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The effectiveness of Strong Start curriculum on the social emotional competence of second grade students

Crystal Nicole Fewkes
Rowan University, cnfewkes@gmail.com

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THE EFFECTIVENESS OF STRONG START CURRICULUM ON THE SOCIAL-EMOTIONAL COMPETENCE OF SECOND GRADE STUDENTS

by

Crystal N. Fewkes

A Thesis

Submitted to the
Department of Educational Services & Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Master of the Arts in School Psychology
at
Rowan University
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Thesis Chair: Carmelo Callueng, Ph.D.
Dedication

I would like to dedicate this study to my boyfriend, Bruce, and my family, Mom, Dad, Matthew, Frank, and David, for their constant support in my academic and occupational endeavors. I would not be where I am today without their love and encouragement.

“Do small things with great love.” – Mother Teresa
Abstract

Crystal N. Fewkes
THE EFFECTIVENESS OF STRONG START CURRICULUM ON THE SOCIAL-EMOTIONAL COMPETENCE OF SECOND GRADE STUDENTS 2016-2017
Carmelo Callueng, Ph.D.
Master of Arts in School Psychology

Social-emotional wellbeing is known to contribute to children’s learning and general health. As a national priority in the United States, schools are called upon to foster social-emotional health in children as part of healthy child development (Durlack, Weissberg, Dymnick, Taylor, & Schellinger. 2011). The study reports the implementation and findings of an empirically supported classroom-based social-emotional learning (SEL) curriculum in second grade students in a suburban South New Jersey school district. Using a two-group non-equivalent design, it is hypothesized that students who are taught of the SEL lessons will show significant improvement in their social-emotional competence in both school and home environments.

Results of the study show that the Strong Start curriculum significantly increased the social-emotional skills of the second grade students in the school environment. These results support that Strong Start is an effective SEL curriculum in the classroom. It also showed marginally significant results of increased social-emotional skills in the home environment. Though these results do not support the hypothesis, they show that Strong Start has the potential to be an effective SEL curriculum to teach skills in the home environment. Lastly, the Strong Start lessons were implemented with high fidelity as evaluated by a school psychologist.
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Chapter 1

The Problem

According to John Santrock (2015), many researchers consider the development of social-emotional skills to be fundamental to an individual’s success in the world. Firstly, with the changes in the structure of families and society, there is rising concern that children are not being taught the emotional skills that enable them to cope properly with the challenges in everyday life. In fact, approximately 12-22% of students younger than eighteen experience mental health problems severe enough to need mental health services (Whitcomb & Parisi-Damico, 2016). According to the Report of the Surgeon General’s Conference on Children’s Mental Health, “mental health is a critical component of children’s learning and general health. Fostering social and emotional health in children as part of healthy child development must therefore be a national priority (Durlack, Weissberg, Dymnick, Taylor, & Schellinger. 2011).” The Institute of Medicine (2009) provides solidarity, stating that the proper development and support of social-emotional competencies, self-efficacy, and social inclusion can serve as both prevention strategy and treatment method for mental, emotional, and behavioral disorders.

Secondly, it is noted that students’ understanding of their emotions is linked to their prosocial behaviors (Santrock, 2015). Prosocial behaviors play a strong role in the success of relationships with others, which includes but is not limited to, peers, teachers, parents, and siblings. Students who are more negative, are more likely to be rejected by their peers (Santrock, 2015). Students who are less understanding and have less control over their emotions will struggle with student-teacher relationships and parent-child
relationships, due to impulsiveness to act upon emotions, frustration, and behavioral outbursts. These tensions will impact their self-esteem and motivation to succeed. During the primary grade levels children are experiencing emotions in a new capacity, and it is important that they learn productive ways to express their emotions (Whitcomb & Parisi-Damico, 2016). For example, it is no longer acceptable for students to have temper-tantrums if they are angry because a tantrum is disruptive to the classroom. Students need to be taught the skills to handle their emotions in a socially acceptable manner. Ronen Habib (2015) states in TEDx Gunn High School, “You know, we assume that second graders don’t know how to multiply, how to divide, and how to read. And that’s why we teach it to them— as we should. But why do we assume that second graders know how to self-regulate, self-manage, or be empathic?”

Developmental research claims that interventions targeting social-emotional development help increase students’ academic and social successes. Social-emotional intelligence is associated with mental well-being, positive academic progress (Durlak et al. 2011), positive employment relationships, prosocial behaviors, good problem-solving skills, and self-motivation (Zins & Elias, 2006).

Social-emotional learning (SEL) is defined as “the process of acquiring and effectively applying the knowledge, attitudes, and skills necessary to recognize and manage emotions; developing caring and concern for others; making responsible decisions; establishing positive relationships; and handling challenging situations capably (Zins & Elias, 2006).” There are many educators, parents, and specialists supporting the requirement of SEL instruction in schools because it helps decrease and prevent emotional-behavioral outbursts and problems (Caldarella, Christensen, Kramer, &
Kronmiller, 2009). Though it is not currently a Common Core requirement (Habib, 2015), there are schools that have implemented SEL programs to support the development of social and emotional skills in their students. Successful SEL programs in schools have shown a multitude of benefits. With more empirical research, it is becoming recognizable that social-emotional skills are just as important as academics because not all skills are innate- they are also taught. A classroom provides the structure and routine that can make social-emotional learning effective in students’ everyday lives.

SEL programs provide systematic classroom instruction and educator training (Payton et al., 2000). They also give us the opportunity to investigate how social emotional intelligence is related to emotion regulation, behavior control, peer interactions, academic performance, and cognitive development. SEL curriculums implemented in school environments have shown positive outcomes.

In this study the curriculum implemented in this research study is a part of Strong Kids by Kenneth Merrell, Ph.D., developed at the University of Oregon. Strong Start, the early education program, consists of two programs: Children ages 3-5 and Grades K-2 (Oregon Resiliency Project). For this research Strong Start—Grade K-2 was implemented in a second grade classroom. Research on Strong Start—Grades K-2 has been completed on both kindergarten (Kramer et al., 2010) and second grade students (Caldarella et al., 2009). In both studies prosocial behaviors and internalized behaviors of the children in their class were assessed through the teacher rating. Kramer et al. (2000), also had parents complete assessments for their kindergarten students who participated in the Strong Start curriculum. Parents rated their students’ an increase in prosocial behaviors, but did not rate a significant decrease for internalized behaviors, like the kindergarten
teachers did (Kramer et al., 2000). Caldarella et al. measured the students’ externalized behaviors through teacher assessment and observation. They did not use parent assessments to measure the effectiveness of the Strong Start program.

**Purpose of the Study**

The purpose of this study is to determine the effectiveness of a SEL curriculum (i.e. *Strong Start—Grades K-2*) in improving social-emotional skills of children in a second grade classroom.

**Research Questions**

The study was conducted to answer the following research questions:

1. Did the SEL curriculum improve social-emotional skills of children in the school environment?
2. Did the SEL curriculum improve social-emotional skills of children in the home environment?
3. To what extent is the *Strong Start* lesson implemented with fidelity?

**Research Hypothesis**

1. *Strong Start* significantly improves social-emotional competence of children in the school environment.
2. *Strong Start* significantly improves social-emotional competence of children in the home environment.
3. With the guidance of the *Strong Start* curriculum the intervention will be taught in an organized, productive, and understandable manner which will assure the correct implementation for accurate results.
Significance of the Study

This study acknowledges the importance of promoting social-emotional competence in children in the school setting through direct classroom instruction. The adoption of Strong Start program in this study demonstrates the efficacy of helping young children develop social-emotional strengths and possibly reduce or eliminate emotional and behavioral risk factors.

In this study the investigator was an active educator of the intervention group, but was not the teacher of the classroom. During the lessons of the Strong Start program, the teacher was present to assess the fidelity of the program, and assist with activities. The teacher and the investigator collaborated to provide an emotion-coaching environment to assist students with practicing the skills they learned through the Strong Start program. Also, the school psychologist was present to assess the fidelity of the program. The collaborative relationship of the three professionals providing a positive learning environment and serving as role models for the students, there is a greater likelihood of students’ success in the program.

Though the Strong Start program does not target the home environment, skills learned in the classroom may still be applicable at home. Students will learn how to recognize and attend to their emotions while completing tasks and communicating with peers and adults. These skills will be applicable to situations that include homework, chores, following instructions, and communicating with the parents or guardians.
Limitations

In conducting this study, the following limitations have been identified:

1. The researcher served as the interventionist who implemented all the lessons of the *Strong Start* program. As the interventionist she was aware of the hypothesis of the study, which may have influenced positive outcomes of the study. The interventionist is also an active member of the classroom during the regular school day. This may affect the results of the study due to her familiarity with the students.

2. The study employed a quasi-experimental design utilizing intact groups (i.e. classrooms) in assigning treatment condition instead of randomly assigning students to either the intervention or comparison group. Due to non-random assignment, treatment and comparison groups may not be necessarily equivalent on some variables that were not controlled in the study, and may had significantly affected social emotional competence of students.

3. Due to the limited sample size and only one class being introduced to the *Strong Start* program, results cannot be generalized to the entire population of second grade students in the school district.

4. There are identified students with Individual Education Plans (IEP), English as a Second Language (ESL) modifications, and children with Attention Deficit Disorder (ADD) and Attention Deficit Hyperactive Disorder (ADHD) with no modifications in the intervention group, but the comparison group does not have students with these modifications. This may affect results when comparing their social-emotional competencies.
5. The *Strong Start* program does not address situations in the home environment and there will be no modifications to the program to include home situations. There may be limitations to a student’s ability to generalize what they learn in the classroom to their home environment.

**Assumptions**

It can be assumed that if there is an increase in prosocial behaviors, emotional identification and emotion control, and a decrease in externalizing behaviors, then the learning environment of the intervention group will be more positive. A more positive learning environment may improve the academic success of the students. Also, improved control over emotions, like frustration and anger, will likely enhance problem solving skills and academic success of students.

A national sample of sixth through twelfth graders reported that 29%-45% of students reported they were competent in social and emotional skills, and only 29% reported their school provided a caring and encouraging environment. More than 30% of students engage in multiple high-risk behaviors (i.e. substance and alcohol abuse, sexual activity, violence etc.) and by high school 40%-60% of students become disconnected and uninterested in school (Durlak et al., 2011). If students are involved in a SEL program throughout their academic career they may be less inclined to participate in risk-taking behaviors. Students would be provided with the support from educators and the community, which would help them build the skills they need to succeed in the job market. Students who participate in an SEL program during their elementary education will have a foundation of skills that include, but are not limited to: interpersonal relationships, empathy, emotion control, respect, problem solving, and communication
(Payton et al., 2000). It can be assumed that the implementation of an SEL program could benefit a student throughout their entire academic and professional career.

It can be assumed that if Strong Start functions as both a prevention and intervention program, there would be an improvement in social-emotional companies, emotion control, and peer relationship of students with and without emotional and behavioral difficulties.

Lastly, it can be assumed that teachers and parents will rate the students accurately and honestly to assure the accuracy of the results.

**Definition of Terms**

**Emotional intelligence.** The ability to monitor one’s own and other people’s emotions, label these emotions appropriately, and to use emotional information to guide thinking and ultimately behavior (Habib, 2015).

**Externalizing behaviors.** Behaviors that are disruptive, observable, and may be aggressive and/or directed towards others. i.e. noise-making, calling-out, hyperactivity, destructiveness, aggression, etc. (Hallahan, Kauffman, & Pullen, 2015).

**Inclusive classroom.** A classroom which includes special education students, and teaches them at the same rate/level as general education students with the necessary modifications the special education student may require (Hallahan, Kauffman, & Pullen, 2015).

**Individualized Education Plan (IEP).** An education plan developed by a multidisciplinary team, which includes current educational performance, academic and classroom modifications, instructional goals, any provided services, and criteria for the goals to be met. IEPs are developed for special education students who are diagnosed
with social, physical, cognitive, and/or behavioral disorder, and/or learning disability (Hallahan, Kauffman, & Pullen, 2015).

**Internalizing behaviors.** Behaviors that consist of a person’s internal state, mood, feelings, and mental well-being, i.e. fear, anxiety, depression, withdraw, etc. (Hallahan, Kauffman, & Pullen, 2015).

**Prosocial behaviors.** Behaviors that are considered by society to be correct, productive, and polite, and help build and maintain positive relationships. i.e. helping, sharing, caring, effective communication, etc. (Caldarella et al., 2009)

**Self-concept.** A child’s cognitive representation of self (Santrock, 2015).

**Social emotional learning (SEL).** The process of acquiring and effectively applying the knowledge, attitudes, and skills necessary to recognize and manage emotions; developing caring and concern for other; making responsible decisions; establishing positive relationships; and handling challenging situations capably (Zins & Elias, 2006). In this study, the *Strong Start* program is the curriculum being implemented.

**Treatment fidelity.** The measurement of a researcher’s accuracy and organization of an intervention’s implementation. A Fidelity Checklist will cover the main points of each lesson, the literature read and taught, if opportunities for practice were given, and if the researcher was honest, organized and understandable when teaching the lessons provided. The Fidelity Checklists being used are a part of the *Strong Start* manual and there is one for every lesson.
Overview of the Study

Chapter 2 provides theoretical and empirical review of mental health in children and social emotional learning in school. It describes implementation and effectiveness of *Strong Start* curriculum and other evidence-based SEL programs.

Chapter 3 describes the method and procedures in gathering data for the study. It provides detailed information regarding setting the participants, treatment implementation, instrumentation, and data analysis.

Chapter 4 reports the findings of the study and the decisions on the research hypotheses advanced in chapter 1.

Finally, Chapter 5 discusses key findings of the study in light of current literature. It also includes conclusions derived from the findings and future research about SEL.
Chapter 2

Literature Review

Mental Health of Children

The growing mind of a child is very vulnerable to the development of mental health problems. According to the 2016 Child Mind Institute Children’s Mental Health Report (2016), one in five children will suffer from a mental health disorder. In agreement, Merrell and Gueldner (2010) also identify the high risk children are at for developing a mental disorder before the age of eighteen, stating that nearly 20% of children will develop mental health problems that are severe enough for treatment. However, many of these children will slip through the cracks and not receive the intervention necessary to stop the progression of the disorder. Many of these children will go on to develop more extreme symptoms and comorbid disorders that will affect them throughout their adolescence and adulthood. The Child Mind Institute (2016) goes on to state that 50% of disorders begin before the age of 14 and 75% of disorders begin before the age of 24. Poor mental health is positively correlated with lower academic success, higher substance abuse, higher likelihood of violence, and poor intimate relationships (Patel, Fisher, Hetrick, & McGory, 2007). Mental health impacts every part of a child’s life and many of these areas overlap and affect one another. In this section, we will address how a child’s mental health impacts education, social and emotional competencies and interpersonal relationships, and how these will impact the path into adulthood.

Mental health and education. As touched upon many times, poor mental health can lead to lower academic success for many reasons. Some of these reasons may
include, inability to create and maintain positive relationships (which will be further addressed in the following sections), learning disabilities, and an inability to control behaviors appropriately. Situations include an array of students, severity of difficulties, diagnoses, and experiences. Students with anxiety may have trouble paying attention and focusing, or miss many days of school because of psychosomatic symptoms, like headaches or stomach problems (ACMH, 2017). Students with behavior or emotional problems may have difficulties paying attention or controlling themselves in stressful and difficult situations. Students with a learning disability may have difficulties keeping up in class, which may influence feelings of anxiety, frustration, and discouragement. All of these situations will take away from the student’s ability to learn.

**Mental health and social skills.** Mental health not only affects the child internally, but also determine the way his or her family, teachers, and peers will interact with him or her. A more positive and healthy child will have a more positive response, and a child who is experiencing mental health problems will be received more negatively (Santrock, 2015). Negative feedback from others will influence the development of feelings, like frustration and discouragement, and will impact self-esteem and confidence.

**Childhood mental health and the effects on adulthood.** Research has shown that quality of mental health in childhood can greatly affect adulthood. Mental health, academic success, and ability to create and maintain relationships is vital to a person’s personal and occupational successfulness in adulthood. Patel et al., (2007) address how vital proper mental health is in adolescence and young adulthood, and look at the risks factors that attribute to mental disorders. Among these factors are poverty, social status, poor social networks, exposure to violence, inadequate education, parental mental
disorder, substance abuse (own or parental), parental conflict, divorce, and marital and child abuse. In their research they state, “Since youth is the period of life when most people complete their academic career, establish themselves in the job market, and establish friendships and romantic relationships, mental disorders may reduce the likelihood of these tasks being completed successfully, mental disorders in young people have a substantial effect on economic and social outcomes that extend into adulthood (2007, pp. 1306).” It is noted that young adults who had behavior disorders, learning disabilities, and neurological disorders are at a higher risk for poor mental health in adulthood than those who did not.

Externalizing behaviors before the age of thirteen can also be an indicator of violent behavior in adulthood (Patel et al., 2007). High anxiety and stress along with poor coping mechanisms can lead to lasting physical problems in the gastrointestinal tract, on the immune system, and on cognition.

Mental health, academic success, and peer relationships often intertwine and impact each other greatly (Patel et. al., 2007). It is important that they are cohesive in order to provide the best opportunities for the student.

**School Based Mental Health Programs**

How are the school systems of the United States currently addressing the pressing mental health reality of their students? In the United States, the public school system’s primary focus is on academic achievement, but mental health is not just cast aside either. The No Child Left Behind Act (NCLB) put more pressure on academic achievement (Merrell & Gueldner, 2010). When there is a highly publicized, devastating event (i.e. a school shooting, suicide, or community disaster), it creates a burst of mental health
efforts that quickly decline when it seems that the event has blown over (Merrell & Gueldner, 2010).

Mental health efforts are mostly intervention based, providing support and resources only once a problem has been identified. There are many steps to the process, which only prolongs the problem and may create time for worsening symptoms. Merrell & Gueldner (2010) note that a “snowball” or “domino” effect is very prominent with students who have mental health issues and receive no or little intervention. It is important to recognize the monetary cost, the lack of resources, and other boundaries that prevent school systems from addressing mental health on a more preventative, comprehensive level. There are not enough psychologists, counselors, and social workers in the school system to help all the students that need assistance (Merrell & Gueldner, 2010).

On a school wide level, many students, at some point in their journey from elementary to high school, will experience an assembly that is directed toward mental health, positive body image, suicide awareness, substance abuse awareness, and risk-taking behaviors (including sexual relations and substance use). It is also mandatory for students to participate in a health class, usually starting around fourth or fifth grade, up until their high school graduation. Curriculums in health classes will target mental health, sexual relationships, positive image of one’s body and self, substance abuse, and suicide awareness.

There a few programs that address the prevention problems with mental health, risk taking behaviors, and social-emotional interactions and awareness. The Drug and Alcohol Resistance Education (DARE) project is a widely used substance prevention
project used in a whole-school method. However, according to research by Clayton, Cattarello, and Johnstone (1996) it is ineffective in preventing students from engaging in drug experimentation and usage.

Students with an identified disorder, learning disability, or physical handicap, the student may be provided with an individual education plan (IEP) or a 504 plan. An IEP or a 504 is developed to address individual goals, strengths, and weaknesses, and implement a plan that would be functional for the student so that they achieve academically on their level. These plans do not address the classroom or school as a whole, as they are designed strictly for an individual. These plans can be beneficial to the student as long as they are implemented effectively. However, the process to obtain and utilize one can be extensive. There needs to be agreement and collaboration among the teachers, student, parents, and other professionals (i.e. Child Study Team) in order to be a successful tool (ACMH, 2017).

If a student is experiencing problems beyond the school’s ability to care for, they may be sent to an out of district facility or be placed in home-bound schooling. In my experience, these are often students who have extreme behaviors, that the school is not trained to address or they do not have the available staff to help address these behaviors.

In a national sample of sixth through twelfth graders, students were asked to anonymously participate in a survey of their school environment and personal assessment of their social-emotional competencies. Of the 148,189 students, 40%-60% students felt disengaged from school. Only 29% of students believed their school provided a positive, and encouraging environment (Durlak et al., 2011). A positive environment is vital to success across the board. A negative home, academic, occupational, or social
environment is not conductive and can be damaging to abilities. This is another reason why developing resiliency, coping skills, and prosocial behaviors is important since not all environments we encounter are going to be supportive and positive. SEL school wide, or in the classroom would help build a more positive environment to help teach these skills.

School environments provide a perfect opportunity to teach and develop social-emotional skills (Merrell & Gueldner, 2010). Not only can SEL be uses as a preventative and intervention method, but it also addresses students of all levels, not just the ones who have already been diagnosed or defined as at-risk.

**Social and Emotional Learning**

The concept of social and emotional learning (SEL) is still fairly new, with research only beginning in the 1990’s. The Fetzer Institute held a meeting in 1994 to promote mental health prevention efforts in the school environment. The educators, psychologists, and interested individuals who attended helped develop the Collaborative to Advance Social Emotional Learning (CASEL) initiative. CASEL is currently leading the promotion and research SEL (Merrell & Gueldner, 2010). CASEL strives to advance the science of SEL, use scientific evidence to develop effective school practices, to distribute information, enhance training opportunities and collaborate with professionals to develop the most effective practices for SEL teachings (Payton et al., 2000).

SEL research developed from developmental resilience— an individual’s ability to successfully cope with adversity, stress, and risk factors. Developmental resilience is cognitive and behavioral, and had been thought to be mostly innate until research showed that it could be taught. Developmental resilience can be acquired through systematic and
effective instruction from parents, peers, and educational figures. The goal of many SEL programs is to help develop the resilience children and adolescents will need in order to cope with difficult situations (Whitcomb & Parisi-Damico, 2016).

Emotional intelligence—“the ability to monitor one’s own and other people’s emotions; to label these emotions appropriately, and to use emotional information to guide thinking and ultimately behavior (Habib, 2015)”—is also highly influenced by SEL. Emotional intelligence includes: self-awareness, motivation and passion, empathy, social skills, and self-regulation (Habib, 2015). Top companies, like Google, are looking for employees that embrace traits like collaboration, creativity and perseverance, and offer classes in order to teach these skills that are highly influenced by social and emotional development (Habib, 2015). It is important that as educators and parents we do our best to prepare our students for these endless opportunities, as well as the hardships that come with growing up. SEL programs educate individuals about both “good” and “bad” emotions, and give students the tools to utilize them in a positive and productive manner.

There are five main competencies that SEL strives to develop: (1) awareness of self and others, (2) positive attitudes and values, (3) responsible decision making, and (4) social interaction skills (Payton et al., 2000). Awareness of self and others focuses on identifying and regulation of feelings, developing a sense of self, and perspective taking. Positive attitudes and values focuses on personal and social responsibility and respect for others. Responsible decision making helps develop skills for problem identification and solving, analysis of social norms, and adaptive and flexible goal setting. Social interaction skills include active listening, expressive communication, skills for
cooperation, negation, ability to refuse in an effective manner, and how to ask for help (Payton et al., 2000). All of these skills begin with being able to identify and regulate one’s own emotions, which is a core of many SEL programs for elementary school aged children. SEL also focuses on positive youth development, violence prevention, and mental health promotion (Merrell & Gueldner, 2010).

All of these competencies can be summed up into the idea of “wellness”—“the psychological capacity to cope with the demands arising across time, circumstances and setting (Merrell & Gueldner, 2010; pp. 7).” Efforts also strive to increase mindfulness—paying attention in a persistent, focused manner to one’s thoughts, emotions, space, and actions, as well as to their environment and interactions with others. Mindfulness is shown to help emotion identification and regulation as well as decrease stress and externalizing behaviors (Perry-Parrish, Copland-Linder, Webb, & Sibinga, 2016).

Ideally, SEL training should begin in the home, starting at infancy with positive role model parents, preparing their children for the struggles to come (Merrell & Guelder, 2010). Parent-coaching—“monitoring the child's emotions, viewing negative emotions as opportunities for teaching, assisting the child in labeling emotions and coaching them in how to deal effectively with emotions (Santrock, 2015)” plays a huge part in the child’s ability to properly develop social and emotional skills in a positive way. When parents use a emotion dismissive—“denying, ignoring, or trying to change negative emotions (Santrock, 2015)” instead of using them as teachable moments approach, the child will not learn effective methods to express and process their emotions. How children are taught to process and express their emotions will affect their ability to build future relationships with peers, teachers, and community members. It is noted that
because of the commonality of students coming from broken homes and experiencing new stress factors (ie: cyber bullying, social media) it is becoming more pressing that schools incorporate SEL into their daily curriculums (Merrell & Gueldner, 2010).

SEL comes with extensive benefits that influence the student’s academic success, interpersonal skills, personal responsibility, and behaviors. Currently, there is no discovered downside or consequences that students experience when these skills are taught and supported (Merrell & Gueldner, 2010). It is, however, vital that SEL is taught in an organized and structured manner. This is targeted in the following section.

**The Benefits of a Structured Curriculum**

There are researchers that question how much social-emotional skills really improve academics and behavior control (Durlak et al., 2011). However, the evidence weighs highly in favor in structured SEL programs that are organized, consistent and support development inside and outside the classroom (Payton et al., 2000). When plans are fragmented, uncoordinated, multicomponent, and have implementation issues the results are short-termed, inconsistent, and varying (Durlak et al., 2011; Whitcomb & Parisi-Damico, 2016). This is often the case with efforts because schools have limited resources (i.e. time constraints, competing demands, poor instructor training, etc.) and is why a structured program is beneficial and necessary when addressing social-emotional development in schools (Durlak et al., 2011). CASEL has identified important skills for social-emotional development. Structured, quality programs work to strengthen each of these areas: (1) awareness of self and others (2) positive attitudes and values and (3) responsible decision making (Payton et al., 2000). Each area, as reviewed before, is made up of specific competencies that help the student to be polite, understanding, empathetic,
and motivated. It is also important that students master the skills, and clear connections are made between the concepts and skills being taught to the students’ experiences in school, home, and community settings in order for the skills to be applicable and relevant (Payton et al., 2000).

Quality SEL programs are clear, use strategies, provide teacher training, have school-wide coordination, and are connected to the family and community (Payton et al., 2000). To measure the quality of an SEL program, professionals look for the SAFE — Sequenced, Active, Focused and Explicit— qualities. In a meta-analysis of 213 school-based SEL curriculum, (Durlak et al., 2011) found that programs that were SAFE influenced a more positive outcome than those programs that were not. Programs that were SAFE and were implemented by the classroom teacher were effective in all six of their measurement categories (i.e. SEL skills, attitudes, prosocial behavior, conduct problems, emotional distress and academic performance), making this the most influential design in the analysis. There was an 11% increase in academic performance, which speaks highly to SAFE SEL programs being a positive support in the classroom (Durlack et al., 2011). The University of Illinois conducted a meta-analysis including 668 schools in Illinois that implemented SEL as part of their regular curriculum. They study showed that 63% of students demonstrated more positive behavior, suspensions dropped by 44%, and 50% of children were improving on achievement scores. SEL was so successful that it is now a requirement for public schools in Illinois (Habib, 2015). The program being implemented in this study (i.e. Strong Start — Grades K-2) is recognized as a SAFE program.
Social-Emotional Learning Curriculums

There are various research based SEL programs that are suitable for elementary level intervention and prevention. Each program differs in age-appropriateness, length, structure, assessment measures available, and design. Curriculums focus on different environments that SEL competencies are reinforced and supported. Some curriculums may only focus on classroom, school-wide, family, and/or community support. Assessment measures may include observation, self-report, parental report, teacher report and measuring behaviors (CASEL, 2012). It is encouraged that professionals and educators pick the SEL curriculum that meets their specific needs and goals. The following SEL programs have been picked as examples, including Strong Start, to show the diversity of different curriculums. There are more programs then only these four.

Positive Action. Positive Action is an SEL program designed by Dr. Carol Gerber Allred. Its original release was in 1983. Since then, Positive Action has been implemented across the USA and internationally. The program has been revised to fit the needs of today’s children and education system. There are curriculums available for kindergarten up to twelfth grade students, along with supplemental materials to focus on more in-depth problems (i.e. bullying, drug use and prevention, and conflict resolution). Each lesson, lasting about fifteen minutes, is designed to be completed every day (Positive Action, n.d.).

Positive Action’s philosophy comes from the idea that we feel good about ourselves when we do positive actions. The program is based on the Thoughts, Actions, Feelings (TAF) Circle. The TAF Circle shows that are feelings affect our thoughts, which affect our actions, and then affect our feelings. The progression of thoughts-actions-
feelings can be either negative or positive. Positive Action claims that if the circle is positive, students will want to learn. However, if the circle is negative, the student’s will not want to learn. The goal of Positive Action is to provide students with the skills to create and maintain a positive thought process (Positive Action, n.d.).

The main curriculums of Positive Action focus on six concepts: (1) self-concept, (2) positive actions for your body, (3) managing yourself responsibly, (4) treating others the way you like to be treated, (5) telling the truth and being honest with yourself, and (6) improving yourself continually. The curriculums are organized so that each of the concepts build off the one before it. The lessons shift from a learning of and focus on the self, to applying these concepts in communication and social settings (school, community, family, and peer groups, etc.). Along with the main classroom curriculums, supplemental lessons can be purchased to target more in-depth and specific problems or situations. The supplemental programs are as follows: school-climate, drug use and prevention, bullying prevention, family, counselor, community, and conflict resolution. These supplemental programs can be used in multiple settings and in multiple grade levels. The school-climate, family, and community kits are designed to be cohesive and reinforce the teachings in the classroom lessons (Flay & Allred, 2003). This could be ideal for parents who want to encourage and support their children’s social-emotional education, or a community that wants to continue these efforts outside of the school environment.

Positive Action has been shown to be effective in various settings and areas of development. Positive Action has been used in classroom, school-wide implementation, community organizations (i.e. Boy’s and Girl’s Clubs) and counseling and detention
centers (Positive Action, n.d.). The lessons are fully scripted with materials that highlight the six concepts (Flay & Allred, 2003). The program also offers training for administrators, teachers, counselors, parents, and community members to be sure they implement the program in a structured, effective manner (Flay & Allred, 2003).

*Positive Action* can be purchased in kits based on grade level and goal (i.e. whole school, bullying, counseling, etc). The kits include the manual, 140 lessons, activity sheets, visual aids, posters, and stickers. The kits can be purchased for $400.00. There are also refresher kits for $150.00 that includes the materials for 30 students. There is also an option to purchase a subscription, which is 3-7 years’ worth of materials. This can cost $330.00-$525.00 (Positive Action, n.d.).

**Second Step.** *Second Step* is an SEL program providing lessons for children in preschool through eighth grade (Committee for Children, 2016). It is supported by the non-profit organization, Committee for Children. The organization has outreach programs in over 70 countries, including the United States.

*Second Step* is taught on a weekly basis and has daily follow-up activities to enforce the material. Each lesson is fully scripted and takes about a half hour to teach. There are four units, each with four to six lessons. The four units are as follows: (1) Skills for Learning (2) Empathy (3) Emotion Management and (4) Problem Solving. All the lessons from early learning to eighth grade follow these four units. The lessons within each unit are designed to teach age appropriate skills (Committee for Children, 2016). The lessons also include take home activities and family bulletins. Within second grade some skills that are taught are: identifying and engaging in respectful behavior, focusing attention, using self-talk, being assertive, identifying body language, identifying feelings,
building self-confidence, being empathetic, recognizing accidents, regulating emotions, taking responsibility and problem-solving skills (Committee for Children, 2014). The lessons are designed to build off the ones before and set a foundation for the ones that come after.

Along with the regular grade level curriculums there are also curriculums that focus on bullying prevention and child safety. The Bullying Prevention Unit is available from preschool through fifth grade, focuses on recognizing, reporting and refusing bullying. The curriculum is also available in Spanish. The Child Protection Unit, available for kindergarten through fifth grade, focuses on safety in the home, with adults, and in the community. Its goal is to help teach students general safety rules, street safety, signs of abuse (physical and sexual), the importance of not keeping secrets. It also provides teachers with tools to recognize signs of abuse, develop a child protection plan, attend to situations in a positive, supportive way, and engage families to support and help develop safety skills (Committee for Children, 2016). These curriculums can be purchased individually, but it is recommended to use them in conjunction with the Second Step program.

Curriculums can be purchased through the Committee for Children (2016) website. Grade level kits are priced $300.00-$500.00 and include all the materials needed for one series of lessons. The kit includes lesson cards, posters, DVD, CD, teaching materials, home link activities, and student handouts. It also includes teacher training and resources that provide ideas, activities, family materials, and Spanish translations (Committee for Children, 2016). There are opportunities to purchase multiple curriculums at a discounted rate. An elementary school bundle is available for $2,259.00
and includes kindergarten through fifth grade kits, and online training and resources for the teachers. The Bullying Prevention Unit and Child Protection Unit can also be purchased by grade level for $199.00 or in a grade bundle for $1,279.00. They can also be bundled with the Second Step grade level curriculums.

**MindUP.** *MindUP* is a product of The Hawn Foundation, developed by Goldie Hawn. She states “I see children as bundles of pure potential and wanted to create a program that helped children to grow and learn and lead in a very different kind of world (The Hawn Foundation, n.d.)” Its release was in 2005 and is now implemented in the United States, Mexico, Australia, New Zealand, Hong Kong, and Serbia (The Hawn Foundation, n.d.).

*MindUP* is driven by four pillars: (1) Neuroscience (2) Mindful Awareness (3) Positive Psychology (4) SEL. Each pillar focuses on teaching skills and information that the students can use to benefit them academically and socially. Neuroscience teaches students how their brain works, teaching lesson like “Your Brain”, “Mindfulness”, and “Focused Attention.” Mindful Awareness is designed to teach skills that help students be aware of their body and senses (i.e. “Mindful Listening”, “Mindful Seeing”, “Mindful Touch”, etc). Positive Psychology focuses on “Perspective taking”, “Choosing Optimism”, and “Savoring Happy Experiences.” Finally, the SEL lessons address “Acting with Gratitude,” “Acting with Kindness,” and “Mindful Actions (The Hawn Foundation, n.d.).” One of the major differences between *MindUP* and the other programs addressed in this review is its Neuroscience pillar. No other program in this review teaches about the brain, how it works, and how we can learn to adapt and change our thoughts, behaviors, and reactions according to our brain’s normal processes. This
can help build and increase self-control and self-regulation, which is an incredibly important skill for students (The Hawn Foundation, n.d.).

*MindUP* curriculums are available for school-wide, classroom, family, community, and counseling approaches. There are fifteen lessons available for students in kindergarten through eighth grade. The curriculums are broken down by K-2, 3-5, and 6-8 in order to provide a lessons that are age-appropriate (Scholastic, 2017). There are training opportunities available for administration and schools, individual teachers, parents, community members, and counselors/therapists. These include whole school trainings, or Regional training for individuals. Along with multiple training opportunities, there are also webinars, digital resources, and supports that a school, community program, family, and/or counselor can utilize in order to make their *MindUP* lessons the most effective. *MindUP* also supports its use in combination with other SEL programs in order to meet the specific needs of the students it is serving. *MindUP* makes sure to note how important consistency and structure are to the success of the program when it is being implemented alone or in combination with another program (The Hawn Foundation, n.d.).

Each manual is $24.99 and includes a poster for visual aide (Scholastic, 2017). Training for districts or whole-schools can cost between $5,000-$10,000 for a custom plan, a year’s access to digital resources, teacher training, and a two-hour parent workshop. For a teacher, parent, therapist, or individual wants to attend a Regional Training, they would receive a year’s subscription of digital resources. Costs do not include travel. If a person cannot attend a training, they can purchase online training which also includes the digital resources (The Hawn Foundation, n.d.).
**Strong Start, Strong Kids and Strong Teens.** The *Strong Kids* program was designed at the University of Oregon by Dr. Kenneth Merrell. There are three programs, broken down into versions appropriate for grade and age levels. *Strong Teens* is designed for ninth through twelfth grade students. *Strong Kids* is designed for third to eighth grade students. There are two versions: 3-5 grade and 6-8 grade. *Strong Start* is designed for preschool (three years old) through second grade. There are two versions: 3-5 years, and K-2 grade (Oregon Resiliency Project, 2001). This study focuses on the second edition of *Strong Start—Grades K-2* (Whitcomb & Parisi-Damico, 2016).

*Strong Start* is described as a “brief and practical” program. Its goal is to help develop and support the emotional knowledge of the students participating in the lessons. *Strong Start* aims to lay the foundation of effective social-emotional skills (Oregon Resiliency Project, 2001). The program is made up of ten lessons, designed to be taught once a week. Each lesson takes about forty-five to sixty minutes to complete. There are available modifications in the manual if the time needs to be shorter due to time constraints, and children’s attention spans (Whitcomb & Parisi-Damico, 2016). The program is designed to meet SAFE (sequenced, active, focused, and explicit) requirements, which research has shown to be influential in the success of SEL programs. The implementation of the program requires no training, so a teacher or educator could easily incorporate it into his or her weekly lesson plans.

The manual comes with partially scripted lessons, activities for the students, literacy materials use during the lesson, a fidelity checklist, instructor reflection activities, opportunities for students to practice the concepts taught, reviews, extension activities, and bulletins to communicate with their families. The information is straightforward and
can easily be understood by the instructor, students, and their families. There have also been revisions to the *Strong Start* program to make the program more effective for different cultures (Whitcomb & Parisi-Domíco, 2016). The manual for *Strong Start* is currently priced at $39.95, plus shipping and handling (Brookes Publishing Company, 2017). The instructor would also be responsible for purchasing any literary materials, crafts materials, and making any copies or handouts.

*Strong Start*’s ten lessons cover a variety of topics, targeting emotion identification, self-regulation and management, and how to respond to other people’s feelings and actions. The curriculum includes the following lessons:

1. “The Feelings Exercise Group” is the introduction to the program. It gives an overview of the expectations and goals of the lessons.

2. “Understanding Your Feelings” Part 1 is an introduction to the feeling and how to identify them as “positive” or “negative” emotion. This lesson also touches on situations that may make us feel these feelings.

3. “Understanding Your Feelings Part 2” is a continuation of lesson 2. In Lesson 3, students learn ways to appropriately express their emotions.

4. “Understanding Other People’s Feelings” introduces on the concept of empathy. Students are taught how to identify another person’s emotions and how to take their perspective. This is an introduction to the idea, since children of this age do not fully have the cognitive capacity to grasp empathy.

5. “When You’re Angry” explains that everyone feels angry and that there are different capacities of anger. There are activities that target how to properly
express anger that are helpful or harmful, and which ones are effective in an appropriate way.

6. “When You’re Happy” teaches the connection between happiness and our thoughts. Situations that affect these feelings and thoughts will be explored. The ABC’s of Positive Thinking will be introduced so that they can learn to be mindful of how their positive thoughts and feelings affect their actions and outcomes. This is similar to the TAF in Positive Action.

7. “When You’re Worried” addresses stress and anxiety on the student’s level. Situations that cause worry will be explored and ways to effectively cope with stress will be introduced.

8. “Being a Good Friend” teaches basic interpersonal skills. Examples of skills that are emphasized in the lesson are making eye contact, using a nice voice, personal space, and being a good listener. Opportunities to practice these skills with their peers will be provided.

9. “Solving People Problems” is focused on resolving conflict. Areas where conflicts would arise will be discussed. Strategies to resolve conflicts will be provided and practiced between peers.

10. “Finishing UP” is designed to wrap up all the lessons and strategies taught in the program.

There are also two booster lessons available to complete after the program. These lessons are to reinforce the teachings of the Strong Start lessons, but are not a requirement for the program (Whitcomb & Parisi-Domico, 2016).
In the following section, we address the research that was conducted to test the effectiveness of *Strong Start* (Whitcomb & Parisi-Domico, 2016). It has been shown to be effective in increased prosocial behaviors, decreases in behavioral disruptions, and increasing positive relationships between peers and teachers (Caldarella et al., 2009; Kramer et al., 2010).

**Scientific Research of *Strong Start*—Grades K-2**

Currently, there is only two other research studies on the *Strong Start*—Grades K-2 focusing on its effectiveness in the classroom. One study by Kramer et al. (2010), focuses on its effectiveness in a kindergarten classroom. Results showed that in the kindergarten class, Strong Start was an effective SEL program. Teachers and parents rated an increase in prosocial behaviors, and teachers rated a decrease in internalizing behaviors. Educators also expressed that Strong Start was easy to implement into the flow of their classroom, however the lessons were too long and too difficult for kindergarten students (Kramer et al., 2010).

The other, by Caldarella et al. (2009), focuses on the program’s effectiveness in a second grade classroom. Caldarella et al. (2009) conducted their research using the *Strong Start* program in two schools in Utah. Results supported that *Strong Start* as an effective SEL program. Students showed a decrease in behavioral issues, and significant increases in peer relationships and prosocial interactions in the classroom. In order to accurately measure the progress of the students, teachers completed the School Social Behavior Skills (SSBS) and the Externalizing and Internalizing subclass of the Social Skills Rating System (SSRS) for their students, before and after the implementation of the program. The research showed significant increase in both at-risk students and
normally developing children who participated in the *Strong Start* program, whereas their peers in the comparison group did not show those increases. The increase of skills and knowledge in both at-risk and normally developing students supports the claim that *Strong Start* can be used as both a prevention and intervention program (Caldarella et al., 2009).

Caldarella et al. (2009) also measured the fidelity of each lesson and the feasibility of *Strong Start* in the classroom. The fidelity of each lesson was assessed by a research assistant for 95% of the lessons. The research assistant also observed student involvement. The feasibility—ability to be easily implemented in the classroom—was assessed by the ratings of both the teacher and the students. The teacher used an adapted version of the Intervention Rating Profile-15 (IRP-15). The teacher ratings were positive, and she even commented that she wished the program could have been implemented in the class earlier in the school year. Students used an adapted version of the Student Self-Assessment of Social Validity and the majority of results (74%) were positive (Caldarella et al, 2009). Overall, the research supports that when implementing *Strong Start* efficiently, it can be an effective program.

**Summary**

Through the literature review, we have addressed the extensive positive impact an SEL program can have on a student when implemented in a consistent, structured, organized manner. Programs that have had significant results have been summarized and compared to show there are many options for districts, schools, classrooms, families, and community programs can pick from to meet their specific needs. SEL is shown to be an effective method of prevention and intervention for mental health issues in students.
(Caldarella et al, 2009; CASEL, n.d.). These preventative and intervention methods would be beneficial to schools across the nation who are looking to further support their students’ mental well-being, along with the school efforts that are already in place. It is clear that schools hold a huge responsibility in preparing their students for the adult world, and with the resources from effective SEL programs, schools can be more prepared to do so. The competencies learned from SEL can also help students excel not only academically, but in other aspects of their life including, family relationships, self-motivation, future careers, community involvement, and peer relationships.
Chapter 3

Method

Setting and Participants

Participants for this study included 30 second grade students and their parents and teachers in a suburban South New Jersey school district. All participants formally consented to participate in the study. The school district where the students were enrolled is located in an area that is generally described as low socioeconomic status. Gender distribution was approximately equal with 13 males and 17 females). Students were between the ages of seven and eight years, with a ratio of 1 seven-year-old child is to 2 eight-year-old children.

Of the 30 students, 16 students in an inclusive classroom comprised the treatment group. Within this group, two students reported as English language learners (ELL), one student reported with Autism Spectrum Disorder comorbid ADHD, one student reported with a speech impairment, and two children reported with ADHD diagnosis. The remaining 14 students from another 2nd grade classroom were assigned as the comparison group. Parents and teachers of the students in both the treatment and comparison groups participated in the pre-and posttest activities to assess the children’s social-emotional competence.

Design and Intervention

Independent variable. In order to assess if the Strong Start program was an effective SEL curriculum for second grade students, a two-group non-equivalent quasi-experimental design was utilized in the study. The study consisted of an intervention group, which was taught with the lessons of Strong Start and a comparison group, which
was not taught with the *Strong Start* lessons nor exposed to any activities related to SEL curriculum.

The SEL curriculum used in this study was the *Strong Start—Grades K-2* a curriculum based on Merrell’s *Strong Kids* program. This curriculum was designed to strengthen and develop the social-emotional competencies of students in kindergarten through second grade. It consisted of 10 structured lessons that included readings, activities, examples, and opportunity for practice. The lessons targeted skills like emotion identification, emotion regulation and control, empathy, and problem-solving (Whitcomb & Parisi-Damico, 2016).


**Dependent variable.** The dependent variable of this study was the social-emotional competence of the students that was measured using the SEARS short-form. The teachers and parents of students in both the intervention and comparison groups completed the SEARS short-form before the implementation of the program as a baseline measurement and after the program was completed as a posttest measurement.

**Measures and Instrumentation**

**Social and Emotional Assets and Resilience Scales (SEARS).** The SEARS is a strength-based multi-rater, multi-source, assessment measure that provides information of a student’s social-emotional competencies (Endrulat, Tom, & Merrell, 2009). These competencies include social and emotional knowledge, peer acceptance and relationships,
resilience to challenges, coping skills, problem solving skills, empathy, and self-concept (Tom, Merrell, Endrulat, Cohn, & Felver-Grant, 2009). It can be used for assessment, screening, intervention planning and monitoring progress, program evaluation and research (Felver-Grant & Merrell, 2009). The SEARS consists of 52-54 questions and are based on a four-point categorical rating (“always” “often” “sometimes” and “never”). Each measure takes about 15 minutes to complete (Felver-Grant & Merrell, 2009; Tom et al., 2009). For this study the SEARS Parent (SEARS-P) and SEARS Teacher versions (SEARS-T) were used as outcome measures of the Strong Start program.

**Fidelity checklist.** In the manual of the Strong Start program 2nd edition, a fidelity checklist was provided at the end of each lesson (Whitcomb & Parisi-Damico, 2016). Each checklist covered the main points of each lesson, which included: literature read, defining emotions, providing strategies to express and communicate emotions, and practice opportunities. Fidelity checklists were completed by the school psychologist who observed all the lessons implement by the interventionist (i.e., school psychology graduate student) in an inclusive classroom.

**Open-ended survey.** In order to assess the teacher’s opinion of the effectiveness, implementation, and resourcefulness of the Strong Start program, an open-ended survey was given to the teacher of students in the treatment after the implementation of the Strong Start program. Items will include: 1) On a scale from 1 to 10 (10 being the most, and 1 being the least) how effective do you believe the Strong Start program was in increasing the social-emotional skills of your students? 2) Did you observe more or less disruptive behaviors? 3) Did you observe more or less prosocial behaviors between peers and student-teacher relationships? 4) Do you think the program was easily incorporated
into the daily routine? 5) Would you use *Strong Start* as a method to influence a positive learning environment? 6) Is there anything you would change about the *Strong Start* program?

**Procedure**

An IRB application for this study was submitted to the Rowan University Office of Research and Compliance to evaluate the compliance of the study to ethical standards on participation of children in research. The researcher also obtained consent from the Board of Education, school district administration, Child Study Team, and teachers of the three participating classrooms. After IRB approval, the researcher obtained formal written consent from all the parents of children in both the intervention and comparison group.

The researcher implemented the *Strong Start* program during the intervention group’s regular school day. The program consisted of 10 lessons and each lesson was about an hour long. The lessons were conducted once a week for 10 weeks in spring 2017, starting in January and ending in March. During the implementation of the program a certified school psychologist was also present for all of the 10 lessons to evaluate the fidelity of the implementation.

The comparison group received no intervention or activities, and continued with their regular academic curriculum throughout the study.

Teachers and parents of students in both the intervention and comparison groups completed the SEARS short-form to assess the social-emotional competencies of their students’ one week before the intervention and one week after the intervention.
Data Analysis

In order to determine whether social-emotional competence of children differed at baseline, the Mann-Whitney U test was utilized to compare pretest ratings of the treatment and comparison groups separately for teacher and parent evaluations. Similarly, Mann-Whitney U test was conducted for the posttest ratings of the two groups independently for teacher and parent evaluations. A Wilcoxon Signed Rank test was used to compare the pre- and posttest ratings within each group, separately for the teacher and parent ratings.

Fidelity rating for each Strong Start lesson was calculated using percentage of accuracy.
Chapter 4

Results

Descriptive Statistics

Presented in Table 1 is the descriptive statistics of the pretest and posttest SEARS ratings conducted by the teachers and parents of the treatment and comparison group in terms of mean ($M$), median ($Mdn$), and standard deviation ($SD$). Normality of score distributions were also evaluated by calculating skewness and kurtosis. All the calculated skewness and kurtosis values were within -2 and +2 interval, which suggests that the score distributions met normality (Meyers, Gamst, & Guarino, 2017).

Table 1

Descriptive Statistic of SEARS Scores

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>$Mdn$</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment Group: n=16</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest – Teacher</td>
<td>49.88</td>
<td>14.81</td>
<td>50.50</td>
<td>-.01</td>
<td>-.46</td>
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<tr>
<td>Posttest – Teacher</td>
<td>55.75</td>
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<td>59.00</td>
<td>-.88</td>
<td>-.36</td>
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<tr>
<td>Pretest – Parent</td>
<td>47.19</td>
<td>10.40</td>
<td>46.00</td>
<td>-.04</td>
<td>-.53</td>
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<tr>
<td>Posttest – Parent</td>
<td>49.88</td>
<td>9.74</td>
<td>51.50</td>
<td>-.77</td>
<td>-.55</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pretest – Teacher</td>
<td>57.43</td>
<td>7.21</td>
<td>58.00</td>
<td>-.32</td>
<td>-.24</td>
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<td>Posttest – Teacher</td>
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<td>9.86</td>
<td>58.50</td>
<td>-.46</td>
<td>-.77</td>
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<tr>
<td>Pretest – Parent</td>
<td>45.50</td>
<td>8.59</td>
<td>43.00</td>
<td>.67</td>
<td>-.58</td>
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Table 1 (Continued)

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>$Mdn$</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest – Parent</td>
<td>45.14</td>
<td>6.78</td>
<td>45.00</td>
<td>-.30</td>
<td>1.24</td>
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</tbody>
</table>

Comparison of SEARS Pretest Scores Between Groups

Mann-Whitney U test was used to compare the SEARS pretest scores of students in the treatment and comparison groups. Teachers and parents rated the students separately. In reference to Table 2, SEARS pretest scores of students in the treatment ($Mdn = 50.50$) and comparison ($Mdn = 58.00$) as teachers were comparable, $U = 81.00, p \geq .05$. Similarly, students’ SEARS pretest scores in the treatment ($Mdn = 46.00$) and comparison ($Mdn = 43.00$) as parents were comparable, $U = 96.00, p \geq .05$.

Based on these results, it can be said that the social-emotional competence of the students in both groups and environments, are equivalent prior to the teaching of the Strong Start lessons.

Comparison of SEARS Posttest Scores Between Groups

The Mann-Whitney U test was also used to compare the SEARS posttest scores of students in the treatment and comparison groups, rated separately by teachers and parents. In reference to Table 2, the SEARS posttest scores of the students in the treatment group ($Mdn = 59.00$) and the comparison group ($Mdn = 58.50$) were comparable, $U = 108.50, p \geq .09$. The SEARS posttest scores completed by the parents
showed a marginally significant \((U = 70.00, p \leq .09)\) difference between the treatment \((Mdn = 51.50)\) and comparison \((Mdn = 45.00)\) groups.

These results partially support the hypothesis that Strong Start is an effective SEL program in the home environment.

Table 2

**Mann-Whitney Results on SEARS Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment</th>
<th>Comparison</th>
<th>(U)</th>
<th>(Z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest - Teacher</td>
<td>50.50</td>
<td>58.00</td>
<td>81.00</td>
<td>-1.29</td>
</tr>
<tr>
<td>Pretest - Parent</td>
<td>46.00</td>
<td>43.00</td>
<td>96.00</td>
<td>-.67</td>
</tr>
<tr>
<td>Posttest - Teacher</td>
<td>59.00</td>
<td>58.50</td>
<td>108.50</td>
<td>-.46</td>
</tr>
<tr>
<td>Posttest - Parent</td>
<td>51.50</td>
<td>45.00</td>
<td>70.00</td>
<td>-1.76*</td>
</tr>
</tbody>
</table>

Note: \(p \leq .09\) *marginally significant

**Comparison of SEARS Scores Within the Treatment Group**

Wilcoxon Signed Rank Test was used to determine if there was a significant difference in the pretest and posttest SEARS ratings completed by the teachers and parents after the completion of the Strong Start program. As shown in Table 3, posttest
SEARS scores of the students in the treatment group as assessed by the teacher \((Mdn = 59.00)\) and parents \((Mdn = 51.50)\) were higher than the pretest SEARS ratings: teacher \((Mdn = 50.50)\) and parents \((Mdn = 46.00)\). However, only the teachers’ SEARS ratings of students in the treatment group was found to be significantly different \((z = -2.91, p \leq .01)\), which suggests that social-emotional resilience of students improved after attending the \textit{Strong Start} lessons. Parental SEARS ratings of students in the treatment group were not significantly different \((z = -1.54, p \geq .05)\). Based on the findings, the hypothesis that the \textit{Strong Start} curriculum can improve social-emotional competence of children in the school environment was supported. However, the hypothesis that the \textit{Strong Start} curriculum can improve social-emotional competence of children in the home was not supported.

\textbf{Comparison of the SEARS Scores Within the Comparison Group}

Wilcoxon Signed Rank Test was used to determine if there was a significant difference in pretest and posttest SEARS ratings completed by the teachers and parents of the comparison group. As shown in Table 3, the pretest \((Mdn = 58.00)\) and posttest \((Mdn = 58.50)\) as completed by the teacher, were comparable, and showed no significant difference, \(z = -.43, p \geq .05\). Parental pretest \((Mdn = 43.00)\) and posttest \((Mdn = 45.00)\) SEARS ratings were also comparable, and showed no significant difference, \(z = -.25, p \geq .05\).

These results suggest that the social-emotional skills of the students in the comparison group did not increase or decrease significantly during their daily routines over the course of the study in either environment.
Table 3

Wilcoxon Signed Ranks Test Results of SEARS Scores

<table>
<thead>
<tr>
<th>Time</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>50.50</td>
</tr>
<tr>
<td>Parent</td>
<td>46.00</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>58.00</td>
</tr>
<tr>
<td>Parent</td>
<td>43.00</td>
</tr>
</tbody>
</table>

Note: **p ≤ .01 *p ≤ .05

Fidelity Scores

Treatment fidelity of the *Strong Start* curriculum was evaluated using lesson checklists provided in the *Strong Start* manual (Whitcomb & Parisi-Damico, 2016). The fidelity checklist was completed by a certified school psychologist during each of the ten lessons taught by the researcher. Fidelity ratings were consistently high across all the lessons at 100% accuracy. This means that all the essential components of each lesson
were implemented as designed and described in the *Strong Start* manual. Hence, the hypothesis that the lessons were implemented with high fidelity was supported.

Table 4

*Fidelity Ratings of Strong Start Lessons*

<table>
<thead>
<tr>
<th>Lessons</th>
<th>Fidelity Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>
Teacher Survey Results

After the completion of the Strong Start lessons, the teacher of the treatment group was given a survey to complete with the SEARS post-test ratings. The survey consisted of seven questions pertaining to her opinion of the program, and how she thought it affected her students. Her opinion of Strong Start was very positive. She rated it as very effective (rating =10, on a scale of 1 to 10 with 10 as the highest) in increasing her students’ social-emotional skills, and that she witnessed her students using the skills and strategies taught in the program. She said that she would use the program again. When asked what she would change about the program, she wrote that she wished it could have been longer.
Chapter 5
Discussion, Conclusion, and Recommendations

Discussion

The results of this study supported the use of the *Strong Start- Grades K-2* as an effective SEL curriculum in the school environment for second grade students. The social-emotional skills for the students significantly increased in the school environment as evidenced by the SEARS ratings given by the teacher. This is consistent with prior research of the *Strong Start* curriculum when used with second grade students (Caldarella et al., 2009). The findings of the current study did not fully support the *Strong Start* curriculum is effective in improving the social-emotional competence of children in the home environment. However, *Strong Start* program can have potential to directly improve social-emotional skills of children in the home environment. The current study uncovered two evidences supporting this claim. First, parents’ SEARS ratings of children who completed the *Strong Start* lessons increased from pretest to posttest, albeit not statistically significant. Second, there was a marginal significant difference between the parents’ SEARS posttest ratings of children in the treatment and comparison groups, with children in the treatment group somewhat higher in social-emotional competence. This suggests that a SEL program that specifically targets social-emotional skills in the home can be promising to improve social-emotional adjustment of children.

It is important to note that this study did not only promote the use of *Strong Start* but also supported social-emotional skills such as self-regulation, social competence, empathy, and responsibility (Merrell, 2011) that can be taught in a structured classroom environment. These skills have been shown to build resilience, increase prosocial
behaviors, wellness, self-esteem, and promote positive mental health (CASEL, 2017; Merrell & Gueldner, 2010; Whitcomb & Parisi-Damico, 2016). Furthermore, all of these are essential in establishing and maintaining healthy relationships with peers and adults. Moreover, social-emotional skills impact academic success and personal endeavors of children and possibly their career pursuits in the future (Habib, 2015).

Conclusion

In conclusion, the Strong Start program was effective in promoting the social-emotional skill of the students in the school environment. Strong Start program can have potential to improve the social-emotional skills of the students in the home environment. Lastly, effectiveness of Strong Start curriculum is facilitated by high treatment fidelity.

Recommendations

Strong Start provides two booster lessons, which were not completed as a part of this study. This may impact the reinforcement of the lessons. It would be beneficial for future studies to include these booster lessons and complete a delayed assessment to see if the results are consistent for an extended period of time after the program has been completed.

Since the treatment group consisted of an inclusive classroom, and the results showed a significant increase in social-emotional skills, it can be assumed that Strong Start is also effective for students who are receiving special education services (IEP or 504 plan). A study focusing on Strong Start’s effectiveness for special education students would expand the research to include a broader range of students.
Overall, this study has shown that *Strong Start program* is an effective SEL curriculum for second grade students in the classroom environment. Teachers may be able to integrate this brief and practical program into their classroom schedule to help students improve social emotional skills, prosocial behaviors, and self-regulation.
References


