Issues and interventions* (pp. 265–285). New York, NY: Springer.
- Rae, W. A., Sullivan, J. R., Razo, N. P., & Garcia de Alba, R. (2009). Breaking confidentiality to report adolescent risk-taking behavior by school psychologists. *Ethics & Behavior*, 19(6), 449–460. doi:10.1080/10508420903274930
- Rand, L. E. (2013). *The impacts of grade retention: Benefits and challenges perceived by* retained middle school students (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3597675)
- Seeley, J. R., Severson, H. H., & Fixsen, A. A. M. (2014). Empirically based targeted prevention approaches for addressing externalizing and internalizing behavior disorders within school contexts. In H. M. Walker & F. M. Gresham (Eds.), *Handbook of evidence-based practices for emotional and behavioral disorders* (pp. 307–323). New York, NY: Guilford Press.
- Shim, S. S., Cho, Y., & Wang, C. (2013). Classroom goal structures, social achievement goals, and adjustment in middle school. *Learning and Instruction*, *23*, 69–77.
- Shirtcliff, E. A. (2009). Biological underpinnings of adolescent development. In R. J. DiClemente, J. S. Santelli, & R. A. Crosby (Eds.), *Adolescent health: Understanding and preventing risk behaviors* (pp. 95–113). San Francisco, CA: Jossey-Bass.

- Substance Abuse and Mental Health Services Administration. (2011). *Results from the 2010*National Survey on Drug Use and Health: Summary of national findings, NSDUH Series

 H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Author.
- Susman, E. J., & Rogol, A. (2004). Puberty and psychological development. In R. M. Lerner &L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed.; pp. 15–44). Hoboken,NJ: John Wiley & Sons Inc.
- Tam, V. C., & Chan, R. C. (2016). What Is Homework For? Hong Kong Primary School Teachers' Homework Conceptions. *School Community Journal*, 26(1), 25-44.
- Véronneau, M., & Dishion, T. J. (2010). Predicting change in early adolescent problem behavior in the middle school years: A mesosystemic perspective on parenting and peer experiences. *Journal of Abnormal Child Psychology*, 38(8), 1125–1137. doi:10.1007/s10802-010-9431-0
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among schoolage children and youth. *Journal of Emotional and Behavioral Disorders*, 4(4), 194–209.
- Wedam, A. (2013). Program development and outcomes assessment of social emotional curriculum utilized with high school special education population. *Dissertation Abstracts International Section A*, 74, 3.
- Wentzel, K., & Battle, A. (2001). Social relationships and school adjustment. In. T. Urdan & F. Pajares (Eds), *Adolescence and education: General issues in the education of adolescents. Volume 1* (pp. 99–118). Greenwich, CT: Information Age Publishing.

- Wentzel, K. R., Barry, C. M., & Caldwell, K. A. (2004). Friendships in middle school: Influences on motivation and school adjustment. *Journal of Educational Psychology*, *96*(2), 195–203.
- Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, *59*(1), 72–81. doi:10.1111/j.1939-0025.1989.tb01636.x
- Whitcomb, S. A., & Merrell, K. W. (2012). Understanding implementation and effectiveness of strong start K-2 on social-emotional behavior. *Early Childhood Education Journal*, 40(1), 63–71. doi:10.1007/s10643-011-0490-9
- Whitman, T. L., Merluzzi, T. V., & White, R. D. (1999). *Life-span perspectives on health and illness*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Young, E. L., Caldarella, P., Richardson, M. J., & Young, K. R. (2012). *Positive behavior support in secondary schools: A practical guide*. New York, NY: Guilford Press.

APPENDIX A: STRONG KIDS KNOWLEDGE TEST

Strong Kids Unit Test

For Students in Grades 3–8

On the next few pages, you will be asked to answer questions to see how much you know about healthy and unhealthy ways to express feelings, thoughts, and behavior. Read each question carefully and choose what you think is the best answer to the questions.

You will not be graded on your answers. Your answers will be kept confidential. If you have any questions, please ask your teacher.

Strong Kids Knowledge Test

Directions: This test has 20 questions about healthy and unhealthy ways to express feelings,

TRUE-FALSE. Read each sentence. If you think it is <u>true or mostly true</u>, circle the <u>T</u>, which means "true." If you think it is <u>false or mostly false</u>, circle the <u>F</u>, which means "false."

- 1. T F Self-esteem is your feelings of worth for yourself.
- 2. T F When identifying a problem, it is important to describe how you feel and then listen to how the other person says they feel.
- 3. T F When people feel <u>embarrassed</u>, they are likely to stand tall, smile, and talk to others.
- 4. T F Clenched fists and trembling or shaking hands are often signs of stress.
- 5. T F Your friend took the last ice cream bar at the class party and you hadn't gotten one yet. A good way to deal with this is to first identify how you feel, figure out if you feel comfortable or uncomfortable, and then choose 3 positive ways to express your feeling.

MULTIPLE CHOICE. Circle the letter that goes along with the best answer for each question.

- 6. Devin's gym teacher tells him to try out for the basketball team. Devin thinks that he is too short and won't make it, so he decides to not try out for the team. What <u>thinking</u> error is Devin making?
 - a. Binocular vision
 - b. Black and white thinking
 - c. Making it personal
 - d. Fortune telling
- 7. An example of an emotion that is uncomfortable for most people is
 - a Excited
 - b Frustrated
 - c. Curious
 - d. Content
- 8. What is an emotion?
 - a. A thought you have about a situation
 - b. Your inner voice inside your head
 - c. A memory you have about something that happened to you
 - d. A feeling that tells you something about a situation you are in
- 9. <u>Self-talk</u> is a way to calm down after you get angry. Self-talk includes telling yourself
 - a. I don't deserve this
 - b. I should get angry when something like this happens
 - c. I can work through this
 - d. I need to stop getting angry so often
- 10. Which of the following statements best describes empathy?
 - a. Knowing how you are feeling
 - b. Not knowing why another person is feeling sad
 - c. Understanding another person's feelings
 - d. Thinking about another person

- 11. What is the meaning of the thinking error <u>dark glasses</u>?
 - a. Looking at the whole picture
 - b. Seeing only the part of a situation that makes you sad
 - c. Trying to see things in a different way
 - d. Thinking about only the negative or bad parts of things

12. Thinking errors occur when

- a. You see things differently than what really happened
- b. You see both the good and bad of each situation
- c. You think something different than your friend
- d. You tell yourself you shouldn't try to do something

13. Reframing is a way to

- a. See the whole picture
- b. Think about the things that make you smile
- c. Think about the situation more realistically
- d. Think about what you will do next
- 14. Why would you want to know how someone else is feeling?
 - a. So you can leave them alone when they're angry
 - b. To better understand that person's feelings
 - c. To tell other people about that person
 - d. To act the same when you are together
- 15. What does the ABCDE plan for optimism help you to do?
 - a. Look at both sites of a situation
 - b. View situations more positively
 - c. Control your positive and negative thoughts
 - d. Realize that you sometimes have no control over things

16. Conflict resolution is best described as

- a. Discussing a problem until there is a winner and a loser
- b. Arguing with another person until they see your point and give in
- c. Problem-solving so you can reach an agreement
- d. Talking about the problem until something changes the other person's mind

- 17. Which of the following is a <u>positive way</u> to express how scared you are for your parents to get your report card?
 - a. Tell them why you are scared
 - b. Hide your report card
 - c. Tell your parents they are expecting too much from you
 - d. Say that your grades were bad because other kids at school distracted you
- 18. Why is it important to <u>make an agreement</u> when you are trying to solve a problem?
 - a. To understand what the other person is feeling
 - b. To let the other person know what you think about the problem
 - c. To make sure both people accept the solution to the problem
 - d. To solve the problem more quickly
- 19. Which of the following is one of the best ways to deal with a problem with you are feeling stressed?
 - a. Crying
 - b. Talking about the problem with a friend
 - c. Complaining to your mom
 - d. Ignoring the problem
- 20. Which of the following is the <u>better way</u> to deal with feeling <u>very angry</u> when the person next to you in class keeps talking and annoying you?
 - a. Yell at them and tell them to stop
 - b. Call out to the teacher about the student
 - c. Take their backpack to get even
 - d. Stop, count to ten, and try to relax

APPENDIX B: TREATMENT FIDELITY CHECKLIST

Lesson 1: Emotional Strength Training

Observation start time:	
Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
 I. Introduction Minutes: Explains to members that a new cur Explains how often they will receive 	
Circle One: Not Implemented Partia. Notes:	lly Implemented Fully Implemented
 II. Introduction to the Topics Covered Minutes: Supplement 1.1 is used to introduce Leader orally reviews topics. Makes an awareness or disclaimer services. 	
Circle One: Not Implemented Partially	y Implemented Fully Implemented

III. Defining Behavior Expectations Iinutes:
 Discusses confidentiality. Goes over <i>Strong Teens</i> rules (respect others, come prepared, personal things stay in group) and sets up any other expectations for the group. Uses Supplement 1.2.
Circle One: Not Implemented Partially Implemented Fully Implemented Iotes:
IV. Closure finutes:
 Reviews with members that they will be learning about life skills. Reminds members about class rules.
Circle One: Not Implemented Partially Implemented Fully Implemented Jotes:
V. Homework finutes: Provides members with homework (supplement 1.3). Explains expectations for completing homework.
Circle One: Not Implemented Partially Implemented Fully Implemented lotes:
Observation finish time:
ercentage of Components Not Implemented:
ercentage of Components Partially Implemented:
ercentage of Components Fully Implemented:

Lesson 2: Understanding Your Emotions 1

Observation start time:	
Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
 I. Review Minutes: Reviews ideas discussed from Ch. 1. Reviews group rules/expectations 	
Circle One: Not Implemented Partially Im Notes:	iplemented Fully Implemented
II. Introduction	
Minutes:	
 Communicates the lesson purpose/obj Activity A, supplement 2.1 is used to Activity B, discussion/questions about 	,

III. Feelings Identification

Minutes:

Conveys importance of identifying emotions.

Notes:

Circle One: Not Implemented Partially Implemented Fully Implemented

• Generates a list of emotions/feelings.

•	Identifie	s comfortable	and unc	omfortable emotion	ons.	
		-		Partially Implem		Fully Implemented
IV Minut		on Groups				
•	Uses sup	plement 2.2.	-			
		nto discussion	•			
•	Conduct	s a follow-up o	discussi	on.		
				lly Implemented	Fully In	nplemented
Minut	Generate Breaks b Conduct	ack into discus s a follow-up o	ssion gr liscussi	oups. on.		es supplement 2.3.
		Implemented		ally Implemented	Fully I	mplemented
	. Closure es: Reviews	the lessons ma	- ain poin	uts		
		Implemented		ally Implemented	Fully I	mplemented
VI	I. Homev	vork				
Min	utes:					
:				lout, supplement 2 omplete the home	*	t My Feelings).

Not Implemented Partially Implemented Fully Implemented

Circle One:

Notes:

Observation finish time:
Percentage of Components Not Implemented:
Percentage of Components Partially Implemented:
Percentage of Components Fully Implemented:

Lesson 3: Understanding Your Emotions 2

Observation start time:	

Tally of	opportunities to resp	oond	Tally o	of student responses
Tally of	total praise statemen	nts	Tally o	of total reprimands given
I. Rev Minutes:				
	eviews previous home eviews ideas/concepts			n ideas.
	Not Implemented			Fully Implemented
II. Int	roduction			

• Communicates the lesson purpose/objectives clearly.

Circle One:	Not implemented	Partially Implemented	Fully implemented	
Notes:				

III. Identify Actions that Follow Feelings

Minutes:

- Activity A, provides didactic on emotions and actions that follow by choice.
- Activity B, identifies common actions associated with emotions
- Discusses appropriate ways to express opinions and ideas in different situations.

	_	Partially Implemented	Fully Implemented
		Examples of Showing I	
• U	ses supplement 3.1 (\	Ways of Showing Feeling	s 1).
	-		ent 3.2 (different situations). s 2), has members generate their own
- 0	ses supplement 3.2 (ways of Showing recting	s 2), has members generate their own
	-	Partially Implemented	· ·
	ractice Situations and	d Application	
• U	ses supplement 3.3 (I	Practice Situations).	
	reaks into smaller dis		
	ses supplement 3.4 (I	Practice Application) ogether for discussion of s	vituations
14.	tembers come back to	gether for discussion of s	ituations.
		Partially Implemented	, ,
	Closure		
• R	eviews the lessons ma	ain points.	
	Not Implemented	Partially Implemented	Fully Implemented
VII.	Homework		
Minute	es:		
		ork handout- supplement 3 now to complete the home	3.5 (Reacting to Emotional Situations) ework.
	•	Partially Implemented	· ·
	tion finish time:		

Percentage of Components Partially Implemented:	
Percentage of Components Fully Implemented:	

Lesson 4: Dealing with Anger

Observation start time:	
ally of opportunities to respond	

Tally of opportunities to respond	Tally of student responses
Cally of total proise statements	Tally of total reprimends given
ally of total praise statements	Tally of total reprimands given

- Reviews previous homework assignment and main ideas.
 - Reviews ideas/concepts discussed from Ch. 3.

Circle One: Notes:	Not Implemented	Partially Implemented	Fully Implemented
II. Int	troduction		
Minu	tes:		
• Co	ommunicates the lesso	on purpose/objectives clea	urly.
Circle One:	Not Implemented	Partially Implemented	Fully Implemented

III. Name and Define Anger and Aggression

Minutes:

- Activity A, uses supplement 4.1, has member read definitions.
- Activity B, leader provides didactic on emotions, anger, and aggression.
- Asks members for examples of when they have become angry and what caused it.
- Uses Activity C, D, and E.

	Not Implemented	Partially Implemented	Fully Implemented
IV. In Minutes:	troduces the Anger	Model and Definitions	
■ Us	es supplement 4.2.		
■ Dis	scusses/defines each	term.	
		Partially Implemented	Fully Implemented
	egrates and Illustra	tes the Anger Model	
	es supplement 4.3.	-	
	gages members in ac	ctivity A or B.	
	Not Implemented	Partially Implemented	Fully Implemented
■ Int	es supplement 4.4. roduces skills used t	o cope with anger.	Follo Involuence d
	Not Implemented	Partially Implemented	Fully Implemented
VII. A	pplication of Ange	r Control Skills	
	es supplement 4.5.		
• Us	es examples/illustrat	tes appropriate use of the A	Anger Model.
	Not Implemented	Partially Implemented	Fully Implemented
VIII. I	Practice and Applic		
Minutes:	a manula ana11	-	. am all amazons
		using the Anger Model in	
• Sel	ects a group to preso	ent their example and has	uiscussion.
	Not Implemented	Partially Implemented	Fully Implemented

Minutes:	eviews the lessons ma		
■ Re	eviews the lessons ma	in points.	
	-	Partially Implemented	· ·
X. Ho	omework		
Minute	s:		
		k handout- supplement 4.	6 (Anger Management Worksheet work.
	-	Partially Implemented	Fully Implemented
Observat	ion finish time:		
Percenta	ge of Components N	ot Implemented:	
Percenta	ge of Components Pa	artially Implemented:	
Percenta	ge of Components Fu	ılly Implemented:	_

IX. Closure

Lesson 5: Understanding Other People's Emotions

Observation start	time:	
--------------------------	-------	--

Fally of opportunities to respond	Tally of student responses
Γally of total praise statements	Tally of total reprimands given

	ĸ	evi	OXX/
1.	17	C V 1	C * *

Minutes:

- Reviews previous homework assignment and main ideas.
- Reviews ideas/concepts discussed from Ch. 4.

Circle One: Notes:	Not Implemented	Partially Implemented	Fully Implemented
II. Int	troduction		
Minu	tes:	<u></u>	
• Co	ommunicates the lesso	n purpose/objectives clea	rly.

Circle One: Not Implemented Partially Implemented Fully Implemented Notes:

III. Name and Define Skills

Minutes:

- Activity A, uses supplement 5.1, has members read definitions.
- Activity B, leader provides didactic on empathy and looking for clues and cues.

) • I	Uses supplement 5.2 Leader models and emodelects members to mo		I have other members guess.
	<u>-</u>	Partially Implemented	Fully Implemented
V. Ir Minutes	ntegrate Key Concept	ts	
• I	eader discusses linkin	ng emotional cues to perspors can use cues to understa	
	Not Implemented	Partially Implemented	Fully Implemented
Minutes	Has members role play Activity A, provides ov Activity B, uses supple	to identify physical cues, wn example or example of ement 5.3.	in order to understand perspective Emma. The act out situations and answer q
	Not Implemented	Partially Implemented	Fully Implemented
Minutes	Closure : Reviews the lessons ma	- ain points.	
Circle One:	_	Partially Implemented	Fully Implemented

- Passes out the homework handout- 5.4 (Empathy Assignment).
- Gives instructions on how to complete the homework.

Circle One: Notes:	Not Implemented	Partially Implemented	Fully Implemented		
Observat	tion finish time:	<u> </u>			
Percentage of Components Not Implemented:					
Percenta	ge of Components P	artially Implemented: _			
Percenta	ge of Components F	ully Implemented:	<u></u>		

Lesson 6: Clear Thinking 1

Observation	start	time:	

Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
Tany of total praise statements	Tany of total reprimands given
 I. Review Minutes: Reviews previous homework Reviews ideas/concepts discu 	
Circle One: Not Implemented Par Notes:	
II. Introduction	
Minutes:	
 Communicates the lesson pur 	pose/objectives clearly.
Circle One: Not Implemented Parti	ally Implemented Fully Implemented

III. Identify Intensity of Emotions, Negative Thoughts, & Common Thinking Errors Minutes:

- Activity A, uses supplement 6.1, Models an emotion and rates it on thermometer.
- Activity B, Describes importance of monitoring thoughts during strong emotions.

Notes:
 IV. Activity C Uses supplement 6.2 describes the 6 common thinking errors. Describes how people can have multiple thinking errors, allows members to ask of
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
 V. Activity D Minutes: Uses supplement 6.3. Discusses situations and has members identify the thinking errors.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
VI. Closure Minutes: Reviews the lessons main points. Circle One: Not Implemented Partially Implemented Fully Implemented
Notes:
 VII. Homework Minutes: Uses supplement 6.4/Homework handout. Gives instructions on how to complete the homework.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
Observation finish time: Percentage of Components Not Implemented:
Percentage of Components Partially Implemented:
Percentage of Components Fully Implemented:

Lesson 7: Clear Thinking 2

Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
 I. Review Minutes: Reviews ideas/concepts discussed an Uses supplement 7.1. ircle One: Not Implemented Partially In 	<u> </u>
otes:	
Minutes:	
 Communicates the lesson purpose/obircle One: Not Implemented Partially Im 	
Notes:	-
III. Looking for Evidence and Learnin	ng How to Reframe Negative Thought

Circle One: Not Implemented Partially Implemented Fully Implemented

Notes: _____

TT7	•	4.	• 4	•
IV.	Α	ctiv	Itv	Α

- Uses supplement 7.2, discusses using evidence to examine thoughts.
- Asks," what is evidence"? And, "is it realistic/reasonable"?

Circle One:	Not Implemented	Partially Implemented	Fully Implemented	
Notes:				

V. Activity B

Minutes:

- Uses supplement 7.3, discusses how to identify thinking errors and how to use methods of reframing.
- Discusses how you may not always have control or ability to change some situations, but in others you may need to take responsibility for making changes

Circle One:	Not Implemented	Partially Implemented	Fully Implemented	
Notes:				

VI. Activity C

- Uses supplement 7.4, asks student to take out homework from Lesson 6.
- Uses member's examples to practice reframing and identifying thinking errors.
- Asks students to volunteer a negative thought and guides through the 5 steps.

NT-4	Circle One:	Not Implemented	Partially Implemented	Fully Implemented	
Notes:	Notes:				

VII. Closure

Minutes:

- Reviews the lessons main points.
- Ties lesson 6 and 7 together.
- Encourages students to use the skills daily.
- Uses supplement 7.5 (Feelings Thermometer).

Circle One:	Not Implemented	Partially Implemented	Fully Implemented	
Notes:				

VIII. Homework

Minutes:	
IVIIII ULCO.	

- Uses supplement 7.6 (Changing Thinking Errors)
- Gives instructions on how to complete the homework.

Circle One: Notes:	Not Implemented	Partially Implemented	Fully Implemented		
Observat	tion finish time:	<u></u>			
Percenta	ge of Components N	ot Implemented:	-		
Percentage of Components Partially Implemented:					
Percenta	Percentage of Components Fully Implemented:				

Lesson 8: The Power of Positive Thinking

Observation	start	time:	

Tally of opportunities to respond	Tally of student responses		
Tally of total praise statements	Tally of total reprimands given		
 I. Review Minutes: Discuss with members their response Reviews ideas discussed/covered from 			
Circle One: Not Implemented Partially In Notes:			
II. Introduction Minutes:			
 Communicates the lesson purpose/object 	jectives clearly.		
Circle One: Not Implemented Partially Imp	plemented Fully Implemented		
NT .			

III. Name and Define Skills

Minutes:

- Activity A, uses supplement 8.1 and discusses vocabulary.
- Activity B, gives didactic on positive thinking vs. negative thinking.
- Facilitates a group discussion about looking at negative thoughts differently.

Notes:
 IV. Introduce the ABCDE Model of Learned Optimism. Uses supplement 8.2, introduces the model as a tool to change negative thoughts into positive thinking. Discusses each component of the model (ABCDE).
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
 V. Integrate and Illustrate the ABCDE Model of Learned Optimism Minutes: Uses supplement 8.2, presents examples to illustrate the ABCDE model. Uses examples and nonexamples of positive thinking and uses the 4 situations.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
 VI. Activity B (Create a Situation) Encourages students to think of a situation that might elicit negative thoughts. Piece together the situation by asking questions and guiding with ABCDE model. Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
VII. Closure Minutes: Uses supplement 8.3 Assesses how well members understand the topic. Call on students to respond.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
 VIII. Homework Minutes: Uses supplement 8.2. Asks members to keep a journal where they implement the ABCDE model.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:

Observation finish time:
Percentage of Components Not Implemented:
Percentage of Components Partially Implemented:
Percentage of Components Fully Implemented:

Lesson 9: Solving People Problems

Lesson 9: Solving	g reopie rroblems
Observation start time:	
Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
I. Review Minutes: Review and discuss previous topics a Reviews ideas discussed/covered fro Circle One: Not Implemented Partially In Notes:	
II. Introduction	
Minutes:	
 Communicates the lesson purpose/ob 	bjectives clearly.
Circle One: Not Implemented Partially Im	plemented Fully Implemented
Notes:	
III. Name and Define Skills Minutes: Uses supplement 9.1, defines the 4 to	erms

Circle One: Not Implemented Partially Implemented Fully Implemented

Notes:

IV. Understanding Conflict	IV.	. Un	dersta	nding	Conflict
----------------------------	-----	------	--------	-------	----------

Minutes:____

- Main idea 1, provides didactic on conflict (inherent, doesn't require a winner and loser).
- Main idea 2, uses supplement 9.2, discusses the 6 alternatives to conflict.

	_	Partially Implemented	Fully Implemented
Minutes:	tegrate Key Concep iscusses a current eve		olving model.
	-	Partially Implemented	Fully Implemented
• Us	•	one of the 2 situations. t volunteer or act out both	roles.
	-	Partially Implemented	· ·
Minutes : ■ U: ■ Ha ■ In	ses current and realis		oblem solving.
		Partially Implemented	
N. 4.	Closure eviews the lesson's m	- nain points.	
	Not Implemented	Partially Implemented	Fully Implemented
IX. H	omework		

- Uses supplement 9.4. (Resolving Conflicts).
- Explains expectations for completing homework

Circle One: Notes:	Not Implemented	Partially Implemented	Fully Implemented
Observati	ion finish time:		
Percentag	ge of Components No	ot Implemented:	
Percentag	ge of Components Pa	artially Implemented:	<u></u>
Percentag	ge of Components Fu	ılly Implemented:	_

Lesson 10: Letting Go of Stress

	rvation start time:		Tall	y of student vegnences
Тапу	of opportunities to 1	respona	1 any	y of student responses
Tally	of total praise stater	nents	Tall	y of total reprimands given
I. Re				
• R	eview and discuss pr	evious topics ar	nd main ide	eas, follow up on lesson 9 homework
• R	eviews ideas discuss	ed/covered from	n lesson 9.	
	Not Implemented	-	_	Fully Implemented
II. In	troduction			
Minu	ites:			
• C	ommunicates the less	son purpose/obj	ectives clea	arly.
Circle One:	Not Implemented	Partially Imp	lemented	Fully Implemented
Notes:				
III. N Minutes:	Name and Define Sk	ills		
AA	ctivity A, uses supple			concepts. ects people, and importance of taking
Circle One:	Not Implemented	Partially Impl	emented	Fully Implemented

Vilnutes:	ave members generate examples of stressful situations in their lives.						
	ncourages members to describe the situation and their feelings.						
	sks students to explain how they would feel.						
	Not Implemented Partially Implemented Fully Implemented						
	ealing with Stress						
	enerates additional situations or use ones previous to brainstorm both negative and						
	ositive ways to deal with stress.						
■ A	sks members how they would know whether a solution is positive or negative.						
• H	as members identify negative and positive ways in the 3 situations.						
	Not Implemented Partially Implemented Fully Implemented						
VI. D	iscussion						
Minutes:							
	ctivity A, Helps members generate ways they can relax when stressed or before a ressful situation.						
■ Se	olicit what coping skills the members might use (positive and negative).						
• If	no negative ones mentioned, consider mentioning that some do to reduce stress.						
	ctivity B, focuses on each strategy listed and evaluates its effectiveness. ave members consider which strategies might cause more stress in the future.						
Circle One: Notes:	Not Implemented Partially Implemented Fully Implemented						
VII	Optional Activity						
Minutes:	•						
	ngages members in a relaxation exercise						
■ I I	ses supplement 10.2						

	Closure 		
■ Re	views the lesson's ma	ain points.	
		Partially Implemented	5 1
IX. H	omework		
Minutes	:		
	ses supplement 10.4 (laplains expectations fo	Letting Go of Stress). or completing homework.	
	-	Partially Implemented	2 1
Observat	ion finish time:	_	
Percentag	ge of Components No	ot Implemented:	
Percentag	ge of Components Pa	artially Implemented:	
Percentag	ge of Components Fu	ılly Implemented:	_

Lesson 11: Behavior Change

Tally of opportunities to	respond	Tally	y of student responses
Tally of total praise state	ements	Tally	y of total reprimands given
I. Review Minutes: Follows up on lesson Reviews ideas discus Circle One: Not Implemented	10 homework. ssed/covered from		
Notes: II. Introduction Minutes: Communicates the le			ly.
Circle One: Not Implemented Notes:			Fully Implemented
III. Name and Define SI Minutes: Uses supplement 11.1 Uses the 4 situations	1, defines the go		
Circle One: Not Implemented		lemented	Fully Implemented
IV. Steps to Goal Attain Minutes: Conveys the main ide Activity A, uses supp Shares examples on e	eas on the purpos plement 11.2, cov		nd attaining goals. teps to attaining goals.
- Shares examples on e	each step.		

Minutes:
 Breaks into smaller groups and has members generate their own goals using the steps
of goal attainment.
 Has members refer to supplement 11.2 for assistance.
 Asks members to share examples.
 Gives members who shared positive feedback.
Circle One: Not Implemented Partially Implemented Fully Implemented
Notes:
VI. Closure Minutes: Leader reviews the lesson's main ideas.
• Leader reviews the lesson's main ideas.
Circle One: Not Implemented Partially Implemented Fully Implemented
Notes:
VII. Homework
Minutes:
 Uses supplement 11.3 (Personal Goal Organizer). Explains expectations for completing homework.
Circle One: Not Implemented Partially Implemented Fully Implemented Notes:
Observation finish time:
Percentage of Components Not Implemented:
Percentage of Components Partially Implemented:
Percentage of Components Fully Implemented:

V. Activity B

Lesson 12: Finishing UP!

Observation start time:	
Tally of opportunities to respond	Tally of student responses
Tally of total praise statements	Tally of total reprimands given
I. Introduction	
Minutes:	
■ Communicates the lesson purpose/o	bjectives clearly (reviewing all previous lessons).
	,
Circle One: Not Implemented Partially Im	plemented Fully Implemented
Notes:	
II. Review of Strong TeensMinutes:Uses supplement 12.1 (reads through	h the lesson titles and has members recall info).
, , ,	and/or assigns lessons to smaller groups to report
Circle One: Not Implemented Partially In Notes:	mplemented Fully Implemented
III. Options for Students Experiencin Minutes:	
	learned important, but that they may not be
 enough help for serious life problem Activity A. lists/discusses resources 	for which members can turn to for help.
Circle One: Not Implemented Partially Im Notes:	plemented Fully Implemented

	losure		
Minutes:			
■ Le	eader reviews the less	son's main ideas.	
Circle One:	Not Implemented	Partially Implemented	Fully Implemented
Notes:			
Ohaamaa	tion finish time.		
Observa	tion finish time:		
Percenta	ge of Components N	Not Implemented:	-
Percenta	ge of Components I	Partially Implemented: _	
Percenta	ge of Components I	Fully Implemented:	

APPENDIX C: SOCIAL VALIDITY STUDENT QUESTIONNAIRE

Social Validity Questionnaire – Student

Please rate the acceptability of the goals and outcomes.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My social and emotional learning is important enough to use a program such as <i>Strong Kids</i> .	1	2	3	4	5
2. My social and emotional abilities are important to how well I do in school.	1	2	3	4	5
3. It is important that social and emotional knowledge and skills be taught in a school setting.	1	2	3	4	5
4. I feel good when I use the skills taught in the <i>Strong Kids</i> lessons during other school activities.	1	2	3	4	5
5. The time taken to participate in the <i>Strong Kids</i> lessons was acceptable.	1	2	3	4	5
6. The length of lessons was appropriate for middle school students.	1	2	3	4	5
7. The materials that I used for <i>Strong Kids</i> were easy to understand.	1	2	3	4	5

8. I could use my knowledge and skills gained from the lessons in other school situations.	1	2	3	4	5
9. I am satisfied with the social and emotional knowledge and skills that I am using.	1	2	3	4	5
10. Strong Kids was a good way to help me prevent social and emotional problems.	1	2	3	4	5
11. I feel I learned important skills from <i>Strong Kids</i> .	1	2	3	4	5
12. I use the skills that I learned from <i>Strong Kids</i> .	1	2	3	4	5
13. I liked Strong Kids.	1	2	3	4	5
14. I found that <i>Strong Kids</i> was easy to learn.	1	2	3	4	5
15. I was interested and excited in the lessons, and showed active participation in them.	1	2	3	4	5
16. Most students would find <i>Strong Kids</i> helpful for improving social and emotional learning skills.	1	2	3	4	5
17. I would recommend the use of <i>Strong Kids</i> to other students.	1	2	3	4	5

18. I would like to participate in <i>Strong Kids</i> again.	1	2	3	4	5
19. My peers in the group enjoyed participating in <i>Strong Kids</i> .	1	2	3	4	5

What problems, if any, did you have with Strong Kids?
Would you change the way the lessons are taught? How?
What changes would you make to the program's content?
What changes did you observe in yourself?
Additional comments:

APPENDIX D: SOCIAL VALIDITY TEACHER INTERVIEW

What was your overall experience teaching the curriculum?

What was beneficial?

What wasn't?

Are middle students' social and emotional concerns are great enough to warrant use of a curriculum such as *Strong Kids?*

Is school the right setting for this social-emotional learning?

Is the health classroom/curriculum a good fit for a program like *Strong Kids*?

Was the curriculum feasible to prepare and teach?

Would you change anything about the way the lessons are taught? If so, how?

Was the length of the lessons appropriate for middle school students?

Was the content appropriate for your students?

What problems, if any, did you have with the implementation of the curriculum?

Did feel like the manual provided enough training to teach the curriculum?

How much prep time did you need to prepare the lessons? Was that enough?

Was the curriculum easy to teach?

How would you compare teaching *Strong Kids* to teaching your regular health curriculum?

Did students like *Strong Kids*?

What changes did you observe in your students after teaching *Strong Kids*?

What changes would you make to the curriculum content?

Would you recommend the curriculum to a colleague?

Would you implement *Strong Kids* again? Additional comments:

APPENDIX E: PASSIVE CONSENT FORM

January 12, 2015

Dear Parent or Legal Guardian,

This year we will be implementing a social and emotional learning program called *Strong Kids*. The purpose of this program is to teach children to recognize and manage their emotions, have better social relationships, and make good decisions.

This program will be taught to half of the eighth grade health classes randomly selected to participate as part of the health curriculum for the term. Those students who participate will be compared with those who do not participate to evaluate the effectiveness of the program. Students' homeroom teachers will rate students on several different behaviors, for example, how well students get along with others and how often they act anxious or sad. Students will fill out a similar self-evaluation. Homeroom teachers and students will complete these ratings twice, once near the beginning of the term, and again near the end of the term. This helps us determine how student behavior changes throughout the term.

There are very few risks associated with having your child rated by their teacher and the students rating themselves. Although you will not receive any direct benefits for allowing your child to participate, results from this evaluation will help us learn how to best improve students' behavior.

If you decide to let your child be rated by their teacher and complete a self-rating, you should know that your child's information will be kept confidential. His or her name will not be attached to the results and an ID number will be used instead. All information will be stored securely.

Your child's homeroom teacher will not complete the ratings on your child if you do not want them to. Additionally, your children will not fill out self-ratings if you do not want them to. Not participating will not affect your child's standing at the school. Participation is voluntary.

If you don't want your child's information to be used, or if you have questions about the evaluation, please notify us by phone or email. If we do not hear from you by January 19, 2015 we will assume you are comfortable allowing your child to participate.

Thank you,	
Principal	Eighth Grade Health Teacher