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Youth and Staff Perceptions of Modifications Made When Implementing  
*Strong Teens* in a Residential Treatment Center

Melissa Rae Bennion

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

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## ABSTRACT

### Youth and Staff Perceptions of Modifications Made When Implementing *Strong Teens* in a Residential Treatment Center

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Master of Science

There is compelling evidence that helping adolescents develop certain traits (especially related to resiliency) can mitigate the confounding effects of suicide. Specific demographics of youth appear to have higher rates of suicidal behavior including those with mental health diagnoses and educational disabilities that affect students' academic achievement. We looked at evidence based social and emotional learning programs (SEL) that fostered adaptive coping skills and resilience. We identified *Strong Teens* (Carrizales-Engelmann, Merrell, Feuerborn, Gueldner, & Tran, 2016) as a program that could be easily administered and adapted into traditional and nontraditional school settings.

This study was conducted in a residential treatment center (RTC) for adolescent males. The RTC permitted one of their therapists to implement the *Strong Teens* over the course of two consecutively run groups. Group 1 included seven boys and Group 2 included four boys. We relied on the therapist's self-assessment of modifications made to the program; the researcher's field notes collected during observations; emails between the therapist and researcher; the researcher's notes taken during conversations between the therapist and researcher; monthly Youth Outcome Questionnaire Self Report (Y-OQ-SR) test scores; youth *Strong Teens* pre and post test scores; and youth exit surveys conducted in one-one interviews at the conclusion of the *Strong Teens* lessons. Fidelity of program implementation was measured by the therapist and researcher completing the *Strong Teens* fidelity checklist (included in the *Strong Teens* manual).

Based on collected data, we make the following recommendations: Adapt the *Strong Teens* program to increase student participation and receptiveness; carefully consider the size of the group, taking into account the capacity of the group leader to manage the group's behaviors and attend to individual needs; consider conducting groups sessions in settings that help youth feel safe and comfortable—groups held outside may be preferable to groups held inside classrooms; mental health professionals and teachers who lead the *Strong Teens* lessons may consider learning about a variety of basic therapeutic strategies and how these strategies might fit participants' needs; when evaluating the effectiveness of *Strong Teens*, carefully gather, consider, and contextualize a variety of data (quantitative and qualitative) from a variety of sources (youth participants, group leaders, and others who interact with the youth); in addition to focusing on teaching information and skills, group leaders must consider motivational strategies; focus initial conversations on why one would use such strategies to benefit oneself—later conversations may expand to include how strategies benefit others.

Keywords: residential treatment center, *Strong Teens Program*, program implementation, resilience, adaptive coping, suicide prevention

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## CHAPTER ONE

### **Introduction**

Currently suicide is the second leading cause of death for youth, ages 10 through 24 (National Institute of Mental Health [NIH], 2019). As reported by the NIH (2019), 6,252 youth (ages 10–24) completed suicide in 2017. Tragically, the escalating suicide rates for school-age youth are a critical issue for schools and communities (Torok, Calear, Smart, Nicolopoulos, & Wong, 2019). As suicide invades and entwines society it removes a life and leaves what Shneidman (1969, p. 22) called a “psychological skeleton” in survivors’ closets furthering suicide’s effects. Increasing efforts to reduce and prevent youth suicide have led researchers to more decisively identify risk factors (Bilsen, 2018) and subsequently specify effective interventions to reduce those risk factors (Miller & Mazza, 2018).

Concerns about youth suicide are not new. In a research article examining adolescents and learning disabilities, McBride and Siegal (1997) participated in the first symposium on adolescent suicide, held in Vienna, Austria in 1910. Looking back over the past century, we find that youth suicide has been and continues to be a major public concern. Current research reveals very specific groups that, for a variety of reasons, are more at risk for attempting and completing suicide (Bilsen, 2018). By narrowing down who is most susceptible to suicide, we can more precisely enhance interventions and target these groups with programs designed to increase adolescents’ adaptive coping skills and resiliency (Arango et al., 2019; Bilsen, 2018). Coping skills fan out into a broad array of ways that an individual deals with life stressors and overwhelming feelings (Carrizales-Engelmann, Merrell, Feuerborn, Gueldner, & Tran, 2016). Many of these skills such as problem solving and emotional regulation can be taught early using social and emotional learning (SEL) programs with the intent to reduce risk.

In regard to research and data collection, adolescents in custody settings or residential treatment centers (RTC) are an often overlooked population. In a research study of US youth in confinement there were 110 juvenile suicides between 1995 and 1999 (Hayes, 2005). This study included youth confined to residential treatment centers (RTCs), juvenile detention centers, reception centers, training schools, ranches, camps, and farms. The average age of the decedent was 15.7 years. Of those suicides, 15.2% occurred in RTCs. Nearly 80% of these deaths were male, and of those close to 70% were White. Prior to death, 74% of this group reported struggling with a mental illness, the majority noting significant depression. Additionally, youth residential treatment centers come under increased scrutiny for their lack of implementing empirically researched practices (Thompson, Duppong Hurley, Trout, Huefner, & Daly, 2017).

### **Applied Research: Research to Practice Gap**

Successfully implementing youth prevention programs to increase the ability to combat the risks of suicide (Calear et al., 2017; Wasserman et al., 2015) and to teach resilience and coping skills is a promising platform (Marvin, Caldarella, Young, & Young, 2017; Thompson et al., 2017). It is critical that those who are implementing a program have the ability to adapt their program to fit the needs of their particular population (Carrizales-Engelmann et al., 2016). One study showed that when given material appropriate for the general population, teachers whose students fell *outside* of the norm were frustrated as they struggled to fit materials to their unique group of youth (Perry, Brenner, Collie, & Hofer, 2015). Allowing those who work with vulnerable youth to adapt programs to fit the needs of their population eases this frustration and offers the potential to strategically target specific needs, thus yielding better outcomes (Klassen, Perry, & Frenzel, 2012; Perry et al., 2015).

Follow up with youth in several residential treatment studies demonstrates ongoing success that carries the benefits of in-patient treatment long after youth leave the program (Behrens, Santa, & Gass, 2010). For example, in a study researchers noted, “By the end of residential treatment and one year after treatment, the majority of the youth demonstrated clinically significant improvement by shifting from the abnormal (or clinical) range to the normal range of behavioral and psychological functioning” (Behrens et al., 2010, p. 109).

The present study sought to address past studies where adolescents have reported limited enjoyment or excitement during program lessons and felt that some of the vignettes used were not relatable to their personal experiences (Caldarella, Millet, Heath, Warren, & Williams, in press). Furthermore, therapists may be concerned about their perceived client responsiveness throughout the program (Marvin et al., 2017).

### **Research Questions**

Our current research considers how a school-based SEL program, *Strong Teens* (Carrizales-Engelmann et al., 2016), could be adapted to fit the needs of a group of adolescents in a selected RTC. This RTC admits youth who are diagnosed with a variety of disabilities, including learning disabilities and mental health impairments. This study examined what program enhancements and adaptations were used to modify the *Strong Teens* program to better help increase participant’s ability to overcome risk factors associated with an increased risk for suicide. The following research questions guided our research:

1. Does the implementation of *Strong Teens* in a residential treatment center increase resilience in teen boys who have been previously diagnosed with mental health conditions and/or educational disabilities?

2. In what specific ways did the RTC therapist adapt *Strong Teens* to better fit the specific population?
3. In regard to modifying the *Strong Teens* lessons, which of these adaptations were related to participants' needs and increasing participants' responsiveness?

## CHAPTER TWO

### **Literature Review**

Children are often placed in a vulnerable category for a variety of reasons. They represent what society most wants to protect. This being the case opens an even more vulnerable population deserving of even more of our protection: those children who have a physical or emotional disability. These disabilities range from severe forms of abnormalities to very minimal disabilities such as slight speech impediments. The National Center for Education Statistics (NCES) reported that in 2017–2018, 13.7% of all students, 6.96 million children aged 3–21 received services under the Individuals with Disabilities Education Improvement Act (IDEIA; U.S. Department of Education & NCES, 2019).

#### **Vulnerabilities/Risk Factors**

In a research study that relied on adolescents self-report of disability, Moses (2017) hypothesized that youth with disabilities (emotional, physical, social, and academic) were at a higher risk for suicidal behavior due to their disability; perhaps in part because of the enduring stigma disabilities carry, as well as a lack of social and romantic connections (Moses, 2017, p. 3). What our research seeks is to provide a way for youth to navigate social regulation in a more productive manner by teaching attributes such as resiliency and coping skills.

Despite researchers' ongoing attempts to identify the precise causes of suicide, definitive answers are elusive (Bilsen, 2018). However, what has been shown over time are factors that contribute to suicidal behavior, ideation, and the act itself (Hawton & Pirkis, 2017). Looking at these risk factors and vulnerability to suicide, themes emerge of groups whose susceptibility may be higher than others. The Suicide Prevention Resource Center (SPRC, 2017) lists the following as risk factors for youth suicide: mental disorders, particularly depression and other mood

disorders, misuse and abuse of alcohol or other drugs, access to lethal means, knowing someone who died by suicide (particularly a family member), chronic disease and disability, lack of access to behavioral health care, and social isolation. In addition, [Healthychildren.org](https://www.healthychildren.org) also adds previous suicide attempts, sexual orientation, local epidemics of suicide, bullying and cyber bullying, children who are bullied and children who bully others ([Healthychildren.org](https://www.healthychildren.org), 2018). The focus of this study was on adolescents who suffer from depression, other mood disorders, and chronic disability, including learning disabilities. It should be considered also that adolescents who suffer from various disabilities (meaning more than one disability), may be more susceptible to risk factors that are related to suicidal behavior (Moses, 2017).

The disabilities that are defined and covered under IDEA include educational disabilities that adversely affect a student's ability to access general education services. Approximately 13% of students in the US are identified with special education needs (U.S. Department of Education & NCES, 2019). These students are often included in high risk categories and have higher rates of suicidal ideation and attempts in relation to their peers in general education (Wachter & Bouck, 2008). Taking this into consideration, we look at disability status (including depression, anxiety, etc.) and explore possible connections to suicidal risk factors.

Children and adolescents with various disabilities are often put in higher risk categories. Children with developmental disabilities are 10 times more likely to be maltreated than their non-disabled peers (Cohen, Mannarino, & Deblinger, 2017). They are also 3.7 times more likely to be victims of violence (World Health Organization [WHO], n.d.). This same population of youth also shows vulnerability to suicidal behavior and completion. Examining suicide rates across different populations and ascertaining which of those populations has a higher risk factor than others also can be difficult. For example, certain disabilities can be overlooked due to the

way data are collected and interpreted. This is the case with specific learning disabilities (SLD). Adolescents who have been classified as having a SLD characteristically have IQ's in the normal range while displaying achievement scores in specific areas (such as math calculation or reading comprehension) in a much lower range. Researchers may not include records of students who have high or normal IQ's. This may result in students who have a specific learning disorder (SLD) as being precluded from data and under investigated (McBride & Siegel, 1997).

Huntington and Bender (1993) summarized several studies and report that youth with learning disabilities have higher levels of anxiety, depression, and suicide than their peers. Similarly, when a Youth Assessment was taken in 2012 from 15 school districts in Wisconsin the results showed consistency with these earlier reports. While 1.5% of the youth surveyed with no reported disabilities had attempted suicide; 7.6% of the youth surveyed with learning disorders had reported a suicide attempt within the past year (Moses, 2017).

In a case control suicide autopsy study by Portzky, Audenaert, and Heenringen (2009), educational problems were listed as contributing factors to adolescent suicide. A survey taken between 1994 and 1995 indicated that students with a learning disability were three times more likely to have reported a suicide attempt than peers not identified with a disability. In addition, those with emotional disabilities (ED) were six times more likely to report an attempt than their peers (Blum, Kelly, & Ireland, 2001).

In a study conducted by Chavira, Accurso, Garland, & Hough (2010) in San Diego, youth who were served in different areas of publicly funded sectors including areas such as the juvenile justice system, child welfare, and special education were involved in a study to assess rates of suicidality. Suicide attempts were significantly higher for those youth receiving school based special education services. They also talked about killing themselves more than the youth from

other sectors (Chavira et al., 2010). Suicide attempts have been correlated to an actual completed suicide (Miranda, Jaegere, Restifo, & Shaffer, 2013). “Concrete suicidal ideation and attempts during adolescence are particularly associated with significant distress, morbidity, and risk for completed suicide” (Chronis-Tuscano et al., 2010, p. 1). Additionally, Chronis-Tuscano et al. (2010) documented that adolescents who have suicidal ideation and suicidal attempts are particularly at risk for completing suicide.

Other types of disabilities and the distinction of co-morbidity are of equal concern when considering risk factors. In addition to students with one noted disability, Moses (2017) revealed that youth who self-identified as having two or more disabilities were three times more likely to report suicide attempts than adolescents who self-identified as having only one. Further research in the same study by Moses also noted that youth who disclosed having Autism Spectrum Disorder (ASD) had the second highest rate of suicide attempts within the preceding 12 months of the study. These same youth reported the highest rate of multiple suicide attempts. This was mirrored by recent research that found that young people with ASD are at twice the risk of suicide than those without ASD (Kirby et al., 2019).

One mental health disorder that has been strongly associated with suicide is depression. Adolescents who fit criteria for depressive disorders are substantially more at risk to display suicidal behavior (Hamrick, Goldman, Sap, & Kohler, 2004). Hamrick and colleagues (2004) stated that in a related study 50% of adolescents who had been referred for special education met criteria for the diagnosis of depression. Another factor that is correlated with an increased potential for developing depression is the diagnosis of attention-deficit/hyperactivity disorder (ADHD) in young children, specifically between the ages of 4–6. Additionally, in a longitudinal study conducted with children who met *DSM-IV* criteria for ADHD, there was an increased risk

for developing major depression or dysthymia and for attempting suicide prior to the age of 18 years (Chronis-Tuscano et al., 2010).

### **Antecedent/Precipitating Events**

Examining conditions and events that contribute to suicidal behavior there are specific events that could be directly related to risk. Precipitating events are specifically those stressful events which are thought to contribute directly to a suicide or a suicide attempt (Hill, Pettit, Green, Morgan, & Schatte, 2012). If these events occur within two weeks of a death, they qualify as a recent crisis; these include: family and intimate partner problems, school problems, the suicide of a friend or family member, drug or alcohol consumption, and family conflicts which lead to the restriction of technology (e.g., phones, gaming systems, laptops, tablets; Hill et al., 2012). Other strategies that have been shown to counter these precipitating events, are collectively called protective factors.

### **Protective Factors**

Increasing youth protective factors is one way to counter the increasing numbers of suicides. Protective factors are those characteristics that can be linked to diminishing negative outcomes and reducing risk factors, “characteristics associated with a lower likelihood of negative outcomes or that reduce a risk factor’s impact” (Substance Abuse and Mental Health Services [SAMSHA], n.d., p. 32). According to the Suicide Prevention Resource Center (SPRC, 2017) the following are known protective factors for suicide: effective behavioral health care; connectedness to individuals, family, community, and social institutions; life skills (including problem solving skills and coping skills, ability to adapt to change); self-esteem and a sense of purpose or meaning in life; and cultural, religious, or personal beliefs that discourage suicide.

Protective factors become a crucial and effective means against suicide ideation, attempts, and completion (Teismann et al., 2019; Wingate et al., 2006). Teismann et al. (2019) reported that protective factors are especially relevant because these protective factors tend to balance the negative impact of suicide risk factors and diminish individuals' suicide ideation from escalating to suicidal behaviors. When looking for efficient ways to address adolescent suicide, understanding protective factors and then learning how to confer these on those who may not adequately possess them, is a worthy pursuit. In the book *Resiliency: What We Have Learned*, Benard (2004, p. 10) describes resilience as “an innate self-righting tendency.” However, she emphasizes that healthy youth development must be supported by policies and practices specifically put in place to encourage resilience.

The CDC (Centers for Disease Control and Prevention) created a technical package to provide direction to communities, schools, and other stakeholders (Stone et al., 2017). This technical package consists of a set of core strategies that are designed to reduce a specific risk factor or targeted outcome (Stone et al., 2017). The recommendations in the package include the implementation of SEL strategies that help youth develop better coping skills and help students resolve problems in relationships including those with parents and peers.

Additionally, in a national longitudinal study, Khurana and Romer (2012) emphasized the following specific coping strategies as being protective in reducing suicidal ideation. These strategies include support seeking, problem solving, and emotional regulation. Their results indicated that universal interventions can enhance youth coping strategies, reduce suicide risk, and in general, promote positive mental health in daily living.

## Social and Emotional Learning Programs

There are many SEL programs that address the needs of adolescents and fortify their ability to overcome risk factors in their lives (Caldarella, Christensen, Kramer, & Kronmiller, 2009; Marvin et al., 2017). In order to select the most appropriate program to deliver to our specific population (those with disability), several dimensions of interest were isolated. These factors included: target populations, program goals, implementation requirements, program lengths, cost, and whether or not there was sufficient empirical evidence to support the program (see Table 1).

The program selected for the current study was *Strong Kids*, a SEL curriculum with *Strong Teens* addressing the needs of older youth in grades 9–12. *Strong Kids* was chosen because of a key feature which alleviates a major obstacle that settings, both private and public, encounter, namely ease of implementation. The majority of youth prevention programming has been designed for schools (Durlak, Weissberg, & Pachan, 2010; Durlak & Wells, 1997; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). However, time for training teachers or implementing *bulky* programs is limited (Boustani et al., 2014; Weisz et al., 2005, p. 639). *Strong Kids* mitigates the obstacle of time spent putting a SEL program in place. It is specifically designed to be a low technology, low cost method that relies on minimal professional training and expenditure of resources (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007). Merrell et al. (2007) described the development of the curriculum:

This curriculum was developed with both time feasibility and ease of implementation as high priorities. Even an exceptionally strong intervention program will never make much of an impact if its time requirements and difficulty of implementation result in few people

being able to use it within the time and training constraints of a school system or other youth-serving agency. (Merrell et al., 2007, p. 5)

The program *Strong Kids* reflects the belief that certain aspects of resilience can be explicitly and systematically taught (Benard, 2004; Carrizales-Engelmann et al., 2016). The goals of the *Strong Teens* program are listed in Table 1 and include resiliency.

*Strong Kids* is a SEL program developed by researchers at the University of Oregon. The *Strong Kid's* Curriculum series begins with pre-k and finishes with high school, the latter being referred to as *Strong Teens*. It is an empirically based series and is designed for easy implementation in a variety of learning environments (Carrizales-Engelmann et al., 2016). In addition, *Strong Kids* is a low-cost and a low-tech program. The *Strong Kids* program is used to increase student's knowledge about healthy and adaptive behavior. The program embraces the notion that “cognitive, behavioral, and affective skills that enable one to cope effectively with adversity may be systematically taught and learned” (Carrizales-Engelmann et al., 2016, p. 10).

### **Program Adaptation**

One of the benefits of using *Strong Teens* is the flexibility the program offers in terms of adapting to fit the needs of a specific population. *Strong Teens* provides a structured script format with sample examples and situations followed by guided and independent practice. Program administrators can follow this format or they can create their own examples and modify the lessons to fit their specific populations for a more personal approach (Merrell et al., 2007). By giving instructors this type of autonomy over lesson implementation you directly fit the needs of the population you are working with as well as enhance the teacher's ability to increase engagement. In a research article that detailed the journey of a teacher who worked with high-

Table 1

*Program Information*

	<i>Friends Resilience</i> (My Friend's Youth) <a href="https://www.friendsresilience.org/">https://www.friendsresilience.org/</a>	<i>Strong Teens</i>	<i>Support for Students Exposed to Trauma</i> (SSET) <a href="https://ssetprogram.org/">https://ssetprogram.org/</a>
Target population	Ages 12–15	Ages 14–18	Ages 10–14
Goals	Empowers teens in stressful situations by normalizing state of anxiety; Self-regulation; Problem solving	Increases resiliency; Teaches coping skills; Forming early wholesome attachments; Empowerment	Coping skills Problem solving skills
Implementation requirements	Teacher training for 4 programs (approx. 2.5 hours each)	Reviewing CASEL competencies at the beginning of lessons; Determining class rules; Making copies, video, etc.	Online training that cover 10 lessons and a test
Program length	10 weekly sessions of 1 hour	12 sessions of about an hour	10 lessons of 45 minutes
Price	\$55 per facilitator, (Australian dollar) AUD \$5 for individual participant eBook	\$42.95 for manual	Free
Evidence based	Yes	Yes	Yes

risk youth, Perry et al. (2015) noted that workplaces that nurture autonomy-supportive environments allow employees the freedom to make choices in carrying out their assigned work. This type of freedom benefits both students and teachers. Perry et al. (2015) also cite a critical benefit of teacher autonomy by adding that student benefits (e.g., increased motivation and achievement) are associated with their teachers' sense of efficacy about their teaching.

## CHAPTER THREE

### Method

#### Institutional Review Board (IRB) Approval

This study was approved as an exempt study, with approval to conduct the study granted by the participating site. The IRB approval letter is included in Appendix A. Identifying information of the site and the participants is confidential.

#### Setting

A residential treatment center (RTC) agreed to implement *Strong Teens*. This facility recently earned an award for excellence and is a member of the American Association of Children's Residential Centers. The facility is located in the western United States and currently serves 54 male adolescents. No females are admitted into the program. The facility specializes in addressing such issues as depression, anxiety, substance abuse, addiction, social problems, learning disabilities, and processing speed deficits.

The facility does not admit sexual offenders. Also, individuals are not admitted if they have been diagnosed with a psychotic disorder, extreme reactive attachment disorder, obsessive compulsive disorder, or have committed violent crime or have exhibited violent behavior. Also, individual with intellectual deficits ( $IQ < 70$ ) are not admitted into the treatment program.

#### Participants

Out of the 54 adolescent clients enrolled at the RTC, 11 were selected to participate. This sample size is considered sufficient for this type of study that utilizes both quantitative and qualitative data and seeks to offer individual insights regarding the initial implementation of the *Strong Teens* program in a residential treatment center (Malterud, Siersma, & Guassora, 2016).

The 54 male clients at the RTC were between the ages of 15–17 years. Those 11 males who participated in the *Strong Teens* intervention were also ages 15–17. On average, these

adolescents had between 3 to 5 mental health diagnoses and nearly all of them had an area of deficit in executive functioning and/or a processing speed deficit. There are a few who had autism and nonverbal learning disorders as well as one or more specific learning disorders. Youth who are diagnosed with depression, anxiety, and a few who have expressed suicidal ideation were included in this study. The inclusion of participants with mental health diagnoses and disabilities was especially relevant in this study.

The first group included seven male participants and the second group included four male participants. Demographic information about the youth participants are included in Tables 2 and 3. The first group of participants' demographics are included in Table 2. Seven adolescent males, whose ages ranged from 15- to 17-years old, participated in this group. At the beginning of the group, the length of their stay at the RTC ranged from two months up until six months. The phases are a levels system that represents therapeutic growth in the program. Higher numbers indicate more growth and progress in the RTC program. The participants all had a variety of mental health diagnoses and four of the seven participants were classified as needing special education assistance, as noted by the presence of an IEP (individual education program). All seven boys were considered White. Of these boys, one was of Middle Eastern decent.

The second group of participants' demographics are included in Table 3. This group included four adolescent males, ranging in age from 15 to 17-years-old. At the beginning of the group, the length of their stay at the RTC ranged from 1 to 8 months. The phases represent therapeutic growth in the program, higher numbers indicate more growth. Although all four participants were identified with a variety of mental health diagnoses, none were formally classified with special education needs, therefore no Individual Education Programs (IEPs) or 504 plans are listed for these four youth. In regard to ethnicity, all four boys were White.

Table 2

*Group 1: Demographic Information*

Participant ID	Age	Phase <sup>a</sup>	Length of stay in RTC, as of 6/1/2019	Diagnosis	Ethnicity	IEP/504 Yes, No
1	17	2	3 months	ADHD combined	White	Yes
2	17	3	5 months	ODD	White	Yes
3	17	2	2 months	MDD, GAD, ADHD, ODD	White	No
4	16	3	6 months	GAD, ADHD, ODD, MDD	Middle Eastern	Yes
5	15	2	4 months	GAD, ADHD, ODD, OCD	White	No
6	17	3	6 months	GAD, MDD, ADHD	White	No
7	17	2	2 months	PDD, GAD, ADHD	White	Yes

*Note.* GAD (General Anxiety Disorder); OCD (Obsessive – Compulsive Disorder); ADHD (Attention Deficit Hyperactivity Disorder); NVLD (Non-Verbal Learning Disorder); MDD (Major Depressive Disorder), ODD (Oppositional Defiant Disorder), PDD (Pervasive Developmental Disorder)

<sup>a</sup> Phases indicate progress in the RTC program (ranging from 1 to 3), with larger numbers indicating higher functioning.

Table 3

*Group 2: Demographic Information*

Participant ID	Age	Phase <sup>a</sup>	Length of stay in RTC, as of 8/1/2019	Diagnosis	Ethnicity	IEP/504 yes/no
1	16	2	2 months	Anxiety	White	Neither
2	17	3	8 months	GAD, OCD, ADHD, NVLD, Substance	White	Neither
3	15	1	1 months	MDD, Substance, ADHD, ODD	White	Neither
4	15	2	3 months	GAD, Dysthymia, Low processing	White	Neither

*Note.* GAD (General Anxiety Disorder); OCD (Obsessive – Compulsive Disorder); ADHD (Attention Deficit Hyperactivity Disorder); NVLD (Non-Verbal Learning Disorder); MDD (Major Depressive Disorder), ODD (Oppositional Defiant Disorder), PDD (Pervasive Developmental Disorder).

<sup>a</sup> Phases indicate progress in the RTC program (ranging from 1 to 3), with larger numbers indicating higher functioning.

The therapist was an adult male who had approximately three and a half years of experience in this field. His professional licensure is in the area of Marriage and Family Therapy.

The researcher was a graduate student with a degree in Elementary Education as well as an endorsement in Special Education. Previously the researcher also worked in varying levels of youth custody programs as an educator, as well as a frontline staff. She had approximately six years working with youth custody programs.

### **Field Notes**

The researcher took field notes for each of the six sessions observed. These notes included which participants were present, how many lessons were given per session and general adaptations made to the lessons. The duration of the sessions was noted as well as participant reception during the lessons.

The therapist also took notes on each lesson by using a basic outline to recall what main points were brought out in each lesson. The main points helped him recall the changes he made in the first group, as he delivered the second session with the four new participants.

### **Research Design**

This study was conducted using a mixed-methods design, utilizing both qualitative and quantitative data in order to answer the research questions (Cooper, Heron, & Heward, 2014). By using qualitative and quantitative measures, the strengths of both approaches can be drawn upon (Johnson & Onwuegbuzie, 2004). By simultaneously collecting quantitative and qualitative data, this study benefits from concurrent triangulation (Martella, 2013). The idea is to compare the similarities and differences between data and then determine if more data are needed to resolve disagreements between the data (Martella, 2013). An A-B design was used to show the effects of the Youth Outcome Questionnaire - Self Report (Y-OQ-SR). According to Cooper et al. (2014),

in an A-B design, the “A” refers to the condition of the participants before the intervention is applied, commonly called the baseline. The “B” refers to the condition after an intervention has been applied. In this manner, one compares the data before and after the intervention in order to provide justification that the intervention may be effective. Because there is no control group and there was no ability to reverse the baseline, this design is considered quasi-experimental.

In addition to the perspective that the Y-OQ-SR brings to the research, there were insights gained from qualitative data that are gathered. Brantlinger et al. (2005) define qualitative research as a “systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context” (p. 196). In this study, the context is a residential treatment center (RTC) for adolescent males who have an array of disabilities including mental health diagnoses. The phenomenon encompassed how a particular program designed to increase resiliency and coping skills was perceived by both the therapist and the youth participants. For this study we used a qualitative hermeneutic phenomenological approach. Hermeneutic means the interpretation of texts (in this case, exit surveys). We strived to report the experience of participants honestly and without presumed assumptions.

As further explained, this type of study elicits “researchers’ attempts to describe phenomena as they appear in everyday life *before* they have been theorized, interpreted, explained, and otherwise abstracted, while knowing that any attempt to do this is always tentative, contingent, and never complete” (Goble & Yin, 2014, para. 2). Phenomenological methodology is what Creswell, Hanson, Clark Plano, and Morales (2007) described as “not only a description but also an interpretive process in which the researcher makes an interpretation of the meaning of the lived experience (p. 254).” Creswell et al. (2007) stated that the researcher

collects data from individuals who have experienced the phenomenon, then surmises a description of their individual experiences.

After gathering qualitative data from interviews, researchers become integrally involved in the interpretive process, “[mediating] between different meanings,” and discussing and analyzing themes that arise from the data (Creswell et al., 2007, p. 80). Creswell et al. (2007, p. 79) defines hermeneutics as the “interpret[ation of] the *texts* of life.” Repeatedly reviewing these *texts of life* (the transcribed interviews) help to clarify our chosen phenomenon.

In this research, the phenomenon under study was the implementation of the *Strong Teens Program* (Merrell et al., 2007) with adolescent males in an RTC, who have been identified with disabilities. This research added to the limited literature regarding how established interventions with the general public are modified with more unique populations, such as those served in this RTC. This qualitative aspect was chosen for this study in order to gather data and identify common themes that arise from modifying and implementing the program with RTC youth.

### **Dependent and Variable Measures**

The Youth Outcome Questionnaire Self-Report (Y-OQ-SR) was administered to show behavior change by self-perception (Ridge, Warren, Burlingame, Wells, & Tumblin, 2009). The measure includes 64 questions with Likert-type scales for youth ages 12–18 (Y-OQ®-SR 2.0., n.d.). There are six Y-OQ-SR subscale scores to pinpoint specific areas that are in need of treatment and guide interventionists to target their treatment in specific directions:

1. Intrapersonal Distress (emotional distress)
2. Somatic Distress (distress presenting physically)
3. Interpersonal Relations (relationship with parents, other adults, and peers)

4. Critical Items (flags need for those requiring immediate intervention beyond standard outpatient treatment)
5. Social Problems (socially-related problematic behaviors)
6. Behavioral Dysfunction (unhealthy behaviors)

An analysis of the Y-OQ-SR showed very good internal consistency as well as test-retest reliability (Ridge et al., 2009). After scoring the test, the behaviors that are in specific subscales are described as either above or below a clinical cutoff score, indicating the severity of the behavior problem or symptom. Scores at or above the clinical cutoff score are more likely to be problematic in the individual's daily mental health functioning.

### ***Strong Teens Knowledge Test***

The *Strong Teens* knowledge test was provided to the participants at the beginning and end of the program implementation. The test measured how effectively the *Strong Teens* curriculum increases SEL. The test consists of items that are presented with multiple choice and true and false responses. This test takes about 10–20 minutes and is composed of 20 items.

### **Youth Exit Survey Questions**

At the end of the *Strong Teens* program (lesson 12, week 8), survey questions were asked to each participant during a one-on-one question and answer session. The following list of guiding questions were asked of each participant:

1. Tell me about what you learned from these sessions involving *Strong Teens*?
2. Tell me about what changes you would recommend to this program.
3. What were some of the pros/cons of Strong Teens?
4. Why would you or why would you not recommend this to others your age?

## **Procedure**

Some variability issues were addressed by the fact that the participants were for the most part, in a controlled situation where there was structured schedule and routines that were monitored by the facility. The participants attended one group per week, as per the RTC guidelines, however all had access to individual therapy as needed.

The *Strong Teens* sessions were held every week consecutively for eight weeks with each session lasting approximately 90 minutes. After the first 8-week session was concluded, another 8-week session with different participants was conducted. Because the *Strong Teens* program is a 12-session program, each lesson included a full lesson plus half of the consecutive lesson. Before and after each session, the therapist kept track of program adaptations by writing down changes made to each lesson. At the beginning and end of both the first and second groups of participants, pre- and post-tests from the *Strong Teens* knowledge test were administered. All 11 participants were also given a brief 5-minute exit interview by the researcher.

## **Research Questions, Variables, and Measures**

Table 4 was created to succinctly describe the research questions and measures that were employed in this study to address the research questions. Table 4 will assist the reader in better understanding how these specific measures are related to each research question.

Table 4

*Methods: Research Questions and Measures to Address the Research Questions*

Research questions	Measures
<b>Resilience: Research Question 1</b>	
Does the implementation of Strong Teens in a residential treatment center increase perceived resilience in teen boys who have been previously diagnosed with mental health conditions and/or educational disabilities (from therapist's perspective and from teen participants' perspectives)?	<ul style="list-style-type: none"> <li>● Y-OQ-SR Scores</li> <li>● Participants' responses to exit survey questions</li> </ul>
<b>Adaptations to Program: Research Question 2</b>	
(a) In what specific ways did the RTC therapist adapt <i>Strong Teens</i> to better fit the specific population?	<ul style="list-style-type: none"> <li>● Strong Teens implementation— (treatment fidelity)</li> <li>● Therapist's notes</li> <li>● Field notes</li> </ul>
(b) Which of these adaptations were related to participants' needs and increasing participants' buy in?	<ul style="list-style-type: none"> <li>● Therapist's notes</li> <li>● Field notes</li> <li>● Participants' exit survey questions</li> </ul>
<b>Youth Perceptions of Strong Teens Program: Research Question 3</b>	
What were the youth participants' perceptions of the <i>Strong Teens</i> Program, specifically what (if anything) they perceived as helpful or unhelpful?	<ul style="list-style-type: none"> <li>● Participants' exit survey questions</li> <li>● Therapist's notes</li> <li>● Field notes</li> </ul>

## CHAPTER FOUR

### Results

The *Strong Teens* program was administered at a residential treatment facility (RTC) in the western part of the United States. There were two consecutive six-week groups led by the same therapist who participated in this study. Two groups, a total of 11 participants, were included in this study.

#### **Resilience: Research Question 1**

*Does the implementation of Strong Teens in a residential treatment center increase perceived resilience in teen boys who have been previously diagnosed with mental health conditions and/or educational disabilities (from therapist's perspective and from teen participants' perspectives)?*

The therapist felt that many dimensions of resilience including coping skills, were well known to the participants before beginning the Strong Teens lessons. What he felt they lacked was the motivation to use these skills. The therapist would assign homework to the participants and encourage them to use a particular coping skill or stress management skill during the upcoming week while interacting with others at the RTC. The next week he would check back and ask for specific examples of how these skills were used. The researcher noted that participants incorporated strategies from *Strong Teens* into the challenges they experienced in the RTC. One participant discussed avoiding conflict with another RTC member by using mindfulness. Participants were able to “let things go” and not perseverate on irritating situations. Several participants described offering suggestions to peers who talked about challenging ongoing problems, specifically incidents that required coping with adverse RTC relationships.

Data that were used to answer the first research question included the Y-OQ-SR scores and comments from the summary of youth exit surveys. Group 1 and Group 2 Y-OQ-SR scores are included in Table 5. In this Table, we only included the scores that were made available to us. These scores are the Y-OQ-SR's overall total score. Based on information from the Y-OQ-SR website, higher scores indicate greater dysfunction. For example, patients in psychiatric hospitals typically score approximately 100 or higher. Those in outpatient treatment average an overall score of approximately 78. Individuals in the general population typically receive scores of less than 47.

Although the Y-OQ-SR scores are used at this RTC as an indicator of youth functioning, due to confounding factors, some of the participants did not take the Y-OQ-SR during each expected administration (ideally administered monthly). Additionally, as indicated by the scores in Table 6, these data are sporadic in nature, with some scores vacillating greatly. Additionally, missing data accounted for 50% of the total data that were expected to be gathered during the allotted time period. Two of the 11 participants had no Y-OQ-SR data entered. This missing data made evaluating youth progress on this dependent variable difficult, if not impossible. Of the nine participants who had partial data on this variable, four participants had fairly stable scores across time that remained in the low range to slightly elevated range; one had very low scores, then extremely elevated scores during the last two time periods; and four had elevated to highly elevated scores across time. Therefore, this data failed to provide evidence that the *Strong Teens* program positively impacted the emotional wellbeing and resilience of these youth.

Table 5

*Overall Y-OQ-SR Scores Across Time for Each Participant in Groups 1 and 2*

Group 1: Participant ID		Date of Y-OQ-SR administration and overall score						
1	3/2019 40	4/2019 53	5/2019 61	7/2019 67	--	--	8/2019 56	9/2019 63
2	12/2018 53	2/2019 39	4/2019 35	7/2019 48	--	--	8/2019 22	No longer in program
3	3/2019 51	--	--	--	--	--	--	--
4	3/2019 76	5/2019 87	7/2019 94	--	--	--	--	--
5	2/2019 97	5/2019 82	7/2019 87	--	--	--	--	--
6	12/2018 3	1/2019 2	2/2019 7	4/2019 8	5/2019 0	7/2019 97	8/2019 107	No longer in program
7	Exempted from testing	Exempted from testing	Exempted from testing	Exempted from testing	Exempted from testing	Exempted from testing	Exempted from testing	Exempted from testing
Group 2: Participant ID								
1	7/2019 15	8/2019 4	--	--	--	--	--	--
2	2/2019 82	3/2019 100	--	5/2019 104	6/2019 115	7/2019 101	8/2019 108	10/2019 103
3	8/2019 101	--	--	--	--	--	--	--
4	No data	--	--	--	--	--	--	--

*Note.* Y-OQ-SR scores indicate overall emotional functioning; empty cells indicate the Y-OQ-SR was not administered during that time. For the overall score, higher scores indicate greater dysfunction, patients in psychiatric hospitals score about 100. Those in outpatient treatment average about 78 and the normal population is less than 47.

Table 6

*Group 1: Summary of Youth Exit Surveys (n=7)*

Question: Tell me about what you learned from these sessions involving <i>Strong Teens</i> ?	Question: Tell me about what changes you would recommend to this program	Question: What were some of the pros/cons of <i>Strong Teens</i> ?	Question: Why would you or why would you not recommend this to others your age?
[Taught] mindfulness, feelings; Keeping safe; How to use mindfulness and in what situations	More hands on stuff; More worksheets	Good things were worksheets and how [therapist] taught	Would recommend [to others]; Helped me understand what to do if I'm upset
[Taught] emotional recognition	Program was boring	It helped me recognize thinking errors	Yes...everyone could use the awareness; It would not be good for those not in treatment; It built upon what I already knew
I remember in the beginning doing different calming activities, like putting candy in mouths; I remember specific times when I could use mindfulness	I can't think of anything	Pros: Good information; Cons: I wish it was like others; Maybe seeing a movie, so more movies	Yes, I would recommend it
A lot like DBT; [Teaches about] thinking errors and what can be a thinking error	Have more of a resiliency focused group; I feel like there wasn't a lot of resiliency being taught	Group was stressful; I don't like writing assignments; Group was same as DBT	Depends on others at RTC; Yes, I would recommend it, but only to those who hadn't taken DBT
Techniques to handle behavior and how you feel	[Program needs] more to do, less talking, more fun, like [going] outside and watching movies	Teaches good coping; Good social skills	To those at this RTC? No
A worksheet showed a picture of someone and the question asked was how I felt about it	More activity, like going outside for the group	Informative: Helped with a personal issue, resiliency; boring sometimes; just a lot of sitting and talking	I don't remember all of what we learned; If you like to be active; I'd recommend it to my dad, he'd feel more empathy towards teenagers
I've been in therapy for a while; I already knew a lot of the stuff	No changes	Cons: Boring, slow; Pros: [Learning about] how other people react, this part of the program was helpful	Not to anyone at this RTC and not to anyone at high school; [But] this could help others learn coping skills

Table 7

*Group 2: Summary of Youth Exit Surveys (n=4)*

Question: Tell me about what you learned from these sessions involving <i>Strong Teens</i> ?	Question: Tell me about what changes you would recommend to this program	Question: What were some of the pros/cons of <i>Strong Teens</i> ?	Question: Why would you or why would you not recommend this to others your age?
I learned about different ways to manage anxiety; Mindfulness, such as walking, being quiet, reducing stress and how to get rid of stress	No changes, I liked how it went	Pros: Insight; A place to talk; What we used worked when we used it; Con: Stuff I already knew; Material was familiar	Yes, I would recommend it because it could help others; In high school it would be beneficial but most kids wouldn't take it seriously; Being in treatment makes sharing "safe;" It's easy for me to share here because I have things in common w/others here; It would help if someone came from treatment and was part of a high school group, then others might share, and there would be someone who could relate why it was important
How to look at emotions, and how to change yours; Where emotions come from, and where you need to start in dealing with emotions; Emotions are something that are controllable; You are able to control the way you're able to live and feel, based off of using certain tools	More interactive, especially for teens! More activities that aren't worksheet based	The group itself was good; We helped each other out, and learned a lot. Cons: Sitting for too long.	I would recommend this to others my age because a lot of people my age don't know how to deal with their emotions; This [ <i>Strong Teens</i> ] helps know how to deal with them better
Stress and anxiety, how to deal with them; mindfulness	No, I liked the program	Pros: Interesting, sometimes boring, depended on lessons; Things that pertained to me (things that I was already struggling with) were more interesting	I would recommend this to my age peers, those with anxiety; Some high school students would like it, some would not

Table 7 (continued)

Question: Tell me about what you learned from these sessions involving <i>Strong Teens</i> ?	Question: Tell me about what changes you would recommend to this program	Question: What were some of the pros/cons of <i>Strong Teens</i> ?	Question: Why would you or why would you not recommend this to others your age?
I got a lot of stress and anxiety management skills, like how to beat the primitive part of your brain, replacing w/positive	Some lessons were boring, seemed like something that would be part of something bigger, like a class at school; I would make it more interactive, like worksheets and videos	Pros: Highlighted stress management skills; If you took notes you could find ways to overcome struggles; Cons: Could be boring; not super interactive	I would recommend this for teens who struggled with anxiety or stress, easy answers for these problems. Not for someone with addictions; Someone struggling with addictions should not start out with this...it wouldn't help them stop using; I would recommend this as a counseling curriculum; Needs to have an adult present or a high school counselor; Kids who are committed would get something out of it; Those who weren't engaged wouldn't get anything

Information from the youth exit surveys are included in Tables 6 and 7. This survey was conducted with each participant. Each of the boys reported learning useful skills from the *Strong Teens* program. They reported incidents of applying these skills in their daily lives to increase resilience. The more commonly reported coping strategies that were utilized included mindfulness activities that addressed anxiety, emotional-regulation strategies to help youth manage their emotions, stress management skills, management of thinking errors (thinking traps), support-seeking strategies (asking for help when needed), and problem solving skills.

An indication of participants' knowledge of the *Strong Teens* information, the scores on the *Strong Teens* pre- and post-tests (see Table 8) were administered on the beginning day of the group (lesson 1, week one) and after the group lessons concluded (lesson 8, week eight). Each pre- and post-test consisted of 20 items. On the pre-test, of the 11 participants in Group 1 and Group 2, three individuals missed three items and received scores of 17; one individual received a score of 18; two received a score or 19; and the remaining five participants received perfect scores (20).

Comparing the pre-to post-test results, of the 11 participants, three individuals received higher scores on the post-test, five received the same test score, and two received lower test scores. One individual failed to take the post-test. The individual who conducted the pre- and post-tests expressed concern about the individuals in Group 1 not putting forth their best effort when taking the post-test. Therefore, test scores of Group 1 participants must be interpreted with caution, as these scores may not be a valid representation of participants' knowledge.

For Group 2 participants, the *Strong Teens* pre- and post-tests in Table 8 show very little variance with all participants earning the highest possible score on the post-test. Indicating a

restriction of range, Group 2 participants started with high scores and ended with high scores. Therefore, there is little room for participants to demonstrate improved knowledge.

Table 8

*Participants' Scores on the Strong Teens Pre- and Post-Test*

Group 1		
Participant ID	Pre-Test Score	Post-Test Score
1	20/20	16/20
2	20/20	N/A
3	17/20	20/20
4	20/20	20/20
5	19/20	19/20
6	17/20	17/20
7	17/20	15/20
Group 2		
Participant ID	Test Score 1	Test Score 2
1	20/20	20/20
2	20/20	20/20
3	19/20	20/20
4	18/20	20/20

*Note.* Pre- and post-tests included the same 20 multiple choice questions. Scores range from 0–20, with 20 indicating all questions were answered correctly.

### **Adaptations to Program: Research Question 2**

*In what specific ways did the RTC therapist adapt Strong Teens to better fit the specific population?* The lessons in the first group were given in the order they appeared in the *Strong Teens* grades 9–12 treatment manual (Carrizales-Engelmann et al., 2016). However, the lessons in the second group were not delivered in the specified sequential order. For example, in the second group, lesson topics were selected to address the youths' specific needs as the needs arose.

**Treatment fidelity and adaptations to *Strong Teens*.** The researcher and the therapist used the implementation checklist, included in the *Strong Teens* manual (Carrizales-Engelmann et al., 2016, pp. 261–266). As previously stated, the researcher conducted observations during four of the eight group lessons for the first group and two out of eight sessions for the second group. Treatment fidelity, based on the Strong Teens implementation checklist, as rated by the therapist (self-check) and the researcher, averaged 71% (for Group 1) and 83% (for Group 2).

Treatment fidelity indicates how closely the lesson is delivered, in comparison to the program components that are outlined in the curriculum. *Strong Teens* was the chosen curriculum for two consecutively run groups, led by the same residential treatment therapist. The therapist expressed enthusiasm and motivation to conduct the initial group, as the program was outlined in the *Strong Teens* manual (Carrizales-Engelmann et al., 2016). He agreed to administer the SEL learning program as the program was intended to be conducted. The therapist was well prepared for each lesson and presented the material in a way that reflected his familiarity with the *Strong Teens* manual (based on researcher's field notes).

The treatment fidelity checklist was included in the *Strong Teens* manual (Carrizales-Engelmann et al., 2016, pp. 261–266). The therapist completed the checklist after each session, and the researcher completed a fidelity checklist after observing each of the six observed sessions; four observations during the first group and two observations during the second group. Based on this checklist, the fidelity for the initial group was 71% (averaging the therapist's and researcher's fidelity checklists). With the first group, the therapist adhered more closely to the treatment manual's outlined lessons. With the second group, although he adhered to the objectives, he took more liberty with lesson order, lesson components, and the location of where groups were conducted. However, in both groups, he enhanced or replaced activities with

similar-themed objectives that appeared to more closely align with the youths' interests and needs, "where the kids were at" on a particular day.

With the second group, the therapist's fidelity list was not perfectly aligned with the specific details in the checklist but aligned with the purpose of the *Strong Teens* program. After the program was completed with the first group, the researcher and therapist discussed running the second group. The therapist expressed the desire to administer the second session by adding specific adaptations. One adaptation included combining chapters together, allowing topics brought up by the participants to be explored with more detail, and the flexibility to omit sections that he considered redundant and that were previously covered in the RTC's individual and group therapy sessions. The researcher agreed that these modifications reflected the therapist's insights and that the modifications were geared to learning experiences that better fit the unique needs of youth served in RTCs. The researcher and the therapist concluded that these modifications would more effectively maximize individual growth. By adapting the content and activities, the lessons would *fit the group* and more fully engage the participants. Looking toward the purpose of such changes, and considering the boys' needs, we concluded that these modified lessons would be more meaningful and relatable.

Measuring treatment fidelity of the second group proved challenging, as the main components of each lesson were given in a non-linear fashion and were tailored to address the needs of individual situations that arose each week. Even so, the fidelity during the second group was 83%. The higher fidelity score during the second group as compared to the first (71%) may be a result of several factors. One factor, the researcher gained familiarity with the methods employed by the therapist in the first *Strong Teens* group. For example, the therapist discussed key terms with participants throughout the entire lesson, rather than beginning the session by

covering terms in a big chunk, as suggested by the manual (e.g., see *Strong Teens* manual, p. 81 under the section *Key Terms and Definitions* and the handout--Supplement 3.2 on p. 89; Carrizales-Engelmann et al., 2016). Across time, the therapist's teaching style became more apparent to the researcher. Additionally, with the researcher's increased exposure to the lessons, the therapist's subtle way of enhancing and adapting activities became evident. Overall, detecting diverse ways that a skilled therapist integrates key components of a lesson--while keeping in mind the audience's needs--were increasingly appreciated and more easily detected by the researcher.

Based on the researcher's observations, the therapist's skill in delivering lessons helped maintain the boys' engagement and helped encourage the flow of natural discussion to match the *Strong Teens* components. Evidence of the boy's engagement was further demonstrated by the depth of discussion, as well as the supportive responses in the participants' exit surveys. For example, one youth in the second group commented, "sometimes the lessons were boring [however], things that pertain to me, things I was already struggling with, were more interesting."

Based on the therapist's feedback and direct observation, during both groups, the participants were mostly attentive and engaged. Based on the researcher's observations, the number of teens in the group appeared to affect the amount of detail and length of discussion during sessions. For example, participants in the first group (the larger group) appeared less inclined to share, and at times only gave brief answers that involved minimal personal connection and less reflection on the discussion's topic. In a discussion between the researcher and the therapist, the therapist also noted that this lack of connection and reflection was not only part of being in a larger group, but was also related to where an individual was in the program

and the personal growth that had or had not taken place. Additionally, the researcher observed that the combination of personalities and the effect of youth leadership also influenced the group chemistry and group behavior.

Based on the researcher's observations, the second group (only four participants) was more inclined to openly discuss topics related to the lessons and discussions generated more thoughtful comments. Additionally, the researcher and therapist noted longer discussions in the second group, relating this difference to the group's smaller size. For example, in the second group, participants often related an experience that lasted several minutes. During this discussion, individuals received peer feedback. Additionally, the discussion reflected participants' engaged listening. On the other hand, during the first group, when an individual's self-reported experience elicited more than a few comments, some members of the group lost their focus. The quality and content of discussions were also related to their maturity and willingness to engage in the *Strong Teens* lesson. Based on the therapist's feedback and field notes, the interconnection of the youth and ability to form a cohesive group also contributed to how the youth ultimately benefited from the *Strong Teens* program.

**Adaptions reported in therapist's notes and researcher's field notes.** Additionally, adaptations to the *Strong Teens* were specified in the therapist's notes and detailed in the researcher's field notes (description of observations). These notes described modifications made during the *Strong Teens* group sessions. Some notes reflected therapeutic practices that were integrated into the lessons, but not explicitly mentioned in the *Strong Teens* manual. In most lessons, the therapist used these adapted practices in conjunction with the manual's provided activities. For example, the therapist noted in the *Strong Teens* Chapter 3 (*Understanding Your Emotions 2*; Carrizales-Engelmann et al., 2016, pp. 79–92), that he showed a short video clip and

shared a specific incident from the RTC to provide examples and context for how an individual's thoughts are connected to emotions. This adaptation involved integrating the Cognitive Behavioral Therapy (CBT) triangle, similar to the *Strong Teens* circular flow chart of thoughts, emotions, and behaviors (Carrizales-Engelmann et al., 2016, p. 88).

Another example was in the *Strong Teens* lesson 4, *Understanding Other People's Emotions* (Carrizales-Engelmann et al., 2016, pp. 93–107) where the therapist again reviewed CBT and used information and strategies from the Arbinger System (mindset change training; Arbinger Institute, 2016). The Arbinger System is included in the RTC's promoted therapeutic tools, but this program is not explicitly included in *Strong Teens*. The therapist dovetailed bits and pieces of the RTC's program into the *Strong Teens* program. These two programs were parallel and supportive of the major objectives.

Also taken from the therapist's notes, Lesson 7 (*Clear Thinking 2*; Carrizales-Engelmann et al., 2016, pp. 143–160) and Lesson 10 (*Positive Living*; Carrizales-Engelmann et al., 2016, pp. 195–218) were identified as specific chapters he chose not to follow closely. He felt these topics were redundant to the boys' background and were topics that were already highly entrenched in the RTC's daily living and routines. He indicated where, at specific points, he guided participants in sharing RTC experiences that connected to the *Strong Teens* content.

The therapist reported picking examples that uniquely fit the materials being taught and how this information related to the boys. He considered "where the youth were at," reflecting on where the boys are in their therapy, in their home life, in their relationships, in the therapeutic community, and in their personal level of development. The therapist relied on background reports and information to get an overarching view of each boy's progress. Interventions were selected in order to meet the boys' specific needs in the present moment.

The therapist was constantly observant of the teens' attitudes and how they were engaging in the therapeutic process. Evidence of how the therapist increased program reception include the following examples. On one occasion, the boys appeared restless. The group's energy was low. At this point, the therapist expressed that the group needed a change. The group and the therapist went outside to play basketball. Changes were made as needed to keep the boys engaged in the group. He also allowed latitude for expanding conversations as the need arose. For example, one day the boys were upset about a youth's recent departure from the RTC. When the boys brought up their concerns, time was allotted to process feelings.

At other times, the therapist invited the boys to do mindfulness activities. He mentioned, "with the first group deep breathing seemed to work best, while in the second group, mindfulness was usually beneficial at the beginning of the lessons." These short activities included being mindful when eating food. For example, the boys would be offered one starburst (type of candy). They would note the flavor and smell. Short activities such as this were implemented on an *as needed* basis.

### **Youth Perceptions of *Strong Teens* Program: Research Question 3**

*In regard to modifying the Strong Teens lessons, which of these adaptations were related to participants' needs and increasing participants' responsiveness?* In order to answer this research question, we examined the comments provided by youth participants in the exit surveys (see Tables 6 and 7). Additionally, we also note the researcher's perceptions of how the youth responded to the *Strong Teens* lessons. Based on the six observations of the *Strong Teens* groups, the researcher recorded impressions and observations in her written field notes. This information is summarized in the following paragraphs.

During the exit surveys, the youth comments indicated general approval of the *Strong Teens* lessons. A few youth noted that they already knew the content that was presented in the lessons. From field notes, during the group's discussion on the subject of empathy, one participant commented that although he knew what empathy meant, he did not understand the point of using it. He expressed that although he might know exactly what the other peer was going through, in the end, it did not seem to matter to him whether or not he showed empathy. Showing empathy seemed pointless. The therapist opened this comment up for group discussion. Participants offered their insights about empathy. This discussion was brief but acknowledged different perspectives.

Another boy brought up some problems he was having with other adolescents in the RTC dorm. Group members listened as the therapist referred to problem solving coping skills from *Strong Teens*. During another session the therapist commented that he felt a lot of "dead energy" and ended the session by taking the participants outside. The boys enjoyed this and were excited to *leave the formal group* early for a less structured outside activity. The therapist referred to these particular outside sessions as "highly effective." In all, during the first group's eight sessions, the therapist took the seven boys outside one time. During the second group, the therapist took the four boys outside two times.

Two additional examples include the following modifications to the *Strong Teens* lessons. While going over a thinking trap activity (p. 141) the therapist asked the participants to write each other's thinking traps down instead of just their own thinking traps (as outlined in the lesson). Then the youth took turns empathizing what to do for one another's situations. On another occasion, one boy noted that he needed a break. The therapist paused and said, "Why don't we all take a break." He then led the group in a mindfulness activity.

As mentioned in the *Strong Teens* (p. 18), “students...must not feel pressured into revealing anything that makes them feel uncomfortable.” Even more pronounced, the therapist explicitly permitted the boys to pass and not participate. Participation was never forced. When the group seemed disengaged; activities were offered, such as basketball, walking outside, and doing mindfulness breaks. Sparingly, the therapist used small pieces of candy such as starbursts (as a way to nurture and motivate the students). Additionally, \$2.00 gift cards were offered as rewards for certain behaviors during the group session, allowing the boys to purchase pop from the local convenience store. These desired behaviors included showing effort during the group, exhibiting respect for others, and offering insights that demonstrated engagement in the lesson.

Based on the boys’ exit interviews, one youth noted that the *Strong Teens* was similar to DBT. This observation aligns with the therapist's notes about integrating the RTC’s strategies into the *Strong Teens* lessons. Youth noted other negative aspects of the program. One commented that he would like to see movies, like other programs utilized in their lessons. One youth commented, “the group was stressful” and “I don’t like writing assignments.” Another youth commented, that the lessons were “boring sometimes, just a lot of sitting and talking.” Another also commented about too much time sitting. In fact, five of the 11 youth mentioned that the lessons were sometimes boring. Therefore, keeping these adolescents actively engaged in the *Strong Teens* lessons appeared to be challenging, yet this therapist was experienced and readily adapted and kept things on track. He also was sensitive to the boys’ needs for engaging activities that involved more than just sitting and listening to a lesson.

Indicating that youth responded positively to the therapist’s modifications and his sensitivity to their perspectives, youth noted several positive aspects of the program. One youth commented that he enjoyed the *Strong Teens* worksheets (which the therapist slightly modified

to fit the boys' needs). This youth also noted that he appreciated learning about how to recognize thinking traps. The thinking trap activity was modified to include other's thinking traps, not just the individual's thinking traps.

The therapist routinely included activities and discussions that involved peer-to-peer support which engaged the boys and created strong group interconnectedness. One youth commented, "...good information." One boy stated, "The group itself was good. We helped each other out, and learned a lot." Another noted that the coping skills and social skills he learned were "good." One youth mentioned that the lessons helped him with a personal issue and that he appreciated learning about resiliency. A few youth noted that they appreciated learning certain things from the group lessons, such as learning about how others might react, learning new insights, and having a place to talk.

The therapist tied the information to daily interactions outside of the group, generalizing behaviors across settings. He also found ways to motivate the boys to use the *Strong Teens* information inside and outside of the group. One boy commented that what they learned in the lessons actually "worked when we used it." Another youth noted that the *Strong Teens* lessons highlighted stress management skills and that "if you took notes you could find ways to overcome struggles."

In conclusion, the therapist emphasized the need to take cues from the boys and to be flexible to adapt as needed in order to maintain the boys' interest and engagement. Because many of the RTC youth have an extensive history of counseling and *know the language*, motivation to apply the knowledge appears to be the challenge. Apart from the content taught in the *Strong Teens*, both the researcher who participated in this study and the therapist noted the

importance of developing and maintaining the therapeutic relationship with each boy. This piece is critical in making connections with the youth and in gaining their trust.

## CHAPTER FIVE

### Discussion

This study, conducted in a male adolescent RTC, evaluated if *Strong Teens*, an evidence-based SEL program, increased the perceived resiliency of adolescents with mental health conditions and/or educational disabilities. This study examined resilience promotion and the development of coping skills as part of specific protective factors that guard against adolescent suicide (Bilsen, 2018; Klassen et al., 2012; Perry et al., 2015).

This study included 11 males, all identified with mental health conditions and four who received special education services through an IEP or 504 plan. According to the demographics of the RTC, youth served in this facility commonly struggle with deficits in executive functioning and impulsivity control issues. The vulnerability to increased risk for suicidality of this particular demographic (Chavira et al., 2010; Chronis-Tuscano et al., 2010; McBride & Siegel, 1997; Moses, 2017), gave researchers an additional opportunity to look at youth and therapist's receptiveness to a SEL program delivered in a RTC setting. This study also noted the participating therapist's adaptations to the *Strong Teens* program. These adaptations were made in order to address this population's special needs and the logistics of the RTC's schedule. Additionally, the therapist tailoring the *Strong Teens* to align with the existing services.

The therapist adapted the group sessions to accommodate the needs of youth who had limited attention spans, processing speed deficits, mental health disorders, and limited executive functioning skills. He adapted the sessions to meet the group's mood and their level of activity. He modified the focus to align with what was going on in the RTC. He built on challenges the boys were facing in their daily RTC experiences. He helped them problem solve and facilitated

learning opportunities for the youth. He helped them identify strategies to address their problems. Some of these strategies were from the *Strong Teens* and some from other sources.

Additionally, the therapist's adaptations were often related to logistical parameters such as limited time, the numbers of participants in the group, the therapist's familiarity with the program, and the youth participants' emotional needs. The facilitation of two consecutive groups allowed for the observation of participants' responses and lesson adaptations made by the therapist as he became more familiar with the material. Additionally, some changes were made to increase the youth's reception of the program.

At the end of each *Strong Teens* lesson, there were possible "homework" sections available to assign to the participants. This homework was adapted because an RTC setting would offer different opportunities to use skills reviewed in the lessons as compared to a typical home or school setting. The therapist encouraged the participants to consider what they had discussed and then generalize strategies including coping skills, mindfulness, and emotional regulation to the RTC environment. Many of the participants reported on how they used certain skills learned from *Strong Teens* when solving problems at the RTC.

As for perceived resilience, it was obtained by participant self-report and exit survey questions. For example, a participant might mention a conflict he was having with another RTC client and then relate how he used a skill taught in the group to negotiate the issue. One boy shared how instead of engaging in a potential volatile situation, he walked away and this helped him retain his RTC level (indication of progress in program). Others shared different mindfulness activities that helped them remain calm during high-intensity situations. These shared experiences showed an aspect of resilience that was undetected in the Y-OQ-SR scores. All participants mentioned diverse aspects of how to emotionally regulate themselves and deal

with stress. These skills were learned while participating in the *Strong Teens* lessons. The therapist noted that although most of the youth knew the *Strong Teens* strategies, the challenge was applying this knowledge into their daily lives. An example of this was directly seen when one participant remarked that he understood what empathy was but did not necessarily see the benefit in being empathetic to his peers. This connection between knowledge and application involves self-awareness of emotions and accessing motivation to change behavior. Group leaders need to consider motivational strategies.

By observing group sessions, the researcher noticed that participant receptiveness was heightened by the therapist's ability to assess the *mood* of the group and adapt the lesson for that particular session. The therapist's careful attention to the participants' behavior (as well as his familiarity with *Strong Teens*) on any particular day, led to him forecasting how he implemented specific topics from the lesson.

Previous to this study, the special educator who conducted observations of the RTC *Strong Teens* groups had observed *Strong Teens* conducted in a public school with adolescent students who had similar challenges, including externalizing behaviors (e.g., aggression toward peers, oppositional defiance toward teachers). Participants in the school group typically displayed indifference to the lessons. Their behaviors included inattentiveness, unauthorized discussion between themselves (cross talk), and impulsive irrelevant comments. Although youth participation differed between the RTC and public school setting, behavior of participants appeared to be strongly explained by participants' background knowledge of coping strategies, feelings of safety within the group, and motivation to learn.

During the *Strong Teens* lesson delivery in the RTC, increased receptiveness was demonstrated by the following behaviors: group discussion related directly to the topic,

willingness to share authentic experiences, and general attentiveness to the therapist. When comparing the consecutive groups at the RTC, there was a noticeable increase in participant engagement during the second group. This was most likely attributed to the group's size, the first group had seven participants, while the second group had four; the personal progress each participant made while at the RTC, those making progress tended to be more engaged in group sessions; and the therapist's increasing familiarity with the *Strong Teens* across time.

All of these factors were noted by the therapist as contributing to different levels of reception between the consecutive groups. The therapist shared that conducting the 75-minute group outside, while on a short walk, was more manageable with four participants than seven. The therapist also noted that in the second session, some participants were farther ahead therapeutically; thus increasing their participation. The familiarity with the lessons was observed by the researcher in the field notes.

Additionally, the therapist's general insight into the "mood" of the group was more readily apparent with the smaller group, possibly because monitoring the needs of four adolescents was more doable than monitoring the needs of seven adolescents. When conducting groups with adolescents who have significant social and emotional needs, careful consideration should be given to the size of the group and the capacity of the group leader to manage the group's behaviors.

The therapist also noticed a distinct preference for those sessions that were held outside. This might be a consideration for other therapists and teachers who lead the *Strong Teens* lessons. Where groups are held contributes to an atmosphere that may or may not be conducive to helping youth feel safe and comfortable.

The therapist carefully selected and integrated different chapters in *Strong Teens* into a well-delivered lesson. His approach was to hit upon major ideas in each lesson while accommodating for the unique needs of each individual. He took his cue from the needs and responses of the group.

As needed, he integrated other therapeutic strategies that were aligned with therapies such as Cognitive Behavioral Therapy (CBT) and Dialectical Behavior Therapy (DBT). These therapeutic strategies were aligned with the *Strong Teens* lessons. Future therapists and teachers who lead the *Strong Teens* lessons, may consider learning about these basic strategies and how these strategies might fit participants' needs. This might be as simple as explaining how emotions/feelings, attitudes/beliefs, and behaviors are related. Group leaders may also discuss self-talk and how to modify these internal conversations to reflect a more positive frame of mind.

Quantitative data collected from administering the *Strong Teens* Knowledge Test, align with previous research (Caldarella et al., in press; Marvin et al., 2017) that youth in residential settings are "well versed" in SEL language. In the current study, the participants' test scores (*Strong Teens* self test and Y-OQ-SR) did not indicate a substantial increase in knowledge or a substantial change in externalizing and internalizing behaviors. The inconsistent administration of Y-OQ-SR tests reveal challenges in the RTC's ability to gather data across time. Additionally, data should be contextualized, taking into account the situation of each youth. When interpreting data, one must take into consideration that youth who typically enter the RTC are highly distressed (Jackson, 2004; Zelechowski et al., 2013), therefore data describing emotional and behavioral indicators will be elevated. Furthermore, while in the RTC, behavior can actually worsen in the beginning of treatment due to the effects of being placed (sometimes contrary to a participant's will) in a treatment center. As explained by the participating therapist, tracking Y-

OQ-SR scores across time shows a bell-shaped pattern where the internalizing and externalizing behaviors increase initially, peak, and then begin to decline as participants make progress in treatment. This type of pattern can be seen with several of the participants' recorded Y-OQ-SR scores. Also, while in the RTC, youth therapeutic activities may trump data collection and tests may not be consistently administered.

### **Limitations**

Youth in this study were not randomly assigned to the group, nor was there a control group. The decision to purposefully assign specific adolescents to take part in the *Strong Teens* program was a possible limitation in this study. In an RTC setting it is difficult to create a truly experimental design while also keeping the integrity of the therapeutic environment and serving individual needs appropriately. Future investigations might look at comparing two simultaneously run groups with participants who receive a different therapeutic technique other than the *Strong Teens Program*. It would also be beneficial to compare adolescents with diagnosed disabilities and adolescents without diagnosed disabilities. Comparisons would investigate differences between these two groups of youth, particularly noting changes in resilience and adaptive coping.

Another limitation was the inability to collect monthly Y-OQ-SR scores. Residential treatment centers collect data with assessment instruments (self-report), such as the Y-OQ-SR. The therapists typically administer this assessment with their adolescent clients. Depending on the client-therapist ratio, several different therapists work with individuals and groups at any given time. This may lead to varying schedules of when standardized tests are administered, thus providing inconsistencies gleaned from these sources. Given the small number of participants involved in this study, it was difficult to measure the effects that might be identified with a

standard assessment, such as the Y-OQ-SR. However, further longitudinal study of this at-risk population would be beneficial as their level of resilience offers insight into reducing suicidal risk.

Treatment fidelity was difficult to measure during observations of the consecutively run sessions of the *Strong Teens* Programs. The therapist ran the second group at his discretion and further adapted each lesson to fit the adolescents' needs during each weekly group. Although the lessons presented during the second round of the *Strong Teens* Program did not strictly follow the suggested course of study, engagement and participation increased because of the therapist's insightful modifications. As such, allowing therapists some leeway to modify program content, may actually strengthen the effectiveness of the intervention. Over time, participants benefit from a caring adult's sensitivity to specific adolescents' needs (Kelley, Bickman, & Norwood, 2010; Klassen et al., 2012; Lambert & Barley, 2001; Perry et al., 2015).

One limitation in this study was the low number of participants. Over two consecutive therapeutic groups, a total of 11 adolescent males participated. Including a larger sample would allow for opportunities to investigate research questions with greater statistical power. Also, this study only included males in one RTC. Future studies may consider investigating both male and female participants in several RTCs across the United States.

In future studies it would be beneficial to follow participants past their experience in the RTC when their own meta-cognition is less subjective to their current placement. During a typical stay in an RTC it can be expected that adolescents are encountering a very difficult and trying part of life. After treatment (maybe even years after) when life has become more manageable, it would be easier to assess what impactful and meaningful lessons were learned by an individual from an SEL.

## Implications for Practice

Over the past decade, there has been a significant escalation in youth suicides (Hedegaard, Curtin, & Warner, 2020), increasing the urgency to find effective ways to curb this distressing trend (Breux & Boccio, 2019). Those who work with youth may lose hope in their influence to prevent youth suicide (Yager & Feinstein, 2017). Some may believe that a certain number of youth suicides are inevitable. However, identifying groups who are most susceptible to suicide and increasing their ability to access protective factors could be one way to combat this health crisis. Developing resilience is a trait that can be especially strengthened during adolescence (Masten, Obradovic, & Burt, 2006; Masten & Tellegen, 2012). Those youth who suffer from a wide range of disabilities are at a particular risk for suicide (Moses, 2017; Chavira et al., 2010). These individuals must be taught coping skills and stress management techniques that increase resilience and buffer suicidal behaviors (Wingate et al., 2006).

Based upon this study's findings, we offer the following recommendations. These recommendations are relevant to mental health professionals, educators, and parents. In particular, deficits of youth served in RTC settings are often aligned with poor impulse control, which is one of the most detrimental characteristics in youth functioning, often leading to self-destructive behaviors and caustic relationships (Mahler, Simmons, Frick, Steinberg, & Cauffman, 2017).

- Adapt *Strong Teens* program to increase student participation and receptiveness. In making modifications to the existing lesson plans, group leaders should take their cue from the needs and responses of the group.
- Careful consideration should be given to the size of the group, taking into account the capacity of the group leader to manage the group's behaviors and attend to individual

needs. This is a crucial consideration when working with youth who have challenging social emotional and behavioral needs.

- Consider where groups are held. The location contributes to an atmosphere that may or may not be conducive to helping youth feel safe and comfortable. Groups held outside may be preferable to groups held inside classrooms.
- Mental health professionals and teachers who lead the *Strong Teens* lessons may consider learning about basic CBT and DBT strategies and how these strategies might fit participants' needs. This might be as simple as explaining how emotions/feelings, attitudes/beliefs, and behaviors are related. Group leaders may also discuss self-talk and how to modify these internal conversations to reflect a more positive and supportive frame of mind.
- When evaluating the effectiveness of the *Strong Teens* program, carefully gather, consider, and contextualize a variety of data (quantitative and qualitative) from a variety of sources (youth participants, group leaders, and others who interact with the youth).
- In addition to focusing on teaching information and skills, group leaders must consider motivational strategies. Youth may *talk the talk*, but not *walk the walk*.
- Initial conversations may focus on *why* one would use such strategies and how individuals may personally benefit from using such strategies. Later conversations may expand to include how others may benefit when one uses the identified coping strategies.

## Conclusion

Following the favorable reception of *Strong Teens* in the RTC, we recommend that delivery of *Strong Teens* be adapted to each unique population in order to increase youth engagement and receptiveness. This study focused on adolescents in a RTC, however the *Strong Teens* program can be generalized and applied across diverse settings, ages, and ability levels (Carrizales-Engelmann et al., 2016). Mainstream settings such as public schools offer an ideal place to increase social and emotional vocabulary. A few of the youth surveyed expressed resistance to taking part in a SEL program if it were offered in a high school setting. Offering this type of program earlier may normalize participation and increase participants' receptiveness. By beginning early in a child's educational career, exposure to adaptive coping strategies, SEL emotional learning, and emotional language could benefit children across time, as part of the general educational curriculum (Calear et al., 2017; Wasserman et al., 2015).

Although the youth in this study clearly exhibited proficiency in social and emotional language, youth responses in the exit survey describe a gap between knowledge and practical application. Youth may know the information but not apply the skills. Ultimately, knowledge in and of itself is not sufficient to change behavior. We must carefully consider how to motivate youth to use their knowledge and coping strategies when presented with life's challenges.

## REFERENCES

- Arango, A., Cole-Lewis, Y., Lindsay, R., Yeguez, C. E., Clark, M., & King, C. (2019). The protective role of connectedness on depression and suicidal ideation among bully victimized youth. *Journal of Clinical Child & Adolescent Psychology, 48*(5), 728–739. doi: 10.1080/15374416.2018.1443456
- Arbinger Institute. (2016). *The outward mindset: Seeing beyond ourselves*. Oakland, CA: Berrett-Koehler Publishers.
- Behrens, E., Santa, J., & Gass, M. (2010). The evidence base for private therapeutic schools, residential programs, and wilderness therapy program. *Journal of Therapeutic Schools & Programs, 4*(1), 106–117. Retrieved from <https://pdfs.semanticscholar.org/5a8d/fa8f5207dc2500b0c0982a77a1db236a9582.pdf>
- Benard, B. (2004). *Resiliency: What we have learned*. San Francisco, CA: WestEd.
- Bilsen, J. (2018). Suicide and youth: Risk factors. *Frontiers in Psychiatry, 9*(Article 540), 1–5. doi: 10.3389/fpsyt.2018.00540
- Blum, R. W., Kelly, A., & Ireland, M. (2001). Health-risk behaviors and protective factors among adolescents with mobility impairments and learning and emotional disabilities. *Journal of Adolescent Health, 28*(6), 481–490. doi: 10.1016/s1054-139x(01)00201-4
- Boustani, M. M., Frazier, S. L., Becker, K. D., Bechor, M., Dinizulu, S. M., Hedemann, E. R., ...Pasalich, D. S. (2014). Common elements of adolescent prevention programs: Minimizing burden while maximizing reach. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(2), 209–219. doi: 10.1007/s10488-014-0541-9

- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*(2), 195–207. doi: 10.1177/001440290507100205
- Breux, P., & Boccio, D. E. (2019). Improving schools' readiness for involvement in suicide prevention: An evaluation of the creating suicide safety in schools (CSSS) workshop. *International Journal of Environmental Research and Public Health, 16*(12), 1–15. doi: 10.3390/ijerph16122165
- 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
- Caldarella, P., Millet, A. J., Heath, M. A., Warren, J. S., & Williams, L. (in press). School counselors use of social emotional learning in high school: A study of the Strong Teens Curriculum. *Journal of School Counseling*.
- Calcar, A. L., Christensen, H., Freeman, A., Fenton, K., Grant, J. B., van Spijker, B., & Donker, T. (2017). A systematic review of psychosocial suicide prevention interventions for youth. *European Child and Adolescent Psychiatry, 25*(5), 467–482. doi: 10.1007/s00787-015-0783-4
- Carrizales-Engelmann, D., Merrell, K. W., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2016). *Merrell's Strong Teens, grades 9–12: A social and emotional learning curriculum*. Baltimore, MD: Brookes Publishing.
- Chavira, D. A., Accurso, E. C., Garland, A. F., & Hough, R. (2010). Suicidal behaviour among youth in five public sectors of care. *Child and Adolescent Mental Health, 15*(1), 44–51. doi: 10.1111/j.1475-3588.2009.00532.x

- Chronis-Tuscano, A., Molina, B. S. G., Pelham, W. E., Applegate, B., Dahlke, A., Overmyer, M., & Lahey, B. B. (2010). Very early predictors of adolescent depression and suicide attempts in children with attention-deficit/hyperactivity disorder. *Archives of General Psychiatry*, *67*(10), 1044–1051. doi: 10.1001/archgenpsychiatry.2010.127
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). *Treating trauma and traumatic grief in children and adolescents*. New York, NY: Guilford Press.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2014). *Applied behavior analysis*. Upper Saddle River, NJ: Pearson.
- Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, *35*(2), 236–264. doi: 10.1177/0011000006287390
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*(1), 405–432. doi: 10.1111/j.1467-8624.2010.01564.x
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, *45*(3–4), 294–309. doi: 10.1007/s10464-010-9300-6
- Durlak, J. A., & Wells, A. M. (1997). Primary prevention mental health programs for children and adolescents: A meta-analytic review. *American Journal of Community Psychology*, *25*(2), 115–152. doi: 10.1023/A:1024654026646

- Goble, E., & Yin, Y. (2014, October 16). *Introduction to hermeneutic phenomenology: A research methodology best learned by doing it*. Retrieved from <https://iiqm.wordpress.com/2014/10/16/introduction-to-hermeneutic-phenomenology-a-research-methodology-best-learned-by-doing-it/>
- Hamrick, J. A., Goldman, R. L., Sapp, G. L., & Kohler, M. P. (2004). Educator effectiveness in identifying symptoms of adolescents at risk for suicide. *Journal of Instructional Psychology, 31*(3), 246–252. Retrieved from <https://search.proquest.com/docview/1416364658>
- Hawton, K., & Pirkis, J. (2017). Suicide is a complex problem that requires a range of prevention initiatives and methods of evaluation. *The British Journal of Psychiatry, 210*(6), 381–383. doi: 10.1192/bjp.bp.116.197459
- Hayes, L. M. (2005). Juvenile suicide in confinement in the United States: Results from a national survey. *Crisis, 26*(3), 146–148. doi: 10.1027/0227-5910.26.3.146
- Healthychildren.org (website supported by the American Academy of Pediatrics). (2018). *Which kids are at the highest risk for suicide?* Retrieved from <https://www.healthychildren.org/English/health-issues/conditions/emotional-problems/Pages/Which-Kids-are-at-Highest-Risk-for-Suicide.aspx>
- Hedegaard, H., Curtin, S. C., & Warner, M. (2020, April). *Increase in suicide mortality in the United States, 1999–2018* [NCHS Data Brief, No. 362]. Hyattsville, MD: National Center for Health Statistics. Retrieved from <https://www.cdc.gov/nchs/data/databriefs/db362-h.pdf>

- Hill, R., Pettit, J., Green, K., Morgan, S., & Schatte, D. (2012, February). Precipitating events in adolescent suicidal crises: Exploring stress-reactive and nonreactive risk profiles. *Suicide and Life-Threatening Behavior*, *42*(1), 11-21. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/22320193>
- Huntington, D. D., & Bender, W. N. (1993). Adolescents with learning disabilities at risk? Emotional well-being, depression, suicide. *Journal of Learning Disabilities*, *26*(3), 159–166. doi: 10.1177/002221949302600303
- Jackson, V. (2004). Residential treatment for parents and their children: The village experience. *Science & Practice Perspectives*, *2*(2), 44–53. doi: 10.1151/spp042244
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14–26. doi: 10.3102/0013189x033007014
- Kelley, S. D., Bickman, L., & Norwood, E. (2010). Evidence-based treatments and common factors in youth psychotherapy. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works in therapy* (pp. 325–355). Washington, DC: American Psychological Association. doi: 10.1037/12075-011
- Khurana, A., & Romer, D. (2012). Modeling the distinct pathways of influence of coping strategies on youth suicidal ideation: A national longitudinal study. *Prevention Science*, *13*(6), 644–654. doi: 10.1007/s11121-012-0292-3
- Kirby, A. V., Bakian, A. V., Zhang, Y., Bilder, D. A., Keeshin, B. R., & Coon, H. (2019). A 20-year study of suicide death in a statewide autism population. *Autism Research*, *12*(4), 658–666. doi: 10.1002/aur.2076

- Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs. *Journal of Educational Psychology, 104*(1), 150–165. doi: 10.1037/a0026253
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training, 38*(4), 357–361. doi: 10.1037/0033-3204.38.4.357
- Mahler, A., Simmons, C., Frick, P. J., Steinberg, L., & Cauffman, E. (2017). Aspirations, expectations and delinquency: The moderating effect of impulse control. *Journal of Youth & Adolescence, 46*(7), 1503–1514. doi: 10.1007/s10964-017-0661-0
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies. *Qualitative Health Research, 26*(13), 1753–1760. doi: 10.1177/1049732315617444
- Martella, R. C. (2013). *Understanding and interpreting educational research*. New York, NY: Guilford Press.
- Marvin, L. A., Caldarella, P., Young, E. L., & Young, K. R. (2017). Implementing *Strong Teens* for adolescent girls in residential treatment: A quasi-experimental evaluation. *Residential Treatment for Children & Youth, 34*(3–4), 183–202. doi: 10.1080/0886571X.2017.1394247
- Masten, A. S., Obradović, J., & Burt, K. B. (2006). Resilience in emerging adulthood: Developmental perspectives on continuity and transformation. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 173–190). Washington, DC: American Psychological Association. doi: 10.1037/11381-007

- Masten, A. S., & Tellegen, A. (2012). Resilience in developmental psychopathology: Contributions of the project competence longitudinal study. *Development and Psychopathology, 24*(2), 345–361. doi: 10.1017/s095457941200003x
- McBride, H. E., & Siegel, L. S. (1997). Learning disabilities and adolescent suicide. *Journal of Learning Disabilities, 30*(6), 652–659. doi: 10.1177/002221949703000609
- Merrell, K. W. (2007). *Strong Teens: A social and emotional learning curriculum*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Merrell, K. W., Carrizales, D. C., Feuerborn, L. C., Gueldner, B. A., & Tran, O. K. (2007). *Strong Kids—Grades 6-8: A social and emotional learning curriculum*. Baltimore, MD: Paul H. Brookes Publishing.
- Miller, D. N., & Mazza, J. J. (2018). School-based suicide prevention, intervention, and postvention. In A. Leschied, D. Saklofske, & G. Flett (Eds.), *Handbook of school-based mental health promotion* (pp. 261–277). Cham, Switzerland: Springer. doi: 10.1007/978-3-319-89842-1\_15
- Miranda, R., Jaegere, E. D., Restifo, K., & Shaffer, D. (2013). Longitudinal follow-up study of adolescents who report a suicide attempt: Aspects of suicidal behavior that increase risk of a future attempt. *Depression and Anxiety, 31*(1), 19–26. doi: 10.1002/da.22194
- Moses, T. (2017). Suicide attempts among adolescents with self-reported disabilities. *Child Psychiatry & Human Development, 49*(3), 420–433. doi: 10.1007/s10578-017-0761-9.
- National Institute of Mental Health. (2019, April). *Suicide*. Retrieved from [https://www.nimh.nih.gov/health/statistics/suicide.shtml#part\\_154968](https://www.nimh.nih.gov/health/statistics/suicide.shtml#part_154968)

- Perry, N. E., Brenner, C., Collie, R. J., & Hofer, G. (2015). Thriving on challenge: Examining one teacher's view on sources of support for motivation and well-being. *Exceptionality Education International*, 25(1), 6–34. Retrieved from <http://ir.lib.uwo.ca/eei/vol25/iss1/2>
- Portzky, G., Audenaert, K., & van Heeringen, K. (2009). Psychosocial and psychiatric factors associated with adolescent suicide: A case–control psychological autopsy study. *Journal of Adolescence*, 32(4), 849–862. doi: 10.1016/j.adolescence.2008.10.007
- Ridge, N., Warren, J., Burlingame, G., Wells, M., & Tumblin, K. (2009, October). Reliability and validity of the youth outcome questionnaire self-report. *Clinical Psychology*, 65(10), 1115-1126. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/19693961>
- Shneidman, E. S. (Ed.). (1969). *On the nature of suicide* (1st ed.). San Francisco, CA: Jossey–Bass.
- Stone, D. M., Holland, K. M., Bartholow, B., Crosby, A. E., Davis, S., & Wilkins, N. (2017). *Preventing suicide: A technical package of policies, programs, and practices*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf>
- Substance Abuse and Mental Health Services. (n.d.). *Module 1: Understanding the multiple needs of families involved with the child welfare system*. Retrieved from <https://ncsacw.samhsa.gov/files/toolkitpackage/mod1/module-1-families-guide-508.pdf>
- Suicide Prevention Resource Center. (2017, February 10). *Risk factors among adolescents*. Retrieved from <https://www.sprc.org/news/risk-factors-among-adolescents>

- Teismann, T., Paashaus, L., Siegmann, P., Nyhuis, P., Wolter, M., & Willutzki, U. (2019). Suicide attempters, suicide ideators, and non-ideators: Differences in protective factors. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *40*(4), 294–297. doi: 10.1027/0227-5910/a000554
- Thompson, R. W., Duppong Hurley, K., Trout, A. L., Huefner, J. C., & Daly, D. L. (2017). Closing the research to practice gap in therapeutic residential care: Service provider–university partnerships focused on evidence-based practice. *Journal of Emotional and Behavioral Disorders*, *25*(1), 46–56. doi: 10.1177/1063426616686757
- Torok, M., Calear, A. L., Smart, A., Nicolopoulos, A., & Wong, Q. (2019). Preventing adolescent suicide: A systematic review of the effectiveness and change mechanisms of suicide prevention gatekeeping training programs for teachers and parents. *Journal of Adolescence*, *73*, 100–112. doi: 10.1016/j.adolescence.2019.04.005
- U.S. Department of Education & National Center for Education Statistics. (2019). *Digest of Education Statistics*, 2018 (NCES 2020-009), Chapter 2. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=64>
- Wachter, C. A., & Bouck, E. (2008). Suicide and students with high incidence disabilities: What special educators need to know. *Teaching Exceptional Children*, *41*(1), 66–72. Retrieved from [https://libres.uncg.edu/ir/uncg/f/C\\_Morris\\_Suicide\\_2008.pdf](https://libres.uncg.edu/ir/uncg/f/C_Morris_Suicide_2008.pdf)
- Wasserman, D., Hoven, C. W., Wasserman, C., Wall, M., Eisenberg, R., Hadlaczky, G., ... & Bobes, J. (2015). School-based suicide prevention programs: The SEYLE cluster-randomized, controlled trial. *The Lancet*, *385*(9977), 1536–1544. doi: 10.1016/S0140-6736(14)61213-7

- Weisz, J. R., Sandler, I. N., Durlak, J. A., & Anton, B. S. (2005). Promoting and protecting youth mental health through evidence-based prevention and treatment. *American Psychologist, 60*(6), 628–648. doi: 10.1037/0003-066X.60.6.628
- Wingate, L. R., Burns, A. B., Gordon, K. H., Perez, M., Walker, R. L., Williams, F. M., & Joiner, T. E., Jr. (2006). Suicide and positive cognitions: Positive psychology applied to the understanding and treatment of suicidal behavior. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy* (pp. 261–283). Washington, DC: American Psychological Association. doi: 10.1037/11377-012
- World Health Organization. (n.d.). *Violence against adults and children with disabilities*. Retrieved from <https://www.who.int/disabilities/violence/en/>
- Yager, J., & Feinstein, R. E. (2017). A common factors approach to psychotherapy with chronically suicidal patients: Wrestling with the angel of death. *Psychiatry, 80*(3), 207–220. doi: 10.1080/00332747.2017.1304079
- Youth Outcome Questionnaire Self-Report* [Y–OQ® SR 2.0]. (n.d.). Retrieved from <http://www.oqmeasures.com/y-oq-sr-2-0/>
- Zelechowski, A.D., Sharma, R., Beserra, K., Miguel, J. L., DeMarco, M., & Spinazzola, J. (2013). Traumatized youth in residential treatment settings: Prevalence, clinical presentation, treatment, and policy implications. *Journal of Family Violence, 28*(7), 639–652. <https://doi.org/10.1007/s10896-013-9534-9>

## APPENDIX

**Institutional Review Board (IRB) Approval**

**From:** [Santee Ains](#)  
**To:** [Melissa Heath](#)  
**Cc:** [Melissa Bannion](#); [Wynne Larsen](#); [Human Subjects Committee](#)  
**Subject:** A19-271 Heath, IRB Determination: NON-HUMAN RESEARCH  
**Date:** Wednesday, October 2, 2019 3:02:01 PM

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INSTITUTIONAL REVIEW BOARD  
 FOR HUMAN SUBJECTS

**Memorandum**

**To:** Melissa Heath, Ph.D.  
 Melissa Bannion, Student  
**Department:** CPSE  
**College:** EDUC  
**From:** Santee Ains, HRPP Manager  
**Date:** October 2, 2019  
**IRB#:** A19-271  
**Subject:** Modifications Made When Implementing strong Teens in a Residential  
 Treatment Center: Youth

Thank you for your recent correspondence concerning your protocol referenced in the subject heading. Brigham Young University's Institutional policy requires review of all research. I appreciate your willingness to comply with this policy.

According to the Code of Federal Regulations 45.46.102 (f), Human Subjects research is when an investigator conducting research will obtain:

- Data through intervention or interaction with the individual, or
- Identifiable private information  
<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm#46.102>

The protocol description does not include any interaction with research subjects and you will not have access to private *identifiable* information. You have no part in the recruiting of participants or the collection of exiting data. According to the regulatory definition of human subject research, this scholarly activity is not under the jurisdiction of the IRB.

You will not receive renewal memos from the IRB regarding this research.

Cordially,

*Santee M.P. Ains*, MPA

Human Research Protections Program, Manager  
 Office of Research & Creative Activities

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**BYU**