CORRELATION BETWEEN SOCIAL-EMOTIONAL COMPETENCIES AND ACADEMIC PERFORMANCE

by

Sherria LaShontae Burney

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University

2022

CORRELATION BETWEEN SOCIAL-EMOTIONAL COMPETENCIES AND ACADEMIC PERFORMANCE

by Sherria LaShontae Burney

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University, Lynchburg, VA

2022

APPROVED BY:

Dr. Richard S. Jensen, Jr., Committee Chair

Dr. Michelle Barthlow, Committee Member

ABSTRACT

The purpose of the correlational research study was to evaluate the relationship between Social-Emotional Learning (SEL) interventions and academic performance. The significance of the research study is that it addressed the literature gap in determining if social-emotional competencies are associated with academic performance. The research study included 62 third-grade students in an elementary school in an urban school district in the Southeastern region of the United States. The predictor variables, which are self-awareness, social awareness, self-management, responsible decision-making, and relationship skills, were measured using the Social Skills Improvement System- Social Emotional Learning Rating Form (SSIS-SEL RF). The criterion variable, academic performance, was measured using the Renaissance STAR reading and math assessments. The Renaissance STAR assessments were administered by the teachers at the end of the participants' third-grade school year, and the SSIS-SEL-RF was administered by the teachers at the beginning of the participants' fourth-grade school year. The STAR data was collected from the principal. The study measured the students' reading and math proficiency and social-emotional competence as outlined by the Collaborative, Academics, Social, and Emotional Learning (CASEL) to determine if there's a relationship between the variables using multiple regression analysis using SPSS Statistics. The results of the study suggested that there is no statistical relationship between social-emotional competence and the academic performance of third-grade students in an urban public school setting.

Keywords: social-emotional competencies, social-emotional learning, Leader in Me, interventions, academic performance

Copyright Page

Dedication

This manuscript is dedicated to my family, friends, and the students I've taught throughout my years of service.

Acknowledgments

I express my gratitude for the prayers and support of my family and friends, which have helped me persevere throughout the journey.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Collaborating States Initiatives (CSI)

Collaborative for Academic, Social, and Emotional Learning (CASEL)

Emotional Intelligence (EI)

Every Student Succeeds Act (ESSA)

Leader in Me (LIM)

Multi-Tiered System of Supports (MTSS)

National Center for Education Statistics (NCES)

Social-Emotional Learning (SEL)

Social Skills Improvement System Classwide Intervention Program (SSIS-CIP)

Social Skills Improvement System Social-Emotional Learning Edition Rating Form (SSIS-SEL-RF)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this quantitative, predictive correlational research study is to determine if there is a relationship between social-emotional competencies and the academic performance of third-grade students in an urban, public-school setting. This chapter provides background information regarding the issues and changes in education and how Social-Emotional Learning (SEL) has evolved over the decades, especially in the public school system. The background section expounds upon the theoretical framework that supports the purpose, problem, and research questions for this quantitative, correlational research study.

Background

The nationwide concern about high rates of disproportionate disciplinary infractions, zero-tolerance policies, and mental health issues in schools led to federal and state reforms (Gregory & Fergus, 2017). Specifically, research suggests that African American male students are more likely to receive a disciplinary infraction (i.e., out-of-school suspension, expulsion, etc.) than White students (Morgan, 2021; Gregory & Fergus, 2017). Some researchers suggest that disproportionate disciplinary infractions and zero-tolerance policies are more prevalent in urban school districts, for which this research study will be conducted (Morgan, 2021).

Additionally, some researchers contribute disproportionate rates of school suspensions and expulsions to the school-to-prison pipeline (Morgan, 2021). The school-to-prison pipeline refers to the movement of minority students from schools and communities to a permanent environment of detention due to harsh disciplinary or zero-tolerance policies (Scott, 2017). The impact of disciplinary infractions, poor academic performance, and the juvenile system are interconnected (Gregory & Fergus, 2017). Some school districts have implemented SEL

interventions as an alternative to increase learning and decrease discipline disparities (Gregory & Fergus, 2017).

Historical Overview

Tienken (2021) compared Social-Emotional Learning (SEL) in the 1800s according to John Dewey's educational philosophy and some of the findings from recent research studies involving SEL in schools today around the world. According to Tienken (2021), SEL was part of John Dewey's (1902) philosophy of learning, and that learning is authentic when it is active and involves opportunities for students to engage in experiences in which the students use their social and emotional instincts. Some of the most recent research findings include neuroscience, which involves the cognitive processes that affect students' social-emotional competence and stress-related factors that negatively impact children's mental health (Tienken, 2021).

SEL has evolved in education over the years since the 1990s (Hoffman, 2009). SEL is defined as the process of students accessing the knowledge and skills to enhance social-emotional competencies (Oberle et al., 2016). The Collaborative for Academic, Social, and Emotional Learning (CASEL) developed and organized five social-emotional competencies (Lawson et al., 2019). The social-emotional competencies include self-awareness, self-management, social awareness, developing and maintaining relationships, and making responsible decisions (Lawson et al., 2019). There is research that asserts that SEL has a positive impact on students' social-emotional competence and academic performance (Taylor et al., 2017; Durlak et al., 2011). However, other studies conclude that the results are mixed (Hunter et al., 2020; Hart et al., 2020; Goldberg et al., 2019).

There is also evidence from meta-analyses that suggest that universal SEL interventions improve behavior and social-emotional skills and decreases emotional distress and conduct problems (Murano et al., 2020).

Society-at-large

Although the Every Student Succeeds Act (ESSA) has made changes that allow more flexibility to implement SEL programs, it does not explicitly mandate states to implement SEL programs (Gregory & Fergus, 2017). Therefore, there is a lack of implementation across states (Gregory & Fergus, 2017). The emergence of a global pandemic, the spread of the COVID-19 virus, and the transition to remote learning have caused many stakeholders to become concerned about the students' social-emotional well-being and academic performance (Willis, 2021). Both variables are significantly important in the field of education and student outcomes.

Social and emotional skills are critical in the school setting and in life to help students become successful and productive citizens in society (Mahoney et al., 2021). These skills are needed in schools to teach students how to develop the social-emotional skills needed to handle stressors, the demands of learning a rigorous curriculum at a fast pace, remote learning, and meet the demand of passing state-mandated assessments. Some research studies suggested that students who have social-emotional skills aligned with the core competencies developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL) impact student outcomes (Oberle et al., 2016). The social-emotional learning skills CASEL emphasizes are Self-Awareness, Self-Management, Social Awareness, Relationship Skills, and Responsible Decision-Making (Oberle et al., 2016). According to Kendziora and Osher (2016), there continues to be a lack of understanding of SEL and consistency in research regarding the impact SEL has on students' social-emotional competence and academic performance.

According to Reicher and Matischek-Jauk (2019), many people support SEL as an intervention to address students' mental health because it addresses social exclusion by promoting social inclusion. Social inclusion is encouraged through the five competencies of SEL identified by CASEL (Matischeck-Jauk, 2019). The social-emotional competencies are Self-Awareness, Social Awareness, Self-Management, Responsible Decision-Making, and Relationship Skills (Matischeck-Jauk, 2019).

Factors such as school dropouts, suicide, increased delinquent behaviors and academic performance, and difficulties in relationships are associated with poor mental health (Dowling et al., 2019). Research suggests that SEL interventions that are implemented schoolwide in addition to other classroom-based programs are likely to improve these risk factors associated with mental health (Dowling et al., 2019). Domitrovich et al. (2017) also found there are benefits of teaching intrapersonal and interpersonal competencies in SEL interventions to students, especially those at risk and from low-income families, and research has proven positive outcomes involving academic achievement and prosocial behaviors in youth and adulthood.

Willis (2021) highlights the connection between stress, social-emotional learning, and brain activity through neuroscience research. When considering the social-emotional wellbeing of human beings, especially students, it is essential to note the impact stress has on the body, particularly the brain (Willis, 2021). Willis (2021) emphasizes the function of the amygdala in the brain and how it specifically impacts information processing and input, which ultimately affects the information transferred to the prefrontal cortex. The blockade of the amygdala negatively impacts behavior, cognitive responses, executive functioning, and emotional self-management (Willis, 2021).

Consequently, when the amygdala is significantly impacted, the physiological and emotional responses a student experiences are presented in the form of behaviors, such as inattention or disruptive behavior (Willis, 2021). The educational staff in schools could misinterpret these negative behaviors as intentional behaviors instead of the physiological and emotional response to the brain's amygdala blockage (Willis, 2021). It is important for students and teachers to become knowledgeable and understand how stress impacts the body, the amygdala, and learning (Willis, 2021). High-quality Social-Emotional Learning (SEL) interventions positively impact students' mental health problems (Bailey et al., 2021; Panayiotou et al., 2019). Factors such as a consistently high level of implementation, implementation fidelity, and participant responsiveness correlate with better student outcomes when implementing a high-quality SEL intervention (Bailey et al., 2021). A consistently high level of implementation of an SEL program is recommended as Bailey et al. (2021) found that some schools were not implementing the appropriate number of sessions as recommended by the SEL program.

Khazanchi et al. (2021) stated that some of the benefits of implementing SEL interventions are enhancing student academic performance, teacher-student relationships, positive behavior, and deeper learning. According to Khazanchi et al. (2021), a lack of SEL intervention negatively impacts student behavior and academic performance. Implementing SEL interventions effectively can be achieved through the following strategies: explicit instruction, integrating the SEL competencies into the curriculum, establishing a positive classroom environment, and utilizing evidence-based practices for SEL (Khazanchi et al., 2021). Also, ongoing professional development for staff is essential in successfully implementing SEL

programming (Khazanchi et al., 2021). Integrating SEL into the school's daily operations is most effective when it is embedded in meaningful ways (Khazanchi et al., 2021).

Theoretical Background

Social-Emotional Learning is theoretically based on the Emotional Intelligence (EI) theory and the Achievement Goal theory (Brackett et al., 2016). EI is the ability to become aware, perceive, understand, and manage one's emotions to enhance thinking and decision-making in achieving personal and social goals (Brackett et al., 2019; Sadri, 2012). Mayer, Salovey, and Caruso's model of EI involves several levels (Sadri, 2012). The first skill includes perceiving or recognizing emotions through self-awareness and perceiving the emotions of others through observing human behavior and determining the meaning of such behaviors (Sadri, 2012). The next level involves understanding emotions in which critical thinking, problem-solving, and resolution influence the decisions that are made (Brackett et al., 2019; Sadri, 2012). The third level of EI is labeling emotions which involve the capacity to understand emotions as well as recognizing any changes in emotions and determining why those changes in emotions occurred (Brackett et al., 2019; Sadri, 2012). The fourth level of EI is the expression of emotions in which one uses knowledge and understanding of emotions to express their emotions based on the situation while considering the culture and context (Brackett et al., 2019). Lastly, the fifth level of EI is the regulation of emotions, in which one learns and applies strategies to manage emotions in a productive manner (Brackett et al., 2019).

Additionally, SEL is associated with the Achievement Goal theory as both are associated with self-efficacy, motivation, growth mindset, goal setting, self-awareness, self-management, and responsible decision-making (Schunk, 2020). Achievement goal theory influences student behavior in academic situations (Schunk, 2020). It influences student behavior, motivation,

attention, self-regulation, engagement, and academic performance (Schunk, 2020). As students set learning goals with a growth mindset and make progress, there is an improvement in motivation, engagement, and self-efficacy (Schunk, 2020). Dowson and Harvey (2003) described achievement goal theory as cognitive representations of students' purpose for learning in an academic situation. The cognitive representations affect the student's cognitive patterns and learning behaviors when engaged in academic activities (Dowson & Harvey, 2003).

Achievement goal theory includes different subsets, which include mastery goal orientation, performance goal orientation, and social orientation (Schunk, 2020; Dowson & Harvey, 2003). According to Dowson and Harvey (2003), mastery goal orientation is the motivation to learn to increase knowledge and understanding in academic situations. Performance goal orientation is the motivation to enhance learning in comparison to others (Dowson & Harvey, 2003). It involves the viewpoint of competing and outperforming others (Dowson & Harvey, 2003). Demonstrating mastery orientation is more likely to recall more important information as opposed to performance orientation (Dowson & Harvey, 2003). Social orientation is a motivation to increase learning to help others in academic situations (Dowson & Harvey, 2003).

Sousa (2021) recommends using an integrated approach to teaching SEL skills and says that teaching social-emotional skills separately from academics is not as effective as an integrated approach. Further, providing opportunities for students to learn in small academic teams increases the likelihood of improving prosocial behaviors, self-management, and conflict resolution (Sousa, 2021). However, it is essential that students are given instructional tasks that are relevant and rigorous, thus, creating the need to empathize and rely on their team members (Sousa, 2021). Moreover, this can be difficult to accomplish if the classroom climate is not

conducive to learning, and a positive emotional climate is needed to build students' social-emotional competence and cognitive skills (Sousa, 2021).

Additionally, CASEL has developed the Collaborating States Initiative to assist states and school districts with SEL implementation (Khazanchi et al., 2021). This includes developing state policies, guidelines, and SEL standards across all states beyond preschool (Khazanchi et al., 2021). Although all states have preschool SEL standards, only a few states have SEL standards for grades

K-12 (Khazanchi et al., 2021). CASEL has been instrumental in the development and implementation of the Collaborating Districts Initiative (CDI) to promote social-emotional learning (SEL) for students in the educational setting (Kendziora & Osher, 2016). According to Low et al. (2019), academic performance is an indirect outcome of implementing an SEL program, even for young students in preschool and Kindergarten (Murano et al., 2020). Gershon and Pellitteri (2018) stated that "Children's emotional knowledge predicts school outcomes, mediates the predictive association between interpersonal relationships and academics, and is mediated by social-emotional behaviors in its prediction of school outcomes." (p. 30).

A small number of studies measure the impact SEL interventions have on academic performance; however, further research in this area is needed (Goldberg et al., 2019). SEL interventions yield more positive results when implemented schoolwide as opposed to partial implementation in a school because it is integrated into the daily operations of a school and the school climate and culture (Oberle et al., 2016).

CASEL provides guidance on selecting programs that promote the improvement of students' social-emotional competence. An evaluation metric used to evaluate the evidence criteria, which include research design used, research setting, statistical findings, and the

outcomes to determine if a program meets the criteria to be endorsed as an SEL program by CASEL (Collaborative for Academics, Social, and Emotional Learning [CASEL], n.d.). According to CASEL (n.d.), a program could be designated as SELect, Promising, or SEL-Supportive. A program is designated as a SELect program if the program is designed to improve students' social-emotional competence (i.e., positive social behavior, reduced problem behavior, reduced emotional distress, improved student-reported identify, improved school connectedness, and improved school climate) through multiple years of programming, high-quality training, and supports for implementing the program (CASEL, n.d.). A program designated as a Promising SEL program is based on improvement in academic performance, SEL skills and attitudes, improvement in teaching practices, and adolescent programing (CASEL, n.d.). Additionally, if the program does not meet the criteria set for the SELect program but demonstrates SELect evaluation outcomes, then the program can be designated as Promising (CASEL, n.d.). Programs that do not fully meet the program design criteria but meet the criteria for improving student and teacher outcomes are designated as SEL-Supportive programs (CASEL, n.d.).

According to CASEL (n.d.), a program meets the criteria for Promising designation if the program is designed to improve students' social-emotional competence and the outcomes include: improved academic performance, SEL skills and attitude, and teaching practices. According to CASEL (n.d.), a program is designated as SEL-Supportive when a program meets the criteria for SELect and Promising designation due to the evidence criteria only. CASEL has recently endorsed the LIM program as a SELect program for preschool and elementary students (Logan, 2018).

Leader in Me

The Leader in Me (LIM) program is a program that was developed based on principles from Dr. Stephen Covey's book (1987), *The Seven Habits of Highly Effective People* and is designed to improve a school's leadership, culture, and student achievement (Wilkens & Wilmore, 2015). The LIM program explains that challenges such as leadership, academic performance, and school culture are interconnected (Leader in Me, n.d.). The LIM program addresses these challenges by having the teachers teach and model leadership and social-emotional skills based on five paradigms while partnering with the students' families and community members using an integrated approach (Leader in Me, n.d.). The paradigms are as follows: Everyone has the capability of becoming a leader; Genius exists in everyone; Change must start with the individual or self; Students must be taught to have leadership and some autonomy in their learning; and that teaching and learning should encompass the "whole" person (Leader in Me, n.d.).

Some researchers suggest that most SEL programs only focus on improving the social-emotional competence of students and not the teachers that work with the students (Gregory & Fergus, 2017). However, the Leader in Me's SEL curriculum instills personal and interpersonal leadership skills in not only the students but also teachers, community members, and the families of the students (Leader in Me, n.d.). This is important to note as research suggests that teachers' social-emotional competence impacts student motivation in school as well as the school's climate (Gregory & Fergus, 2017). Building leadership skills, in turn, builds emotional competence (Wilkens & Wilmore, 2015; Covey, 2008). Therefore, the Leader in Me SEL curriculum develops students' social-emotional competence, which is aligned with CASEL's social-emotional competencies and meets the criteria for SELect designation (Leader in Me, n.d.).

Additionally, the LIM program positively impacts areas such as leadership, culture, and academics (Leader in Me, n.d.). According to Leader in Me (n.d.), implementing the LIM program improves reading proficiency, math proficiency, student-led learning, and teaching efficacy.

Problem Statement

There are several gaps in the literature regarding the impact social-emotional learning has on academic performance. Although research involving the impact SEL has on academic performance has increased over the years, there is a lack of clarity on the actual impact SEL has on improving academic performance (Goldberg et al., 2019). The mixed results may be a contributing factor to the lack of implementation across the United States. Research studies yielded results indicating that SEL programming does not impact academic performance (Hart et al., 2020; Goldberg et al., 2019). Taylor et al. (2017) conducted a meta-analysis to follow up on the results from Durlak et al.'s (2011) study to determine the impact SEL interventions have on student outcomes and address gaps in the previous meta-analysis. According to Taylor et al. (2017), after follow-up periods from 56-195 weeks of implementing a universal SEL intervention program, prosocial behavior and academic performance were positively impacted. However, it was noted that all SEL programs are not effective in achieving such outcomes (Taylor et al., 2017).

Like Hart et al. (2020), Goldberg et al. (2019) suggest that more research is needed to determine the impact SEL interventions have on academic performance. The problem is some research studies suggest that universal SEL interventions improve students' academic performance, and some studies suggest that SEL interventions have no impact on academic performance; more research is needed to determine if there's a relationship between social-

emotional competencies and academic performance (i.e., reading and math proficiency) (Hart et al., 2020; Goldberg et al., 2019; Wolf & McCoy, 2019). Specifically, the problem is there is little research that suggests that there is a correlation between social-emotional competencies through the implementation of the SEL program, Leader in Me, and academic performance (Bennett, 2020).

Purpose Statement

The purpose of this quantitative, predictive correlational study is to determine if a relationship exists between social-emotional learning competencies and the academic performance of third-grade students in an urban public-school setting. The study will use the correlational research design to determine if there is a relationship between reading proficiency, math proficiency, and social-emotional learning competencies. The predictor variable is third-grade students' social-emotional competencies which include self-awareness, self-management, social awareness, responsible decision-making, and relationship skills (Eklund et al., 2018). The criterion variable is academic performance as measured by reading and math scores. The research study included third-grade students in the public-school setting in an urban school district. The predictor variables included in this study are self-awareness, self-management, social awareness, responsible decision-making, and relationship skills (Eklund et al., 2018).

According to CASEL (n.d.), self-awareness refers to understanding your own emotions, thoughts, and values. On the other hand, social awareness is understanding others' emotions and perspectives with different cultures and backgrounds through empathy (CASEL, n.d.). Self-management refers to one's ability to control your own emotions and behaviors to achieve personal goals and aspirations (CASEL, n.d.). Responsible decision-making refers to having the ability and skillset to make choices that are caring and conducive to the wellbeing of self and

others across diverse situations (CASEL, n.d.). Relationship skills refer to building and maintaining healthy relationships with others from diverse backgrounds (CASEL, n.d.).

The study addressed the literature gap that suggests that the results of research studies that evaluated the impact SEL interventions have on academic performance are mixed (Goldberg et al., 2019). Further, researchers suggest that more research is needed to determine the mechanisms that link SEL competencies to academic performance (Hart et al., 2020; Goldberg et al., 2019; Legkauskas et al., 2019; Wolf & McCoy, 2019).

Significance of the Study

In today's society, students are faced with many pressures, such as anxiety regarding passing statewide assessments (Willis, 2021). With the recent events regarding the COVID-19 pandemic and the sudden transition to remote learning, Social-Emotional Learning has been a major topic in the educational field (Willis, 2021). Learning from home, the rise in COVID-19 cases, deaths, and limitations in social interactions with others caused tremendous stress on students and their families. The negative impact of the pandemic caused many individuals to have concerns about students' social-emotional wellbeing (Willis, 2021).

Additionally, students are faced with peer pressure, bullying, and temptations that lead to poor decisions and unfavorable consequences. Statistics have associated reading proficiency in employment with the quality of life in adulthood (Hurford et al., 2016). Hurford et al. explained how the lack of reading proficiency did not have as much effect on the ability to gain employment as it does today. Reading proficiency is a national problem in the United States and is more prevalent in students from communities with a low socio-economic status (SES) (Fiester, 2009).

Reading proficiency deficits continue to be an area of concern in the United States, and one of the specific areas of concern is reading fluency which in turn impacts reading comprehension (Rasinski et al., 2017). When reading deficits are not addressed in elementary grades, particularly by third grade, students continue to have difficulties with reading throughout middle and high school (Rasinski et al., 2017). It is important to note that third-grade reading proficiency is used to predict high school graduation rates (Rasinski et al., 2017). Further, there are many causes for low reading proficiency, but some of the most notable areas of concern are learning loss during the summer and that students from communities with low socio-economic status are more prevalent in low reading proficiency due to limited opportunities (Rasinski et al., 2017).

Although some students are nominally proficient in third-grade reading, deficits in reading skills still negatively impact their fourth-grade performance (Fiester, 2009). One educational factor that has been associated with this problem is states setting low standards and each state having the autonomy to use its own assessment to measure reading proficiency (Fiester, 2009). Improving reading proficiency for all students is critical because low reading proficiency is associated with school dropout, and improving reading proficiency helps prepare students to assume the roles of citizenship and adulthood (Fiester, 2009).

Some of the causes for low reading proficiency of students from communities with low SES include chronic absenteeism, learning loss during the summers, and lack of preparedness in cognitive skills, social-emotional skills, and physical needs from birth to third grade (Fiester, 2009). African American male students are most impacted by low reading proficiency rates (Whaley et al., 2019). Failure to read at an appropriate and expected reading level by the end of third grade puts students, particularly African American male students, at a more significant

level of risk of academic failure (Whaley et al., 2019). Research suggests that student-teacher relationships are associated with academic performance (Whaley et al., 2019). Whaley et al. (2019) suggest that creating a safe and secure educational environment could impact students' behaviors, which could, in turn, positively impact learning for African American male students.

Providing high-quality learning opportunities for equitable education is one of the most critical areas of concern in improving reading proficiency (Fiester, 2009). Additionally, there is evidence that improving students' social-emotional competence positively impacts students who live in poverty (Murano et al., 2020). Moreover, there's research that suggests that SEL interventions have the most impact on at-risk students (Bailey et al., 2021). Social-emotional competence, reading proficiency, and math proficiency are critical needs of students. Researchers suggest that students benefit from SEL interventions by gaining the necessary skills (e.g., social-emotional competencies) needed at school and independent living, such as problem-solving skills, conflict resolution, and teaching students to practice exercising their civic duty (Garner et al., 2014). SEL interventions could improve African American students' referral rates to special education services (McCormick et al., 2019).

This study focused on examining if students' academic performance and social-emotional well-being are improved through the implementation of a universal SEL intervention. Considering the climate we are currently living in, involving the spread of COVID-19, remote learning, and the heightened awareness of the digital divide, many students are struggling with their academics. The isolation and drastic change have negatively impacted their social-emotional well-being. The research study evaluated the relationship between social-emotional competencies and academic performance.

This study added to the existing literature by addressing the mixed results from studies that evaluated if SEL interventions positively impact academic performance. The research study addressed the problems that may have caused contradictory results by targeting specific measures such as measuring reading proficiency, math proficiency, and social-emotional competencies as outlined by CASEL (Jones & Doolittle, 2017). The target population was third grade students in the public school system in an urban school district.

Research Question(s)

RQ1: How accurately can third-grade students' reading proficiency scores be predicted from a linear combination of social-emotional competencies?

RQ2: How accurately can third-grade students' math proficiency scores be predicted from a linear combination of social-emotional competencies?

Definitions

1. *Collaborative for Academic, Social, and Emotional Learning (CASEL)*: CASEL is an organization that is responsible for the development and continued research and programming in SEL practices (Eklund et al., 2018).
2. *Emotional Intelligence (EI)*: Brackett et al. (2019) defined emotional intelligence as processing information based on individuals' thoughts and behavior about information to accomplish their goals. Further, emotional intelligence is needed to apply the necessary skills that are not contradictory to social norms (Brackett et al., 2019).
3. *Every Student Succeeds Act (ESSA)*: U.S. federal policy in which the Elementary Secondary Education Act was reauthorized in 2015 (Gregory & Fergus, 2017).
4. *Multi-Tiered System of Supports (MTSS)*: a framework that applies a systematic approach to provide tiered layers of support through universal, targeted, and intensive interventions

to support the academic, behavioral, and social-emotional needs of students that intensifies based on the needs of the student as determined by data (Eklund et al., 2018; Gregory & Fergus, 2017).

5. *Relationship Skills*: To acquire and maintain healthy relationships through clear communication, cooperation with others, conflict resolution, and requesting help when needed (Eklund et al., 2018).
6. *Responsible Decision-Making*: The ability to make proper choices about one's behavior and interactions with others, considering the safety of self and others, ethics, and social norms (Eklund et al., 2018).
7. *Self-Awareness*: The ability to identify one's thoughts, feelings, attitudes, behaviors, strengths, and weaknesses with a capacity to demonstrate a growth mindset (Eklund et al., 2018).
8. *Self-Management*: The self-regulation of emotions, thoughts, and behaviors in various situations, including setting and working towards personal and academic goals (Eklund et al., 2018).
9. *Social Awareness*: The ability to demonstrate empathy with diverse individuals and groups, including the ability to understand the expectations for socially acceptable behaviors (Eklund et al., 2018).
10. *Social-Emotional Learning (SEL)*: The process of students accessing the knowledge and skills to enhance social-emotional competencies (Oberle et al., 2016).
11. *Social Skills Improvement System Social-Emotional Learning Edition Rating Form (SSIS-SEL-RF)*: The SSIS-SEL-RF is a norm-referenced behavior rating scale with 46 items

used to assess students' social-emotional competence (Anthony et al., 2020; Collaborative for Academic, Social, and Emotional Learning, n.d.).

12. *School-to-Prison Pipeline*: movement of minority students from the schools and communities to a permanent environment of detention due to harsh disciplinary or zero-tolerance policies (Scott, 2017).
13. *School-Wide Approach*: According to Goldberg et al. (2019), a schoolwide approach is defined as integrating skills and practices into daily operations through a collaboration involving all stakeholders (e.g., teachers, staff, students, families, and community members).

CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this literature review is to provide a synopsis of the existing literature regarding the mixed results of the impact social-emotional learning has on students' academic performance in reading and math. This chapter provides an in-depth description of the theoretical basis for conducting this quantitative correlational research study. This correlational research study is based on the achievement goal theory and emotional intelligence. An extensive review of these theoretical frameworks, as well as a synthesis of the results of the existing literature, are provided. Additionally, literature gaps are identified, and the chapter ends with a summary of the research findings.

Theoretical Framework

Social-Emotional Learning (SEL) has progressed in education over the years since the 1990s (Khazanchi et al., 2021; Hoffman, 2009). Although research involving the impact SEL has on academic performance has increased over the years, there is a lack of clarity on whether social-emotional competencies are associated with academic performance (Hoffman, 2009). According to Goldberg et al. (2019), the results of research studies that examined the impact schoolwide SEL programming has on academic performance are mixed. On the other hand, Durlak et al. (2011) also conducted a meta-analysis and determined that schoolwide SEL interventions positively impact academic performance. Specifically, positive attitudes, prosocial behavior, and emotional distress were also noted as positive outcomes of schoolwide SEL programs (Durlak et al., 2011). It is important to note that only 16% of the studies measured academic performance (Durlak et al., 2011).

The literature supports that SEL is comprised of more than one theory (Brackett et al., 2019). This supports the notion that SEL was developed decades ago but has evolved tremendously over the years (Wood, 2020). The theories include the emotional intelligence theory and the achievement goal theory (Schunk, 2020; Brackett et al., 2019).

Emotional Intelligence Theory

A theoretical basis of SEL is the Emotional Intelligence theory because SEL is based on the development, understanding, and management of emotional skills (Brackett et al., 2019; Gershon & Pellitteri, 2018). SEL was developed and has been used since the 1990s (Hoffman, 2009). According to Fiori and Vesely-Maillefer (2019), emotional intelligence was influenced by Thorndike's social intelligence and Gardner's interpretation of intrapersonal intelligence, but John Mayer and Peter Salovey developed emotional intelligence. According to Sadri (2012), Mayer and Salovey developed the notion that emotional intelligence is based on four levels of emotional ability. These levels of emotional ability include perceiving emotions, using emotions to facilitate thoughts, understanding emotions, and managing your emotions (Sadri, 2012). According to Brackett et al. (2019), emotional intelligence is the process of using an individual's thoughts and behaviors to apply the skills needed to accomplish goals that are not contradictory to societal norms. Moreover, the research suggests that emotions, thoughts, and behaviors are connected and that they impact learning, judgment, decision-making, and relationships (Brackett et al., 2019). It is suggested that SEL, including basic effectiveness skills (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making), predicts an individual's level of success through one’s career, education, and personal accomplishments (Turki et al., 2018).

Gershon and Pellitteri (2018) defined emotional intelligence theory in two components: emotional knowledge and emotional regulation. Emotional knowledge is attaining information about emotions to label and recognize the emotions of self and others (Gershon & Pellitteri, 2018). Emotional regulation was described as applying strategies to manage emotions (Gershon & Pellitteri, 2018). According to Fiori and Vesely-Maillefer (2019), Mayer and Salovey defined the emotional intelligence theory based on four branch models: perceiving emotions, managing emotions, understanding emotions, and facilitating thoughts using emotions. Both interpretations of emotional intelligence are similar in that it explains the theory as attaining knowledge about emotions and utilizing the knowledge to manage or regulate one's own emotions (Fiori & Vesely-Maillefer, 2019; Gershon & Pellitteri, 2018). Gershon and Pellitteri (2018) compartmentalize emotional intelligence, but Fiori and Vesely-Maillefer (2019) provided a deeper and more detailed interpretation of the process of emotional intelligence.

Brackett et al. (2016) referred to SEL as a systematic approach in which several areas of student outcomes, including emotional and academic skills, can be impacted by applying a combination of theories to develop skills that are aligned with the SEL competencies developed by the Collaborative for Academics, Social, and Emotional Learning (CASEL). The emotional knowledge component of emotional intelligence can be used to predict student outcomes and associations between academics and relationships (Gershon & Pellitteri, 2018).

Gershon and Pellitteri (2018) examined the impact four SEL programs have on student outcomes when emotional knowledge and emotional regulation are predictors. According to Gershon and Pellitteri (2018), emotional intelligence is associated with executive functioning skills and school readiness skills that are taught during the preschool age. The social-emotional skills, including emotional knowledge and emotional regulation, are essential in improving

students' academic performance, engagement, and social-emotional competence in later grades (Gershon & Pellitteri, 2018). The SEL programs that improved SEL skills are Promoting Alternative Thinking Strategies (PATHS), RULER, Als Pals, and Incredible Years (Gershon & Pellitteri, 2018). According to Brackett et al. (2019), RULER skills is an acronym that refers to Recognizing emotions, Understanding feelings, Label emotions, Express feelings, and Regulating emotions. Panayiotou et al. (2019) and Calhoun et al. (2020) also found that the PATHS curriculum positively impacted SEL skills. Moreover, the SEL programs incorporate emotional regulation (Gershon & Pellitteri, 2018). Gershon and Pellitteri (2018) suggested that RULER was the only SEL program that was effective in improving students' academic performance. RULER, PATHS, and Incredible Years are SEL programs that incorporate emotional knowledge and labeling (Gershon & Pellitteri, 2018).

Like Gershon and Pellitteri's (2018) study, this study examined the impact an SEL program has on students' academic performance. Also, Gershon and Pellitteri (2018) conveyed the association between the Emotional Intelligence theory and Social-Emotional Learning. It is important to note that Gershon and Pellitteri (2018) suggested that three out of four SEL programs were effective in improving students' academic performance. Gershon and Pellitteri's (2018) results regarding academic performance are consistent with the existing literature in that there are mixed results regarding the correlation between social-emotional competence and academic performance.

Achievement Goal Theory

Achievement goal theory influences student behavior in academic situations; It influences student motivation, attention, self-regulation, engagement, and academic performance (Schunk, 2020). Dowson and Harvey (2003) described achievement goal theory as cognitive

representations of the student's purpose for learning in an academic situation. As students set learning goals with a growth mindset and make progress toward achieving their goals, motivation, engagement, and self-efficacy improve (Schunk, 2020). The cognitive representations affect the student's cognitive patterns and learning behaviors when engaged in academic activities (Dowson & Harvey, 2003).

Research shows that achievement goals may be linked to academic adjustment at several educational levels; however, more research is needed to determine mediators that potentially exist between both variables (Duchesne & Ratelle, 2020; Turki et al., 2018). Mastery goal orientation is the motivation to learn to increase knowledge and understanding in academic situations (Dowson & Harvey, 2003). Learning goals are similar to mastery goals, but the learning goal orientation specifically involves the attainment and application of processes and strategies to improve students' capabilities and skills (Schunk, 2020). Further, applying learning goals increases the likelihood of students having a growth mindset in which they have a mindset that they can improve their abilities with time and effort (Schunk, 2020). Hence, learning goals impact self-efficacy, which consequently impacts motivation and self-regulation, which in turn impacts perceived progress, and this contributes to achievement gains (Schunk, 2020). It is important to note that one of the social-emotional competencies, self-awareness, emphasizes the ability to demonstrate a growth mindset (Eklund et al., 2018). Another social-emotional competency, self-management, involves setting and achieving personal and academic goals (Eklund et al., 2018).

Some researchers suggest that there is a link between the implementation of schoolwide SEL and writing and that there may be a correlation between mastery goal orientation, writing, and self-efficacy (Fisher et al., 2019; MacArthur et al., 2016). The research study conducted by

MacArthur et al. (2016) implemented a self-regulatory strategy for college students enrolled in a remedial course and found that the strategy improved students' mastery goal orientation. The self-regulatory strategy included explicit instruction in which writing strategies were implemented in discussions, thinking practices, memorization, collaboration, and support in small groups (Fisher et al., 2019; MacArthur et al., 2016).

Performance goal orientation is the motivation to enhance learning in comparison to others (Dowson & Harvey, 2003). It involves the viewpoint of competing and outperforming others (Dowson & Harvey, 2003). Demonstrating mastery orientation is more likely to recall more important information as opposed to performance orientation (Dowson & Harvey, 2003). Social orientation is a motivation to increase learning to help others in academic situations (Dowson & Harvey, 2003). Moreover, research supports the notion that achievement goals may impact students' study habits and learning (Schunk, 2020).

Achievement goal theory is directly associated with this research study as both involve the process of how social-emotional skills (e.g., self-awareness, self-regulation, social awareness, relationship skills, and responsible decision-making) impact student outcomes. This quantitative correlational research study determined if social-emotional competencies were associated with the academic performance of third-grade students in a rural public-school setting. Additionally, this research study focused on the correlation between SEL and academic performance through the implementation of a schoolwide SEL program in which students learned social-emotional skills outlined by CASEL.

Related Literature

Social-Emotional Learning Defined

Social-Emotional Learning (SEL) refers to the process of attaining knowledge and skills about one's emotions and the emotions of others that involve regulating emotions, empathizing with others, setting and accomplishing goals, developing and maintaining relationships, and making responsible decisions that impact the well-being of self and others (CASEL, n.d.). SEL is comprised of five social-emotional competencies in which emotional knowledge and skills are fostered in communities, families, schools, and classrooms (CASEL, n.d.). The social-emotional competencies are self-awareness, self-management, social awareness, responsible decision-making, and relationship skills (CASEL, n.d.). The purpose of the SEL framework, as defined by CASEL (n.d.), is to develop essential skills to enhance students' learning, development, and environment.

Self-Awareness

Self-awareness refers to the ability to identify one's thoughts, feelings, attitudes, behaviors, strengths, and weaknesses with a capacity to demonstrate a growth mindset (Eklund et al., 2018). Also, self-awareness involves self-efficacy and integrating one's personal identity and social identity (CASEL, n.d.). An individual that is self-aware is able to link feelings, values, and thoughts (CASEL, n.d.). Additionally, self-awareness involves recognizing your own personal and cultural assets while examining predispositions (CASEL, n.d.).

Self-Management

Self-Management is the self-regulation of emotions, thoughts, and behaviors in various situations, including setting and working toward personal and academic goals (Eklund et al., 2018). To achieve self-management, one can apply stress management strategies and apply self-

discipline (CASEL, n.d.). Setting and achieving goals require planning and organizational skills, taking the initiative, and self-motivation (CASEL, n.d.).

Social Awareness

Social awareness refers to the ability to demonstrate empathy with diverse individuals and groups, including the ability to understand the expectations for socially acceptable behaviors (Eklund et al., 2018). Social awareness also includes taking others' perspectives into consideration as well as the impact influences of organizations and systems have on behavior (CASEL, n.d.). To accomplish this, one must identify diversity in societal norms, including just and unjust norms (CASEL, n.d.).

Relationship Skills

According to Eklund et al. (2018), relationship skills refer to acquiring and maintaining relationships through clear communication, cooperation with others, conflict resolution, and requesting help when needed. Effective relationships require active listening and the ability to collaborate with others to negotiate a compromise (CASEL, n.d.). This includes advocating for the rights of others and resisting the temptation of giving in to negative social pressure (CASEL, n.d.). Establishing and maintaining positive relationships with others also require showing leadership skills amongst diverse individuals and groups (CASEL, n.d.).

Responsible Decision-Making

Responsible decision-making refers to making proper choices about one's behavior and interactions with others, considering the safety of others, ethics, and social norms (Eklund et al., 2018). Making responsible decisions requires a person to be able to analyze information and facts and use critical thinking skills to make reasonable judgments (CASEL, n.d.). Additionally, considering the well-being of self and others is essential in responsible decision-making

(CASEL, n.d.). This also includes considering the consequences of one's behavior when identifying solutions to problems (CASEL, n.d.).

There are evidence-based approaches to implementing a universal SEL intervention, two of which include person-centered and environmental-focused pathways (Rodriguez-Izquierdo, 2018). The person-centered approach builds students' social-emotional competence through SEL instruction and activities that teach students self-awareness, self-management, social awareness, responsible decision-making, and developing and maintaining positive relationships with others (Rodriguez-Izquierdo, 2018). On the other hand, an environmentally focused approach includes fostering an environment in which students are actively engaged in their learning and use responsive communication styles (Rodriguez-Izquierdo, 2018). The learning environment is caring and well-managed, with high student expectations, including parent and community partnerships (Rodriguez-Izquierdo, 2018).

Impact of Social-Emotional Learning

The existing literature on the impact SEL has on academic performance is mixed (Hart et al., 2020; Goldberg et al., 2019; Wolf & McCoy, 2019). Goldberg et al. (2019), Hoffman (2009), as well as Meyers and Hickory (2014) suggest that more research is needed to determine the impact SEL interventions have on academic performance. The inconsistency in the results of studies like Goldberg et al. (2019), Taylor et al. (2017), and Durlak et al. (2011) is a gap in the literature that needs further investigation. Students face many school stressors that are caused by many factors, including high-stakes testing, bullying, depression, and mental health (Reicher, 2019). Recently, the COVID-19 pandemic and a sudden transition to remote learning have become additional factor that negatively impacts students' academic performance (Willis, 2021).

Based on the existing literature, additional research is needed in several areas, and some researchers suggest that there are several barriers to implementing SEL interventions. For instance, researchers suggest further research is needed on academic and social-emotional outcomes, long-term impact, fidelity, components of implementing an SEL intervention schoolwide, and the mechanisms that link SEL and academic performance (Goldberg et al., 2019; Oberle et al., 2016). Also, there is a lack of schoolwide implementation of SEL interventions as a Tier I intervention in the Multi-Tiered System of Supports (MTSS) framework in public schools across the country (Eklund et al., 2018). The lack of implementation of SEL interventions impacts the existing literature. Gregory and Fergus (2017) expounded on the recent changes in the Every Student Succeeds Act (ESSA) that require states to reduce discipline infractions that result in suspensions that lead to students missing instruction. However, ESSA does not specify that districts must use SEL interventions (Gregory & Fergus, 2017). ESSA allows states to have the freedom to set an accountability system in place that would include an indicator for student success, which could include schoolwide SEL program implementation (Eklund et al., 2018). Some school districts, such as Syracuse (N.Y.) City School District, Denver (C.O.) Public Schools, and Cleveland (O.H.) Metropolitan School District, has implemented policies that increase the use of SEL interventions in schools (Gregory & Ferguson, 2017).

Some researchers suggest that social-emotional competencies positively impact academic performance (Legkauskas et al., 2019; Taylor et al., 2017; Durlak et al., 2011). The results of the longitudinal study conducted by Legkauskas et al. (2019) suggest that social competence was correlated with academic performance for students in the first grade and that social competence was the greatest predictive variable for academic scores. The results of Durlak et al.'s (2011)

meta-analyses suggest that SEL programming positively impacts academic performance. Although Durlak et al. 's (2011) meta-analysis suggested that universal SEL programming positively impacts academic performance, they also reported there was a lack of research studies available (Hart et al., 2020; Durlak et al., 2011). Both meta-analyses conducted by Goldberg et al. (2019) and Durlak et al. (2011) concluded that there were a small number of research studies, less than 20% of overall studies, that measured academic performance. Both meta-analyses had contrasting findings regarding the impact SEL programs had on academic performance; however, both meta-analyses recommended further research (Goldberg et al., 2019; Durlak et al., 2011). Hart et al. (2020) determined that a universal SEL program had a small but not significant impact on students' academic performance (reading and math) on state tests in the elementary setting.

Another barrier that affects SEL implementation is a lack of infrastructure in implementing schoolwide SEL interventions (Oberle et al., 2016). The shortage of SEL standards in grades K-12, benchmarks, funding, and resources in federal and state policies are barriers to the implementation of schoolwide SEL interventions (Oberle et al., 2016). All states have freestanding SEL standards for preschool; however, most states do not have SEL standards for grades K-12 (Eklund et al., 2018). The state of Georgia, in which the research study was conducted, has freestanding SEL standards for preschool for all SEL competencies except for Responsible Decision Making, but there are no SEL standards for grades K-12 or counseling that are aligned with the CASEL standards (Eklund et al., 2018). However, there are SEL standards that are aligned with CASEL standards for Health and P.E. (Eklund et al., 2018).

Dowling et al. (2019) suggest achieving this by monitoring the implementation fidelity of an SEL program that is classroom based in addition to a schoolwide approach. While more

research is needed to determine if there's a correlation between social-emotional competence and academic performance, some researchers suggest that educational factors positively impact academic achievement (Rodriguez-Izquierdo, 2018). Educational aspects, including positive teacher-student relationships and developing partnerships with parents, affect academic performance (Rodriguez-Izquierdo, 2018). Sousa (2021) suggests that educational factors affect the impact SEL has on academic performance, which includes teacher instructional practices and the classroom climate. Further, Lawson et al. (2019) suggested that social skills, identification of feelings, and behavioral coping skills are likely a few of the core components of SEL interventions that could contribute to positive student outcomes.

Although some studies have evaluated mechanisms such as executive function, further research is needed to increase the results' credibility and trustworthiness. Identifying the correlation between SEL and academic performance could address the literature gap regarding the mixed results of studies that evaluated the impact SEL interventions have on academic outcomes. Moreover, as the research study addressed the mixed results of previous studies and the gap in the literature regarding the misalignment of measures and targeted skills that was suggested by Jones and Doolittle (2017). It is also critically important to address the gap in the lack of cultural diversity in the literature involving schoolwide SEL interventions (Barnes, 2019). The culture of the participants that are selected to participate in the study should be considered when selecting an SEL intervention (Barnes, 2019). For instance, it would not be appropriate to use an SEL intervention that lacks African Americans cultural characteristics for sample participants that are predominantly African American. The SEL intervention should be culturally diverse to address the race and socioeconomic status of all participants involved in the study (Barnes, 2019; Taylor et al., 2017).

Cultural diversity is critical in developing students' social-emotional competence because students have different cultural backgrounds (Rodriguez-Izquierdo, 2018). Emotions are conditioned by an individual's culture, including relationships and the context in which an individual lives (Rodriguez-Izquierdo, 2018). Because of the cultural differences in the student population, a systematic approach is essential in the implementation of an SEL intervention (Rodriguez-Izquierdo, 2018). A systematic approach to promoting school transformation includes using a common vocabulary and teaching the same message with connected learning intentions so that all aspects of the school's practice are transformed (Rodriguez & Izquierdo, 2018).

Additionally, the existing body of literature suggests that more research is needed that includes adolescents, especially adolescents with disabilities (Domitrovich et al., 2017; Espelage et al., 2016). As students transition from elementary grades to middle and high school, the academic curriculum and expectations are more complex and increase in difficulty. Addressing the literature gap to provide clarity on the impact SEL interventions have on academic performance would significantly contribute to the existing literature.

Social-Emotional Learning Meta-Analyses

Dowling et al. (2019) reported that their study's results that analyzed the impact SEL interventions have on academic performance did not produce significant differences in academic performance, in contrast to previous research, according to Durlak et al.'s (2011) meta-analysis. Several researchers, such as West et al. (2020), have cited Durlak et al.'s (2011) meta-analysis to support that schoolwide SEL positively impacts academic performance. The purpose of Durlak et al.'s (2011) meta-analysis was to determine the effects universal SEL programs have on "social-emotional competencies, attitudes about self and others, positive social behavior,

emotional distress, and academic performance" (p. 407). Subsequently, Durlak et al. (2011) suggested that SEL programs have positive impacts on students in elementary, middle, and high school. Out of the 213 studies included in the meta-analysis, only 27 studies included high school students as participants (Durlak et al., 2011).

On the other hand, 120 of the 213 studies included participants from the elementary school setting (Durlak et al., 2011). The findings from Durlak et al.'s (2011) meta-analysis included mostly participants from the elementary school setting. There were few research studies conducted in high school (Durlak et al., 2011). Additionally, the findings concluded that SEL programming had a positive impact on academic performance with an 11-percentile -point gain (Durlak et al., 2011). However, out of the 213 studies in the meta-analysis, only 16% of the research studies measured academic performance (Durlak et al., 2011).

Goldberg et al.'s (2019) most recent meta-analysis included a smaller number of research studies, and it included a larger overall sample of participants than the meta-analysis conducted by Durlak et al. (2011). The study included 45 research studies with a sample of 496,299 (Goldberg et al., 2019) in comparison to Durlak et al.'s (2011) 213 research studies with a sample of 270,034 participants. The purpose of this meta-analysis was to determine the effects a schoolwide SEL program has on social-emotional competencies, behavior, and academic performance (Goldberg et al., 2019). Similar to the results of Durlak et al.'s (2011) meta-analysis, the results suggested that SEL programs have positive impacts on social-emotional skills, but also, there was a positive impact on behavior (Goldberg et al., 2019). In contrast, this meta-analysis found that implementing a universal SEL program had no significant impact on academic achievement (Goldberg et al., 2019).

Moreover, Taylor et al. (2017) conducted another meta-analysis to address the literature gaps identified in a previous meta-analysis by Durlak et al. (2011) that primarily focused on evaluating the impact SEL programs have on student outcomes. In contrast to the aforementioned meta-analyses (Goldberg et al., 2019; Durlak et al., 2011), Taylor et al. (2017) included 82 research studies with a sample of 97,406 students in elementary through secondary grades. It's important to note that data for academic performance was collected from grades and achievement test scores (Taylor et al., 2017). The results of the meta-analysis indicated that SEL interventions positively impacted long-term academic outcomes in 8 out of the 82 studies in the meta-analysis (Taylor et al., 2017). Additionally, the data from the meta-analysis suggests that students' social-emotional competencies improve academic performance and behavior (Taylor et al., 2017).

In contrast to Durlak et al.'s (2011) meta-analysis, Taylor et al. (2017) measured the impact social-emotional competencies have on different students based on their race and socioeconomic statuses and obtained data that suggests that SEL had positive impacts on students of different races and socioeconomic statuses. However, Graves et al. (2017) suggest that many SEL programs do not address real-life situations that African American students encounter. According to Graves et al. (2017), there are limited interventions that address the negative consequences and experiences African American males encounter in the public school system (i.e., overrepresentation of African American males identified as Emotionally and Behaviorally Disturbed in special education and discipline disparities).

Corcoran et al. (2018) also analyzed the relationship between social-emotional competencies and academic performance in elementary and secondary settings. The meta-analysis included 40 research studies (Corcoran et al., 2018), which was close to the number of

studies in Goldberg et al.'s (2019) meta-analysis. However, Corcoran et al. (2018) included over 55,000 participants in measuring math in 33 studies, reading in 35 studies, and science performance in five studies. Similar to Taylor et al. (2017) and Durlak et al.'s (2011) meta-analyses, the results indicated positive effects in the association between reading and math performance and social-emotional competencies (Corcoran et al., 2018). Jones et al. (2020) suggest that the results of research studies that evaluate the correlation between SEL and academic performance are inconsistent. Although there are substantial research studies that evaluated if social-emotional competencies are associated with academic performance, there is less empirical research that evaluates the correlation between the two variables regarding racial backgrounds.

Jones et al. (2020) indicated that there is inconsistency in defining SEL and SEL standards. Georgia has preschool SEL standards that are mostly aligned with the social-emotional competencies outlined by CASEL, but there are not SEL standards for grades Kindergarten through 12th (Eklund et al., 2018). Jones and Doolittle (2014) suggest that the lack of consensus about the definition of SEL competencies, lack of development of SEL standards, and misalignment of SEL intervention targets and outcomes may be contributing to the contradictory results in determining the impact of SEL interventions on student outcomes. Further, Jones et al. (2020) categorized SEL into different skills, such as emotional and cognitive processes and interpersonal skills. This correlational research study addressed this literature gap by using the Social Skills Improvement System Social-Emotional Learning Rating Form (SSIS-SEL-RF) assessment to measure students' social-emotional competence and the STAR reading and math assessments to measure the academic performance of students. Both standardized assessments were used to determine if social-emotional competence is correlated with students'

academic performance.

Jones et al. (2020) researched the relationship between SEL, school climate, and academic performance across racial groups. Based on the study's results, students of color reported lower social-emotional competence than their White peers (Jones et al., 2020). Additionally, there was a stronger relationship between SEL and academic performance (e.g., grades) for White students than for Black and Native American students (Jones et al., 2020). Jones et al. (2020) suggest that the results could have been impacted by a lack of cultural relevancy in SEL interventions. Additionally, a lack of access to high-quality SEL interventions across schools may be another contributing factor to the study's results (Jones et al., 2020). Oberle et al. (2016) suggest that more research is required to determine the mechanisms that link academic performance to social-emotional learning.

Panayiotou et al. (2019) addressed this literature gap by conducting a longitudinal research study to determine the mechanisms that link SEL and academic performance. Soland and Kuhfeld (2021) argued that constructs such as self-efficacy, growth mindset, and self-management are argued as mechanisms that link SEL and academic performance. Some literature suggests a relationship between academic performance and social competence by providing students with social support and motivation and decreasing their anxiety levels (Tabassum et al., 2020). Research suggests that executive functioning skills and social-emotional skills support academic performance by improving school readiness (Wolf & McCoy, 2019). Lemberger et al. (2018) indicate that executive functioning skills are a related cognitive operation of SEL that impacts students' behaviors and academic interests.

Further, Wolf and McCoy (2019) suggest that academic performance or skills can be used to predict students' social-emotional skills, but social-emotional skills do not predict

students' academic performance. The study conducted by Lemberger et al. (2018) suggested a relationship between the SEL intervention and executive function when the intervention group was compared with a control group of participants in the middle school setting. Additionally, the study indicated growth in the academic scores (reading and mathematics) for the participants in the intervention group (Lemberger et al., 2018).

Murano et al.'s (2020) meta-analysis researched the effects SEL interventions, used universally and as a targeted intervention, had on preschool-aged students' social-emotional skills and problem behaviors (i.e., externalizing and internalizing behaviors). Murano et al. (2020) highlighted a couple of limitations in the existing literature that led to their research. The limitations identified include a lack of empirical research to determine the effectiveness of the SEL intervention and a lack of research, including randomized controlled trials or quasi-experimental control designs (Murano et al., 2020). Therefore, this meta-analysis only included research studies that used high-quality research designs (i.e., randomized controlled trials and quasi-experimental control designs) (Murano et al., 2020).

In contrast, Panayiotou et al.'s (2019) research study included school-aged students in an elementary setting as opposed to the sample that Murano et al.'s (2020) meta-analysis used, which included pre-school aged students. Panayiotou et al. (2019) measured the impact a universal SEL intervention, Promoting Alternative Thinking Strategies (PATHS) had on 1,626 elementary students across 45 elementary schools in England. Murano et al.'s (2020) meta-analysis included 15,498 preschool-aged students, and 57 studies were included. Additionally, studies with over 50% of students identified as low socio-economic status (SES) were included in the meta-analysis, as research indicates that students living in poverty benefit greatly from SEL interventions (Murano et al., 2020). According to Calhoun et al. (2020), there are adverse

effects (e.g., developmental delays and behavioral and psychological disorders) associated with children who live in poverty-stricken communities. Similar to Panayiotou et al. (2019), Murano et al. (2020) found that there was a lack of research studies that measured implementation fidelity. According to Panayiotou et al. (2019), teachers implemented the SEL intervention approximately once per week.

Moreover, improper implementation of universal SEL programs also may impact student outcomes (Durlak et al., 2011). Durlak et al.'s (2011) meta-analysis concluded that 43% of the 213 research studies didn't monitor the implementation of the SEL program. Similarly, 46% of the research studies did not monitor the implementation of the SEL programs in Goldberg et al.'s (2019) meta-analysis. It is essential that the intensity of the program or dosage is implemented across multiple years with fidelity to determine the effectiveness of the SEL program (Hunter et al., 2020).

Like Goldberg et al. (2019), Taylor et al. (2017), and Durlak et al. (2011), Murano et al.'s (2020) meta-analysis results indicated that universal SEL interventions positively impacted student outcomes. Murano et al.'s (2020) meta-analysis measured preschool-aged students' student outcomes (i.e., problem behavior reduction and increase in social-emotional skills). Lawson et al.'s (2019) meta-analysis confirmed that there is evidence that implementing universal SEL programs improves student outcomes such as social skills, behavior, and academic performance. Similar to the results of Durlak et al.'s (2011) meta-analysis, Murano et al. (2020) found that there were limited studies that measured academic performance as an outcome of the implementation of SEL interventions.

However, it is strongly recommended that systematic SEL interventions that are evidence-based and aligned to CASEL 's social-emotional competencies and guidelines are more

effective in improving student outcomes (Lawson et al., 2019; CASEL, n.d.). According to CASEL's (n.d.) framework, a systematic approach to the implementation of universal SEL provides an equitable learning environment to improve students' social-emotional competence across settings. This can be accomplished through ongoing collaboration with parents, families, and the community (CASEL, n.d.). Implementing a universal SEL program that is evidence-based using a systematic approach as outlined by CASEL (n.d.) is supported by research conducted by Mahoney et al. (2021), Taylor et al. (2017), and Durlak et al. (2011). It is suggested that when SEL interventions are embedded into the core curriculum and throughout all operations of the school, there is more of a positive impact on student outcomes (Fisher et al., 2019; CASEL, n.d.). Other benefits of schoolwide SEL include positive attitudes toward school, relationships, and improvements in behavior problems and emotional stress (Fisher et al., 2019). Fisher et al. (2019) specifically outline distinct behaviors that are produced from SEL implementation that could positively impact academics, such as empathy and expressing oneself in a humane manner.

Other researchers suggest that all approaches to SEL implementation are not effective and that a systemic and "SAFE" approach using the Theory of Action approach as outlined by CASEL is recommended to produce more of a positive impact on student outcomes (Mahoney et al., 2021). According to CASEL (n.d.), SAFE is an acronym for Sequenced, Active, Focused, and Explicit. Specifically, SEL and academic performances in students in preschool to high school can be enhanced when the SEL intervention includes evidence-based practices, inclusive culture, school-family-community partnerships, and equitable learning opportunities (Mahoney et al., 2021). CASEL guidelines include meeting a criterion to be considered a SELect program which consists of the following: alignment with the social-emotional competencies, opportunities

for practice, programming across multiple years, training and implementation support, and includes one research study using a comparison group, and pre-post measures documenting improvements in one of four areas (e.g., academic performance, decrease behavior problems, decrease emotional distress, and improve positive social behaviors) (Lawson et al., 2019).

It is important to note that researchers suggest that an impact on academic performance is more likely present in intermediate or long-term implementation instead of short-term implementation (Mahoney et al., 2021). However, more research is needed to determine the long-term effects SEL intervention has on academic performance (Goldberg et al., 2019; Oberle et al., 2016). Mahoney et al. (2021) expressed the importance of leadership (e.g., school administrators) support and the implementation of state standards in determining the effects of SEL intervention.

SEL Interventions and Programs

In addition to meta-analyses, longitudinal studies have been conducted to determine the relationship between social-emotional competencies and academic performance using the SEL curriculum, PATHS (Panayiotou et al., 2019; Calhoun et al., 2020; Hennessey & Humphrey, 2020). PATHS is an SEL curriculum designed to improve students' social-emotional competence (Calhoun et al., 2020). PATHS consists of 30–40-minute lessons that are designed to be implemented twice per week (Panayiotou et al., 2019). Additionally, PATHS is based on the Affective-Behavioral-Cognitive-Developmental model of development (Hennessey & Humphrey, 2020). According to Calhoun et al. (2020), SEL interventions are used more frequently as a preventive measure.

Both Calhoun et al. (2020) and Panayiotou et al. (2019) researched the effects of implementing the PATHS curriculum. Panayiotou et al. (2019) conducted a research study to

determine the mechanisms that affect the proximal and distal outcomes that some researchers suggest are impacted due to the implementation of universal SEL programming (Panayiotou et al., 2019). On the other hand, Calhoun et al. (2020) examined the long-term effects of implementing an SEL program, PATHS curriculum, up to two years after the initial year of implementation and a follow-up the following year after the program was no longer implemented. The purpose of Calhoun et al.'s (2020) study was to examine if the PATHS curriculum provided a sustained improvement over time in students' social-emotional competence, behaviors, and cognitive skills between intervention and control groups (Calhoun et al., 2020). Panayiotou et al. (2019) measured and analyzed students' social-emotional competence, school connectedness, mental health, and academic performance to determine if there's a relationship between these variables.

The results of Panayiotou et al.'s (2019) study indicated that there were small and medium correlations between the variables measured (Panayiotou et al., 2019). Overall, the data indicated that social-emotional competence was not a predictor of academic achievement (Panayiotou et al., 2019). The data from the study showed that social-emotional competence served as a protective factor for positive distal student outcomes. According to Calhoun et al. (2020), their research study's results suggest that there were significant improvements for students who received SEL intervention through the PATHS curriculum than the students in the control group over time (Calhoun et al., 2020). During the first year of implementation, it was noted that there were significant behavioral improvements for students who were identified with low-income status in Kindergarten (Calhoun et al., 2020). However, it's important to note that although the effects of the SEL intervention were significant, they eventually reached a plateau after the intervention was no longer implemented (Calhoun et al., 2020).

According to Panayiotou et al. (2019), difficulties with mental health were a predictor of poor academic achievement. Additionally, school connectedness was also not a strong predictor of improving academic performance (Panayiotou et al., 2019). Lastly, social-emotional competence was associated with school connectedness and fewer mental health problems (Panayiotou et al., 2019). Panayiotou et al. (2019) recommend further research by replicating their research study with the exception of using different measures. Both Calhoun et al. (2020) and Panayiotou et al.'s (2019) research studies suggested some positive effects of using the PATHS curriculum. However, there was no strong evidence suggesting that the SEL program significantly impacted students' academic performance (Calhoun et al., 2020; Panayiotou et al., 2019).

Although there are inconsistencies in the existing literature regarding the impact SEL has on academic performance, Panayiotou et al. (2019) contend that there's sufficient evidence that suggests there's a correlation between SEL intervention and academic performance directly and indirectly. On the other hand, other researchers suggest that more research is needed to determine if universal SEL intervention programs positively impact students' academic performance (Goldberg et al., 2019; Oberle et al., 2016). It is important to note that only 2-10% of SEL research studies have measured SEL interventions' effects on academic performance (Panayiotou et al., 2019). According to Panayiotou et al. (2019), more research is needed to provide an explanation for how and why universal SEL interventions impact student outcomes (i.e., academic performance).

Hennessey and Humphrey (2020) also examined the impact an SEL program, PATHS, had on student achievement in reading and mathematics. The research study targeted students in 45 elementary schools ranging from 9 to 11 years of age by monitoring student performance of

23 schools implementing PATHS and a control group of students who were not receiving SEL intervention through the PATHS curriculum across two years (Hennessey & Humphrey, 2020). Like Panayiotou et al.'s (2019) research study, students with low socioeconomic status were included in Hennessey and Humphrey's (2020) research study. In contrast to Panayiotou et al. (2019) and Calhoun et al.'s (2020) studies, it was noted that some of the schools in Hennessey and Humphrey's (2020) study did not use the PATHS curriculum but were using alternative forms of SEL intervention (Hennessey & Humphrey, 2020). Like the results of Panayiotou et al.'s (2019) study, Hennessey and Humphrey's (2020) research study did not show that the PATHS curriculum positively impacted students' reading and math performance.

Some researchers have stated that some of the outcomes of implementing an SEL intervention program (e.g., positive classroom environment and student-teacher relationships) are mechanisms that link SEL intervention and the improvement of academic performance (Hennessey & Humphrey, 2020). However, Hennessey and Humphrey (2020) explained that previous research that suggested that SEL interventions impacted academic performance actually had little impact on academic performance. It is important to note that Hennessey and Humphrey (2020) collected data on the implementation fidelity of the PATHS curriculum. Similar to Panayiotou et al. (2019) and Murano et al. (2020), Hennessey and Humphrey (2020) found that implementation fidelity was inconsistent. Based on the data, teachers generally were not on track with following the lesson guide with the number of lessons taught on a weekly basis (Hennessey & Humphrey, 2020).

The study's results suggested that there was no significant difference in the students' academic performance in reading and math between the intervention and control groups (Hennessey & Humphrey, 2020). There were shortcomings noted regarding implementation

fidelity by stating that the control group of schools that weren't using the PATHS curriculum was actually implementing some form of SEL intervention (Hennessey & Humphrey, 2020). Overall, based on the data obtained, Hennessey and Humphrey (2020) did not suggest that implementing the SEL program PATHS curriculum improves student performance in reading and math at the elementary level.

Other longitudinal studies have been conducted to evaluate the correlation between SEL and academic performance (Legkaukas et al., 2019; Thierry et al., 2016). Legkauskas et al. (2019) and Thierry et al. (2016) conducted a longitudinal correlational study that included students in the elementary setting. The purpose of Legkauskas et al.'s (2019) longitudinal study was to determine if social anxiety, social competence, teacher-student relationship, and academic performance are associated in an elementary setting from first to third grade. On the other hand, Thierry et al. (2016) also conducted a longitudinal research study, but a quasi-experimental design was used to determine if an SEL program, MindUP, positively impacted young students' executive functioning skills, language, and vocabulary skills. It is important to note that Legkauskas et al.'s (2019) longitudinal study was conducted outside of the United States, and different systems were used to collect data on academic performance, therefore, limiting the comparison of data (Legkauskas et al., 2019). In contrast to the study conducted by Legkauskas et al. (2019), Thierry et al.'s (2016) research study was conducted in the United States in an urban elementary school, and it included a smaller sample size (Thierry et al., 2016).

In contrast to the results of Panayiotou et al.'s (2019) and Calhoun et al.'s (2020) studies, Legkauskas et al.'s (2019) results of the longitudinal correlational study suggested that social competence, teacher-student relationship, and lower rates of school anxiety were associated with the academic performance of first-grade students. The results from the first grade were similar to

the data from the third grade, except that teacher-student relationships were not suggested to be correlated with the academic performance of third-grade students (Legkauskas et al., 2019). Moreover, the results of Thierry et al.'s (2016) research study indicated that the SEL program improved executive functioning skills and improvement in English vocabulary during the prekindergarten school year.

Additionally, more research is needed to determine the development of SEL skills over time for different subgroups in the school setting (West et al., 2020). The immediate and long-term impact of an SEL program should be measured to determine if there's an association between social-emotional competencies and academic performance (Dowling et al., 2019). It is important to mention that Taylor et al.'s (2017) meta-analysis evaluated studies with a large sample that suggested that SEL interventions have a positive impact on various students from different races and socioeconomic statuses. However, Taylor et al. (2017) noted that many of the studies included in the meta-analysis lacked data on racial and socioeconomic demographics. Taylor et al. (2017) also recommended that SEL programs need to be designed with cultural competence. Similarly, Dowling et al. (2019) also suggest that the two areas that are underrepresented in existing literature are students in disadvantaged communities and adolescent students.

Jones and Doolittle (2017) suggested that the literature's mixed results may be due to the targeted skills not being appropriately aligned with the measured outcomes. It is important to note that some Social-Emotional Learning (SEL) interventions are based on different theoretical frameworks (Murano et al., 2020). Theoretical foundations in SEL interventions may impact the variability of the effectiveness of SEL interventions (Murano et al., 2020). Research suggests

that SEL interventions that are heavily focused on behavioral principles significantly impact positive student outcomes (Murano et al., 2020).

Although there is substantial research on SEL, more research is needed to determine the core components of an evidence-based SEL program for students in elementary settings (Lawson et al., 2019). Identifying the core components of evidence-based SEL interventions and utilizing CASEL's guide would benefit school leaders in the decision-making process of determining the most appropriate intervention to address the needs of the students in their school setting (Lawson et al., 2019). It is important to note that implementation fidelity, quality, and dosage impact the effectiveness of the SEL intervention and the impact SEL has on student outcomes (Lawson et al., 2019).

The results of Lawson et al.'s (2019) study indicate that many of the 14 SEL programs included in their study suggest that behavior skills are more frequently addressed and complex, and cognitive skills are less consistently addressed at the elementary level (Lawson et al., 2019). This observation is essential as more research is needed to determine if there's a correlation between social-emotional competence and academic performance (Goldberg et al., 2019; Oberle et al., 2016). As identified in the existing literature, more research is needed on SEL in the secondary setting, but Lawson et al. (2019) specifically noted that more research is required to determine the core components of SEL interventions in the secondary setting.

Additional research is needed in SEL developmental benchmarks associated with each Collaborative for Academics, Social, and Emotional Learning (CASEL) core competencies and SEL assessments (Eklund et al., 2018). CASEL has attempted to address the lack of infrastructure for schoolwide implementation of SEL programming by developing resources to assist educational systems with implementation (Oberle et al., 2016).

According to Barnes (2019), additional research is needed on the effects of implementing SEL schoolwide with fidelity on a long-term basis. According to Yang et al. (2018), the effects of the social-emotional competencies implemented in a schoolwide SEL program on student engagement have not been studied directly. According to Goldberg et al. (2019), their meta-analysis suggests further research on the effects of schoolwide SEL on academic performance, long-term effects, and the components of implementing a schoolwide SEL program with fidelity. Furthermore, implementing evidence-based SEL interventions with fidelity on a long-term basis is needed to ensure that schoolwide SEL programs are used more widely (Goldberg et al., 2019).

Social-Emotional Learning Impacts

Academic performance

According to Hunter et al. (2020), the implementation of SEL in schools in the United States has increased; however, the effectiveness of several SEL programs is unclear. Hunter et al. (2020) suggested that little research measures the impact universal SEL interventions have on student outcomes when implemented across multiple grade levels. Other research studies have evaluated the effects the SEL program, Social Skills Improvement System Classwide Intervention Program (SSIS-CIP), has on academic performance (Hart et al., 2020; Hunter et al., 2020).

Hart et al. (2020) evaluated the impact SEL programs have on academic performance on state-mandated tests, whereas Hunter et al. (2020) measured student performance scores on SSIS-CIP, Academic Competence Evaluation Scales (ACES), Cooperative Learning Observation Code for Kids (CLOCK), STAR Reading, and STAR Math. Hart et al. (2020) evaluated if SEL competencies were related to academic performance on reading and math state tests using the SSIS-CIP. The SSIS-CIP is a universal SEL program for students in kindergarten through eighth

grade (Hunter et al., 2020). Additionally, Hunter et al. (2020) evaluated the effects SSIS-CIP had on student outcomes, including social skills, academic engagement motivation, problem behaviors, and academic performance for students in the elementary setting.

According to Hunter et al. (2020), student outcomes of students exposed to SSIS-CIP for first- and second-grade and a group of students exposed to SSIS-CIP for one year were different (Hunter et al., 2020). It is important to note that approximately 50% of the students were female and White (Hunter et al., 2020). Further, less than 20% of the participants in both groups were minorities. Hunter et al. (2020) used several measures to ensure that SSIS-CIP was implemented with fidelity by at least 90%, such as observations, data collection, and teachers completing an implementation checklist.

The findings from Hart et al.'s (2020) research study suggest that there was no statistical difference between variables indicating that there's not a strong association between SEL competencies and reading and math state test scores. On the other hand, Hunter et al.'s (2020) study results suggest that implementing the SSIS-CIP across first- and second-grade students yielded small improvements in responsibility, assertion, and social skills (Hunter et al., 2020). However, there were no significant differences in academic performance and problem behaviors (Hunter et al., 2020). Students who received SEL intervention through SSIS-CIP for one year in second grade did not demonstrate a significant difference in academic performance (Hunter et al., 2020). These findings are consistent with the results of Panayiotou et al. (2019), Calhoun et al. (2020), and Thierry et al. (2016) in that there is no significant evidence suggesting a correlation between SEL and academic performance.

In contrast, Bavarian et al. (2013) evaluated the impact an SEL program had on student outcomes, including academic performance for students in an urban, low-income, elementary

setting. The study's results indicated that there was growth in academic scores (reading and mathematics) for African American male students (Bavarian et al., 2013). According to Sousa (2021), there is evidence that SEL positively impacts student outcomes, including academic performance. The intervention program targeted skills such as self-control, attention, emotional regulation, and problem-solving skills, and Bavarian et al. (2013) suggested that these skills could have contributed to the growth seen in academic performance. On the other hand, Loeb et al. (2019) conducted a large-scale study that analyzed the correlation between SEL growth and academic outcomes of students within schools across grade levels. The results of the study indicated variance in SEL outcomes and academic performance across schools (Loeb et al., 2019).

There were several essential factors noted in the widely cited meta-analysis conducted by Durlak et al. (2011). First, 51% of the 213 studies used valid outcome measures, and 76% of the studies used reliable outcome measures (Durlak et al., 2011). Secondly, the meta-analysis included studies ranging from 1955-2007, and only 36% of the research studies were conducted between 2000-2007 (Durlak et al., 2011). Therefore, recent research studies that were conducted after 2007 to date were not included in the meta-analysis (Durlak et al., 2011). Moreover, only 16% of the 213 studies measured academic performance (Hart et al., 2020; Durlak et al., 2011).

On the other hand, Durlak et al. (2011) discussed that the research findings of SEL programming had a positive impact on academic performance, and there was a small percentage of research studies that measured academic performance but noted that those studies included large sample sizes. Like Durlak et al.'s (2011) meta-analysis, Goldberg et al. (2019) also included a small number of research studies, specifically 16% of 49 studies, that measured academic performance as an outcome. One of the limitations noted in the follow-up meta-

analysis is that more than 70% of the research studies included data that was collected from self-report measures (Taylor et al., 2017).

Soland and Kuhfeld (2021) conducted a longitudinal research study to determine if SEL constructs predict students' academic performance during the transition from middle to high school and dropout rates. Constructs such as self-efficacy, growth mindset, and self-management are argued as mechanisms that link SEL and academic performance (Soland & Kuhfeld, 2021). Some researchers suggest that strategies for SEL intervention and having a positive school climate are likely to improve academic performance for all students, especially students of color (Jones et al., 2020). Self-efficacy refers to how one perceives one might perform on a particular task (Soland & Kuhfeld, 2021). A growth mindset refers to an individual's perception of their intelligence based on two extremes: growth and fixed mindsets (Soland & Kuhfeld, 2021). Self-management refers to how an individual manages emotions, thoughts, and behaviors (Soland & Kuhfeld, 2021).

In contrast to the longitudinal studies previously discussed (Calhoun et al., 2020; Hart et al., 2019; Hunter et al., 2019; Panayiotou et al., 2019), Soland and Kuhfeld's (2021) research study included a sample of high school students as opposed to students in the elementary school setting. Further, the research examined if SEL impacts the stability of students' social-emotional competence and academic achievement throughout the high school years, therefore decreasing dropout rates (Soland & Kuhfeld, 2021).

According to Soland and Kuhfeld (2021), research involving SEL in schools has increased due to its possible effects on students' long-term educational performance and postsecondary outcomes. Therefore, some school districts use scores that measure students' social-emotional competence to predict their academic performance, including school dropout

rates (Soland & Kuhfeld, 2021). Soland and Kuhfeld (2021) used data from SEL surveys and the math and reading scores from the NWEA MAP Growth Assessment. Moreover, off-track behaviors for dropouts included GPA, attendance, and suspensions (Soland & Kuhfeld, 2021).

There were several findings from Soland and Kuhfeld's (2021) research study. The research study's results indicated that growth in self-efficacy, self-management and growth mindset were correlated (Soland & Kuhfeld, 2021). Additionally, the students' SEL scores from middle school predicted academic performance and students who were off track from graduating and possibly dropping out of high school (Soland & Kuhfeld, 2021). Overall, self-management was the SEL construct that was the most stable in predicting if a student was off track for graduation and at risk of dropping out of high school (Soland & Kuhfeld, 2021).

Jones et al. (2020) examined the impact improvement in school climate and the implementation of Social-Emotional Learning (SEL) intervention has on the academic success of students, including students of color, as well as determine if there's racial equity. More school districts are utilizing resources to improve school climate and students' social-emotional competence to improve academic performance for all students (Jones et al., 2020).

On the other hand, some researchers, including Jones et al. (2020), suggest that more research is needed to determine if SEL and school climate improve racial equity in academic performance (Jones et al., 2020). More research is needed to evaluate the impact SEL interventions have on students across racial groups and SEL interventions that impact racial equity (Jones et al., 2020). Findings from Dowling et al.'s (2019) study suggest that an SEL program that is culturally relevant and age-appropriate may be more effective when using a schoolwide approach in disadvantaged communities in which the immediate and long-term impact is measured.

Kendziora and Osher (2016) examined the impact of the systemic implementation of SEL interventions using the Theory of Action in eight large, urban school districts that participated in Collaborating States Initiatives (CSI). Mahoney et al. (2021) suggest that a systemic approach using the Theory of Action enhances the impact SEL intervention has on student outcomes as outlined by CASEL's CSI. It is important to note that an experimental design was not used, and the findings from the research do not imply that there's a correlation between the variables measured (Kendziora & Osher, 2016). Kendziora and Osher (2016) noted that the results of the study were mixed. Based on the data obtained from the eight participating school districts, evidence suggested that systemic SEL implementation overall positively impacted two of the eight school districts (Kendziora & Osher, 2016). Additionally, the social-emotional competence of third-grade students improved in 4 out of 6 school districts (Kendziora & Osher, 2016). It is important to note that CDI had no significant effect on most social and emotional competence areas (Kendziora & Osher, 2016).

The data showed evidence of improvement in academic performance as early as the first year of the CDI and, in some cases, before implementation, which could have been attributed to other variables that were not measured (Kendziora & Osher, 2016). Further, the findings suggest that overall, students' academic performance improved since the implementation of CDI; however, it was noted that academic performance could be measured in 4 out of the eight school districts (Kendziora & Osher, 2016). Similar to Panayiotou et al. (2019) and Low et al. (2019) assertions, the theory of action suggests that students' academic performance is a distal outcome of improving social-emotional competence (Kendziora & Osher, 2016). According to Kendziora and Osher (2016), research suggests that systemic SEL intervention districtwide could take 5 to 7 years for long-term effects on improving student outcomes. Therefore, longitudinal research is

needed to determine the association between students' social-emotional competence and academic performance (Goldberg et al., 2019; Kendziora & Osher, 2016).

Kendziora and Osher (2016) found that there were improvements in systems for continuous improvement, professional development, knowledge of SEL, and stakeholder commitment. However, the least impact was on the needs and resources assessment (Kendziora & Osher, 2016). Similar to Murano et al. (2020) and Panayiotou et al. (2019), Kendziora and Osher (2016) found that implementation fidelity was lacking and inconsistent. Moreover, there were several challenges that the school districts encountered that could have impacted implementation and the findings (Kendziora & Osher, 2016). Some of the challenges include leadership turnover, superintendent turnover, finances, test accountability, and managing other districtwide initiatives (Kendziora & Osher, 2016).

Some researchers suggest the principle of implementing SEL with the purpose of long-term success in all areas of life, including academics, jobs, and careers, and all areas of life in a multicultural society (Mahoney et al., 2021). Moreover, the schools, districts, and states need to be aligned in policies and practices so that SEL is equitable for all students (Mahoney et al., 2021). This can be accomplished through the following areas: foundational support and plan, improving adult and student social-emotional competence, and implementing practices for continuous improvement (Mahoney et al., 2021).

Low et al. (2019) suggested that improvements in academic performance are a distal outcome of students learning and applying social-emotional skills from an SEL intervention. Oberle et al. (2016) stated that students who have skills that are aligned with the core competencies developed by CASEL are more focused on academics than students who do not have social-emotional skills. Legkauskas et al. 's (2019) results of the first year of their

longitudinal correlational study suggested that there was a positive correlation between academic performance and social competence, including interpersonal relationships between students and teachers. However, Legkauskas et al. (2019) also reported that the data might have been inflated; therefore, further research is needed. Espelage et al.'s (2016) study yielded results in which middle school students with disabilities' academic performance improved when an SEL program was implemented in a longitudinal study. However, the study had several limitations, one of which there was a small sample size.

More research is needed on the short-term and long-term impact schoolwide SEL interventions have on academic performance (Hart et al., 2020). Moreover, there needs to be more research that collects data across multiple outcomes as well as follow-up data collection to observe the durability SEL programs have on academic achievement (Durlak et al., 2011). Corcoran et al. (2018) suggest that future research includes large sample sizes that exclusively focus on academic performance as an outcome variable. Additionally, researchers suggest that future research use subgroup analysis to determine if the characteristics of participants from different subgroups are associated with SEL programs (Durlak et al., 2011).

It is suggested that a theory-driven research approach is used to determine if there's an association between social-emotional competencies and academic performance (Durlak et al., 2011). Goldberg et al. (2019) and Dowling et al. (2019) suggest more research on fidelity, implementation, and the long-term impact SEL has on academic performance is needed. Similarly, Durlak et al.'s (2011) meta-analysis concluded that monitoring the implementation of SEL programs should be included in research studies in the future to ensure that SEL programs are delivered effectively. Moreover, Mahoney et al. (2021) suggest more research to examine how federal and state policies can be utilized to improve SEL implementation, which in turn

impacts student outcomes. Future research should also include using a schoolwide approach to implementing SEL programming so that it is integrated into daily school operations as Mahoney et al. (2021), Goldberg et al. (2019), and Dowling et al. (2019) noted that a schoolwide approach is most effective. Further, research should be conducted to determine how to integrate a universal SEL effectively (Mahoney et al., 2021).

Further research is required to determine the mechanisms that link the social competencies of SEL and academic performance and if there is a relationship between the variables (Goldberg et al., 2019; Domitrovich et al., 2017; Oberle et al., 2016; McCormick et al., 2015). Rodríguez-Izquierdo (2018) suggests that there is evidence that supports the notion that SEL promotes positive outcomes in academic performance, but more research is needed to determine the relationship between social-emotional and academic performance that includes students in several contexts across school settings. Some researchers suggest that parental and family interactions indirectly impact a student's adjustment, including their school environment, especially during the adolescent years (Bully et al., 2019). Additionally, more research is needed to determine the mechanisms that link students' achievement goals and social-emotional adjustment in school (Duchesne & Ratelle, 2020).

Although research suggests that executive functioning skills and social-emotional skills support academic performance, more research is needed to determine how these variables are connected (Wolf & McCoy, 2019). McCormick et al. (2015) suggested that research consumers can use randomized trials to analyze mechanisms that link SEL and academic performance. Voith et al. (2019) indicated that more research was needed to compare control groups with intervention groups that measure the following variables: academic performance, social-emotional competence, classroom functioning, student engagement, and fidelity. Barnes (2019)

identified a significant gap in the literature regarding the lack of cultural diversity in SEL programs and literature, and it was suggested that there needs to be more research using culturally diverse SEL interventions. SEL, intercultural education, and culturally responsive teaching are associated (Rodriguez-Izquierdo, 2018). From a theoretical perspective, embedding SEL interventions in learner-centered psychological principles improves students' learning experiences and takes an active role in their learning (Rodriguez-Izquierdo, 2018). A lack of consistency in the definition of SEL and emotional intelligence could be the cause of some limitations in research findings regarding the impact SEL has on student outcomes (Rodriguez-Izquierdo, 2018). Although research supports that social-emotional competence is associated with academic performance, more research is needed because the association appears to be modest (Rodriguez-Izquierdo, 2018).

More research on the impact SEL intervention has on academic performance is needed beyond elementary school settings that, includes participants in middle and high school (West et al., 2020; Lemberger et al., 2018; Domitrovich et al., 2017). Dowling et al. (2019) also proposed more research that includes participants that are older adolescents is needed as well. According to Ross and Tolan (2018), the social-emotional competencies developed by CASEL are primarily researched in preschool and elementary settings. Also, more research should include larger samples instead of small convenience samples (West et al., 2020). Further, a clear understanding of the developmental component of SEL is needed for adolescents, which may be a contributing factor to the lack of SEL state standards for upper grades beyond elementary grades (Ross & Tolan, 2018). Espelage et al. (2016) explained that more research is needed to clarify the impact SEL interventions have on the academic performance of middle school-aged students with disabilities and consider the different disability categories.

Cognitive Development

There is evidence in neuroscience research that indicates that social-emotional competence impacts students' cognitive development (Sousa, 2021). Sousa (2021) suggests that social-emotional competence is developed in a child's early years, whereas cognitive skills are developed more in later years. This may explain why more complex cognitive skills were not consistently addressed in SEL interventions at the elementary level, as noted by Lawson et al. (2019). Sousa (2021) provides a compelling explanation for the connection between social-emotional competence and cognitive skills based on neuroscience research. Evidence suggests that the part of the brain that controls social-emotional processing is connected to the part of the brain that processes information (Sousa, 2021).

In contrast to neuroscience research and research studies that suggest there's a correlation between SEL and academic performance, a research study conducted in Ireland using the MindOut SEL program for students in a secondary education setting indicated differing results (Dowling et al., 2019). The MindOut program is an SEL program that is aligned with the core SEL competencies that are outlined by CASEL and designed for adolescents (Dowling et al., 2019). Using a cluster randomized-controlled trial design including over 400 students in disadvantaged schools, Dowling et al. (2019) measured the impact an SEL program had on social-emotional competence, academic performance, and mental health. Similar to the results of Thierry et al.'s (2016) study, the data distinctively indicated that the SEL program had no significant impact on the students' academic performance (Dowling et al., 2019). However, it is important to note that the academic scores for males were better than the female students on most of the scales given (Dowling et al., 2019).

On the other hand, the data also suggested that the SEL program had an impact on the students' mental health, specifically depressive symptoms and anxiety for female students (Dowling et al., 2019). The most significant improvement was found in the students' mental health (Dowling et al., 2019). These results are essential to improving the mental health and social-emotional wellbeing of students because mental health is associated with school dropout rates, suicide, a decline in academic performance, and difficulties in social relationships (Dowling et al., 2019).

Race and Socioeconomic Status

Limitations that possibly impact research findings on the impact SEL programming has on student outcomes include but are not limited to inconsistency in the definition of SEL, lack of confidence in implementation fidelity, and lack of cultural diversity (Rodriguez-Izquierdo, 2018). More SEL interventions need to consider cultural diversity when designing SEL programs (Bailey et al., 2021). Considering such factors would address the needs of all students that limit students from adapting to meet the target social behaviors that are not relevant to them (Bailey et al., 2021). Further research is needed to measure the impact social-emotional competencies have on student outcomes for students from different races and socioeconomic statuses (Taylor et al., 2017). More recently, researchers are suggesting that academic performance is not noticeably impacted by SEL intervention in short-term implementation (Mahoney et al., 2021).

Students with Disabilities

The lack of research involving adolescents, as well as individuals with disabilities, are critical gaps in the literature that needs to be addressed (Espelage et al., 2016). This age group is critical in K-12 education, in which students in high school are preparing to transition to post-secondary education, careers, and independent living. Social-emotional competence and

academic performance are even more critical as students transition through the final segment of their educational career in high school. Students with disabilities in secondary education need additional support with transitioning from high school to life after graduation. Learning skills aligned with the social competencies identified by CASEL would greatly benefit students with disabilities as they learn academic skills and social skills in workplace and community settings. Lastly, future research is needed that includes a multimethod approach that includes randomized trials and quasi-experimental designs, including qualitative approaches at both the school level and school district level (Mahoney et al., 2021).

Summary

In conclusion, the existing literature regarding the impact schoolwide SEL interventions have on academic performance is mixed and more research is needed to determine if universal SEL programming impacts academic performance (Hart et al., 2020; Goldberg et al., 2019; Oberle et al., 2016). Legkauskas et al. (2019) stated that the recent results from other research studies that involved determining the correlation between social-emotional competencies, teacher-student relationships, and academic performance are mixed.

Further research is needed to provide consistent results suggesting if schoolwide SEL has a positive impact on academic performance (Hart et al., 2020; Goldberg et al., 2019; Oberle et al., 2016). There is specifically a lack of research that determines the impact universal SEL interventions have on students' performance on state-mandated tests, and it is recommended that researchers include state tests in future studies (Hart et al., 2020). In addition to including state tests in future research, it is also recommended to include baseline data for academic skills (Hart et al., 2020). Several research studies recommend further research in determining the relationship between SEL and academic performance (Hart et al., 2020; Hunter et al., 2020; Goldberg et al.,

2019; Dowling et al., 2019). Wolf and McCoy (2019) and Durlak et al. (2011) suggest further research is needed using a correlational or longitudinal research study to determine if SEL competencies and academic performance are associated. More research is needed to determine the mechanisms that link social competence and academic performance (Dowling et al., 2019; Goldberg et al., 2019).

Overall, existing literature suggests that more research is needed to evaluate the association between an SEL intervention and multiple dependent variables, as several studies only measured broad variables such as academic performance (Wolf & McCoy, 2019; Aleksic et al., 2018; Oberle et al., 2016; Durlak et al., 2011). Aleksic et al. (2018) suggested further research to determine the association between social-emotional competence and academic performance, such as literacy and math performance. Therefore, the data was collected in quantifiable form using Renaissance STAR reading and math assessments to measure reading and math proficiency and the Social Skills Improvement System Social-Emotional Learning Rating Form (SSIS-SEL-RF) to measure social-emotional skills. Goldberg et al.'s (2019) meta-analysis revealed that out of 45 studies evaluated, 62% of the studies measured outcomes associated with social-emotional skills, and 18% of the studies measured student performance outcomes (i.e., academic performance). This quantitative correlational research study addressed the literature gap by evaluating the association between SEL competencies and academic performance, including reading and math performance.

CHAPTER THREE: METHODS

Overview

This quantitative, predictive correlational research study determined if there's a relationship between social-emotional competencies and academic performance. This chapter provides an in-depth description of the research design that was used as well as how the design aligns with the research questions and hypotheses. After the description of the research questions and null hypotheses, there are details about the participants and the setting in which the research study was conducted. The instruments used in this research study are reliable and valid and were used to measure social-emotional competencies and academic performance. Moreover, this chapter includes details regarding the procedures for conducting the research study, including data analysis.

Design

A quantitative, predictive correlational research design was conducted to determine the relationship between SEL competencies, reading proficiency, and math proficiency, including the direction and strength of the variables (Creswell & Guetterman, 2019). The problem is some research studies suggest that universal SEL interventions improve students' academic performance, whereas some studies suggest that SEL interventions have no impact on academic performance (Hart et al., 2020; Goldberg et al., 2019; Wolf & McCoy, 2019). More research is needed to determine if there's a relationship between social-emotional competencies as outlined by CASEL and academic performance (i.e., reading and math proficiency scores) (Hart et al., 2020; Hunter et al., 2020; Goldberg et al., 2019; Wolf & McCoy, 2019).

The existing literature supports using a correlational design to determine the association between SEL competencies and academic performance (Wolf & McCoy, 2019; Durlak et al.,

2011). Correlational and longitudinal studies have shown associations between academic performance and social-emotional competencies (Wolf & McCoy, 2019; Durlak et al., 2011). Wolf and McCoy (2019) conducted a longitudinal quantitative predictive correlational research study using a cross-lagged panel analysis to determine if preschool students' social-emotional competencies and executive functioning can predict their academic performance, specifically literacy and numeracy performance. The results of the quantitative correlational predictive research study suggested that social-emotional competencies do not predict improvement in academic performance; however, academic performance predicts social-emotional competence (Wolf & McCoy, 2019). The current research study is similar to Wolf and McCoy's (2019) study in that both used a quantitative, predictive correlational research design to determine if social-emotional competencies can predict academic performance, including reading and math proficiency. Implementing research designs that evaluate each component of an SEL intervention can better predict the effects each social-emotional competency has on academic performance (Durlak et al., 2011).

As recommended by Gall et al. (2007), reliable and valid assessments, such as the Renaissance STAR reading and math assessments and the Social Skills Improvement System Social-Emotional Learning Edition Rating Form (SSIS-SEL-RF), are required when conducting a correlational study. The correlational design was used to determine if the predictor and criterion variables are related as measured by the SSIS-SEL-RF and the Renaissance STAR reading and math assessments. The predictor variables are self-awareness, social awareness, responsible decision-making, developing and maintaining positive relationships, and self-management. The criterion variable is academic performance, including reading and math performance.

Research Questions

The following research questions are addressed in the research study.

RQ1: How accurately can third-grade students' reading proficiency scores be predicted from a linear combination of social-emotional competencies?

RQ2: How accurately can third-grade students' math proficiency scores be predicted from a linear combination of social-emotional competencies?

Hypotheses

The null hypotheses for this quantitative, predictive correlational research study are:

$H_0$1: There will be no significant predictive relationship between the criterion variable (third-grade students' reading proficiency scores) as measured by the Renaissance STAR reading assessment and the linear combination of predictor variables (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness) as measured by the Social Skills Improvement System Social-Emotional Learning Edition Rating Form, for students in an urban school district.

$H_0$2: There will be no significant predictive relationship between the criterion variable (third-grade students' math proficiency scores) as measured by the Renaissance STAR math assessment and the linear combination of predictor variables (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness) as measured by Social Skills Improvement System Social-Emotional Learning Edition Rating Form, for students in an urban school district.

Participants and Setting

This section includes a detailed description of the population in which the research study was conducted, including a geographical description. Also, there is a description of the research

participants, the sampling technique used, and the sample size. The guidelines for the sample size are provided to provide insight into the technique used for sampling. Moreover, the setting of the school district is described in detail to depict the environment in which the study was conducted.

Population

The research study's setting was in the Southeastern region of the United States in an urban school district because research suggests that the school-to-prison pipeline is more prevalent in urban school districts (Scott, 2017). Additionally, according to CASEL (n.d.), evidence suggests the school characteristics of the LIM program include urban schools and in the Southeastern region of the United States. The school district is located in Georgia and is a consolidated city-county. According to the National Center for Education Statistics (NCES) (n.d.b), the school district is located in a community with a population of 153,490 with a median household income of $39,931. NCES (n.d.b) reported that 54% of the population are Black, 39% are White, 3% are Hispanic/Latino, and 2% are Asian. Additionally, NCES (n.d.b) reported that 50% of the population in the community are female householders with no husband present.

Participants

This study's participants were gathered from a convenience sample of 62 students in the third grade during the 2021-2022 school year in an urban school district in the Southeastern region of the United States. Third-grade students from three elementary schools were targeted in the research study because the Georgia Department of Education (n.d.) indicates that the Georgia Milestones End-of-Grade (EOG) tests are administered beginning in the third grade for ELA and mathematics. A large sample size of participants increases claims of representativeness of the population scores and lessens error variance (Creswell & Guetterman, 2019; Gall et al., 2007).

One of the three elementary schools participated in the research study. Therefore, the number of participating schools reduced the anticipated sample size, and the sample does not meet the requirement for the number of participants needed in a correlational study when assuming a medium effect size with a statistical power of 0.7 at a 0.5 alpha level (Gall et al., 2007). The minimum sample size needed is 66 participants (Gall et al., 2007). However, the sample size for this study was 62 participants.

According to CASEL (n.d.), the LIM program has been endorsed as a SELect program that has been endorsed for students in elementary school. Additionally, the LIM program has significant outcomes in decreasing problem behaviors for African American/ Black and Hispanic/Latinx students that live in low-income households in urban areas in the Southeastern region (CASEL, n.d.). Recruitment letters were sent home with the students to inform parents about the study and to recruit participants. All personal identifying information (i.e., race, gender, date of birth, etc.) was stripped from the data and renamed with a random number (i.e., Participant 1). The sample consisted of 62 participants that were enrolled as third-grade students during the 2021-2022 school year.

Setting

The school district has 21 elementary schools, six middle schools, and six high schools. According to the NCES (n.d.a), the school district had a total of 21,812 students, 2,234 students with IEPs, 1,541 classroom teachers, and 372 instructional aids during the 2019-2020 school year. The Governor's Office of Student Achievement's (n.d.b) 2019-2020 school report indicates that 77% of the students in the district are Black, 13% are White, 5% are Hispanic, 3% are Multi-Racial, and 1% are Asian. The majority of the students are economically disadvantaged at 96% (Governor's Office of Student Achievement, n.d.b). Moreover, 89.7% of the student population

are students without disabilities, and 97% of the students are not English Language Learners (Governor's Office of Student Achievement, n.d.b).

The Governor's Office of Student Achievement's (n.d.a) 2018-2019 school report indicated that 35.9% of the third-grade students were reading at or above the grade level. Assessment data for the 2019-2020 school year has not been provided because of disruptions associated with the COVID-19 pandemic. Although the school district has implemented Positive Behavior Intervention and Supports (PBIS) districtwide, the Governor's Office of Student Achievement's (n.d.c) student discipline report for 2020 indicates the following for third-grade students: 5.4% OSS, 5.5% ISS, and 1.4% Expulsion. Some of the school district's goals include enhancing the social and emotional growth of all students and improving academic performance in reading and math.

Instrumentation

Social Skills Improvement System Social-Emotional Learning Rating Form

This quantitative correlational research study used the Social Skills Improvement System Social-Emotional Learning Edition Rating Form (SSIS-SEL-RF) to measure the social-emotional competence of third-grade students. The instrument was removed from the Appendices to comply with copyright (Anthony et al., 2020; Collaborative for Academic, Social, and Emotional Learning, n.d.). The SSIS-SEL-RF is a norm-referenced behavior rating scale with 46 items used to assess students' social-emotional competencies, including relationship skills, responsible decision-making, self-awareness, self-management, and social awareness (Anthony et al., 2020; Collaborative for Academic, Social, and Emotional Learning, n.d.). SSIS-SEL-RF includes a rating form for students in grades 3 to 12, and it is aligned with CASEL's SEL competencies which are also suggested as an assessment tool by CASEL (Anthony et al., 2020; Gresham et al.,

2018; Collaborative for Academic, Social, and Emotional Learning, n.d.). The SSIS-SEL rating form is a self-report that includes a 4-point scale that ranges from “Not True” to “Very True.” The response choices are as follows: "Not True" = 1, “A Little True” = 2, “A Lot True” = 3, or "Very True" = 4 (CASEL, n.d.; Anthony et al., 2020). It takes approximately 10 to 15 minutes to administer the rating form, and the rating form can be administered to the participant online or on paper (CASEL, n.d.). It is important to note that the student self-report forms can only be reported based on individual responses as opposed to reporting the data at the group level (CASEL, n.d.).

The participants’ responses on the SSIS-SEL rating form can be scored manually by entering the data into the Q-Global platform provided by Pearson, or if the rating form was administered online, the computer generates an SEL Composite Score, a Core Skills Score and a Standard Score with a mean of 100 and standard deviation of 15 for all five social-emotional competencies ranging from 40 to 160 with a 95% confidence interval range (CASEL, n.d.). Standard scores that fall between 85 and 115 indicate that the participant is demonstrating skills in the “Average” range (CASEL, n.d.). Standard scores that are between 115-130 indicate that the participant is demonstrating skills in the “Above Average” range, and standard scores that are between 130 and 160 indicate that participants are demonstrating skills in the “Well-above Average” range (CASEL, n.d.). However, standard scores that are between 70 and 85 indicate that the participant is demonstrating skills in the “Below Average” range, and standard scores between 40 and 70 are in the “Well-below Average” range (CASEL, n.d.).

SSIS-SEL-RF is based on a national sample and norms aligned with a universal SEL program (Anthony et al., 2020). Per an email correspondence between the researcher and a representative from Pearson, permission to use the SSIS-SEL-RF was not needed as long as there

were no modifications to the instrument. See Appendix A for the correspondence with Pearson. Hart et al. (2020) used the SSIS-SEL-RF to measure the impact SEL had on the academic performance of 3rd-5th grade students on state-mandated tests in reading and math. Also, Panayiotou et al. (2019) used the SSIS-SEL-RF to measure social-emotional competence and to determine if SEL and academic performance are associated.

Anthony et al. (2020) evaluated the validity and reliability of SSIS-SEL-RF and indicated that the study provided evidence of the scores' validity and reliability. The Cronbach's alpha levels for SSIS SELb-S SEL Composite were .91, and the Cronbach's alpha levels for SSIS SELb scales ranged from .67 to .72 (Anthony et al., 2020). Gersham et al. (2018) and Rigney (2018) also provided evidence of the SSIS-SEL-RF validity and reliability. A confirmatory factor analysis was used using the AMOS version 22.0 subroutine in SPSS (Gresham et al., 2018). Evidence of reliability was achieved using Coefficient alphas for students' Core Skills (Gresham et al., 2018). Evidence that there was likely an association between SSIS-SEL-RF and another measure of social behavior was attained by examining other rating forms that measured social behaviors (Gresham et al., 2018). Another reason for selecting the aforementioned instruments is because Durlak et al.'s (2011) widely cited meta-analysis included studies that used the SSIS-SEL-RF to measure social-emotional competencies and reading and math assessments to measure academic performance. Hart et al. (2020) used the accompany SEL program, Social Skills Improvement System Classwide Intervention Program, to determine if there's a relationship between social-emotional competencies and academic performance as measured by third through fifth-grade reading and math state tests. Panayiotou et al. (2019) used the following tools to measure the dependent variables in this study: the self-report SSIS-SEL-RF, School Environment subscale of the Kidscreen-27, Teacher informant-

report version of the Strengths and Difficulties Questionnaire, and the 2014 Key Stage-2 (KS2) national curriculum test in mathematics, reading, and writing.

Renaissance STAR Assessments

The Renaissance STAR Reading and Math assessments were used to measure the reading and math proficiency of the third-grade participants. The researcher did not request permission from Renaissance because the school district already uses this assessment to measure reading and math proficiency. The researcher obtained permission from the school district to obtain the data from the participating school. According to Renaissance (2020), STAR assessments are computerized assessments that are designed to measure student progress in math, reading, and early literacy for students in preschool through 12^{th} grade.

According to Renaissance (2020), the STAR Reading assessment includes 34 questions and takes approximately 20 minutes to complete the assessment. The STAR Math assessment also has 34 questions, but it takes approximately 25 minutes to complete the assessment (Renaissance, 2020). The STAR reading and math assessments are computer-adaptive tests with multiple-choice questions that calculates the scaled scores for students and creates individual student data reports (Renaissance, 2020). Additionally, the level of difficulty of each question is determined by the student's answer to the previous question (Renaissance Learning, 2020).

The STAR Reading and Math assessments automatically generate a scaled score to determine the student's growth in comparison to peers nationwide over time (Renaissance, 2020). The scaled scores on reading and math are generated using the Unified score scale ranging from 600-1400 (Renaissance, 2022a). The STAR Reading scale score for students in the third-grade ranges from 937 to 992, including low and high scores based on grade equivalency that progresses throughout the school year for each month (Renaissance, 2022b). However, the

STAR math scale score for students in the third-grade ranges from 914 to 968, including low and high scores based on grade equivalency that progresses throughout the school year for each month (Renaissance, 2022a).

In addition to a scaled score, a grade-equivalent score and student growth percentile are generated (Renaissance, 2020). According to Renaissance (2020), STAR reading and math assessments are highly reliable, given a reliability coefficient of .95 (internal) and .91 (Test-Retest). The grade-equivalent scores and scaled scores were used in comparison to the scaled scores from the SSIS-SEL-RF reports to determine the correlation between social-emotional competence and academic performance in reading and math. The validity of the STAR reading assessment has been proven through several assessments ranging from concurrent (.72 to .80) and predictive (.69 to .72) (Sutter et al., 2020). The Tennessee Comprehensive Assessment Program, Comprehensive Test of Basic Skills, Stanford Achievement Test, California Achievement Test, and the Iowa Test of Basic Skills are evidence of the validity of the STAR reading assessment (Sutter et al., 2020).

Hunter et al.'s (2020) research study used the STAR Reading and Math assessments to measure student performance to determine if there's a correlation between SEL and academic performance, including reading and math scores. According to Renaissance (2020), the data obtained from the STAR assessments are used as a screening tool, progress monitoring tool, diagnostic tool, personalized learning purposes, as well as a predictor of student proficiency on mandatory statewide tests and mastery of the state's standards. Many school districts administer the STAR assessments at the beginning, middle, and end of the year to monitor student progress, as this instrument is often used in conjunction with intervention programs.

Procedures

Procedures and guidelines were followed to conduct the research study in three elementary schools, including third-grade students. The first step included seeking approval from the school district to conduct the research study. The school district's Research, Evaluation, Assessment, and Accountability (REAA) Department required the researcher to submit a request form via Google Form and a copy of the consent form that would be used in the research study. The request form included questions about the following: the researcher's name and contact information, the chairperson's name and contact information, the name of the study, a summary of the study, and a brief statement regarding the benefits of conducting the study in the school district. The request form and required documents were submitted to the secretary of the REAA department for approval.

After approval to conduct research was received by REAA, the principals at each school received an email from the REAA secretary with notification of my conditional approval to conduct a research study at their school. The principals were informed that they needed to complete a "Principal Approval" document that was attached to the email. The principals were given three business days to accept or decline the request to conduct research by completing and submitting the form via Google to the REAA secretary. It is the school district's policy that if the principals do not deny or accept the request to conduct the research study within three business days, the request is approved by default. The principals did not deny or accept the request from the REAA to conduct the research study at their schools during the three business days. Therefore, the school district gave the researcher approval to conduct the research study by emailing the researcher an approval letter. See Appendix B for the school district's approval letter.

After approval was granted, the researcher attempted to communicate with all principals to discuss the plan for conducting the research study. However, only one school participated in the study. Months after the school district approved to conduct the study, one of the remaining two principals declined to participate in the study due to the number of new staff at the school. The remaining principal did not respond to the researcher's correspondence via emails and phone calls. Therefore, only one of the three schools participated in the study.

Also, the researcher communicated with the school district's REAA secretary via phone calls and emails to discuss the process for obtaining STAR reading and math assessment scores for third-grade students. The researcher spoke with the school district's Senior Analyst once by phone about retrieving the STAR data confidentially. Afterward, there were no responses to the email correspondences sent by the researcher. The STAR Reading and Math assessment data for the end-of-the-year (EOY) were obtained from the principal of the school as the school administrators have direct access to the STAR data for their school. Additionally, the researcher requested approval from Pearson to use the SSIS SEL-RF in a research study via email. A representative from Pearson informed the researcher that approval is not needed to use the instrument in a research study for its intended use. See Appendix A for the email correspondence from Pearson. Procedures and guidelines were followed to apply for and get IRB approval through the university. The IRB approved the study, and an approval letter was received. See Appendix C for the IRB approval letter. The researcher ordered 200 SSIS-SEL-RF from Pearson as well as a 12-month subscription to use Q-Global to score the rating forms manually.

The researcher attempted to schedule a meeting with the principals to schedule dates and times to complete the required tasks to conduct the research study. However, only one school responded to schedule a date to conduct the research study, and the principal and the researcher

communicated via email to discuss procedures. The researcher provided the principal of the school with recruitment letters, parent opt-out forms, assent letters, and SSIS-SEL rating forms. Teachers sent home the recruitment letters (See Appendix D) and parent opt-out forms (See Appendix E) to the students' parents in the student folders. Three parent opt-out forms were signed and returned to the school, and those students did not participate in the study. The assent forms (Appendix F) were explained to the students and signed prior to completing the SSIS-SEL-RF.

The principal explained how to administer the SSIS-SEL-RF and informed teachers not to complete the identifying information portion of the rating scale prior to administering the rating forms. After the SSIS-SEL rating forms were completed, the rating forms were placed in a sealed envelope and given to the school administrator. The school administrator locked the assessments in a secure location until the researcher obtained the materials.

The STAR reading and math data from the end of the year was obtained from the principal on a Word document, including the standard scores for reading and math for each participant. Once the data was collected by the researcher, the researcher stored the data in a locked and secured location. The data was collected by the researcher anonymously by the following process:

1. Teachers administered the SSIS-SEL rating forms to all students who did not return the opt-out document to their teachers, and then the completed forms were given to a school administrator.
2. The school district’s senior analyst was supposed to give the STAR data for the students who completed the SSIS-SEL to the school. However, the principal of the

school has direct access to the STAR data and was able to gather the data for the researcher.

3. A district employee affiliated with the participating school linked each student's SSIS-SEL rating form to his or her STAR assessment data, removed all identifying information and replaced identifying information with a random number.
4. The principal of the school gave the data to the researcher, but the researcher was not able to link the data to individual students.

The SSIS-SEL-RF was administered by hand on paper. The completed rating forms were retrieved by the researcher in a sealed envelope. The researcher used the Q-Global program online to score the rating forms as recommended by Pearson. The Q-Global program can only be accessed by the researcher by entering a username and password. The participants' responses on the rating forms were manually entered into the database, and a score report was generated with a 95% confidence interval. The report included a standard score for SEL composite (SEL), Self-Awareness (SA), Self-Management (SM), Social Awareness (SO), Relationship Skills (RS), Responsible Decision Making (RDM), and Core Skills (CS). The data was stored on a password-locked computer and drive, and the data may be used in future presentations. After five years, all data, including electronic and paper records, will be deleted.

Data Analysis

This quantitative, predictive correlational study used multiple linear regression to test the hypothesis using the SPSS software (Gall et al., 2007). The process of analyzing the data for a quantitative correlational research study involves correlating the data from the predictor variables with the data from the criterion variables (Gall et al., 2007). Since more than two predictor variables or social-emotional competencies (i.e., relationship skills, responsible

decision-making, self-awareness, self-management, and social awareness) are measured, using the multiple regression analysis maximizes prediction by calculating the multiple correlation coefficient and determining if there's collinearity (Gall et al., 2007). Other quantitative, predictive correlational research studies have used regression analysis to determine if social-emotional competencies predict academic performance (Legkauskas et al., 2019). For instance, Legkauskas et al.'s (2019) longitudinal study used a regression analysis to determine if social competence, teacher-student relationship, and school anxiety are predictors of students' academic performance. Moreover, a stepwise multiple linear regression was used to predict students' first and third-grade students' academic performance (Legkauskas et al., 2019). Although the predictor variables in this study are not exactly the same as the predictor variables in the proposed research study, there are three or more predictor variables that are used to predict a criterion variable (i.e., academic performance).

The assumption tests of linearity, bivariate normality distribution, and multicollinearity were used. It is recommended to use a scatterplot to determine if there are bivariate outliers (Warner, 2012). A scatter plot was used to determine linear relationships, the strength of the association, and the direction of the association (Gall et al., 2007, Creswell & Guetterman, 2019). Therefore, a scatter plot was used to determine the association between the variables as well as linear relationships (Gall et al., 2007). The data was used to determine if there is a predictive relationship between social-emotional competencies and academic performance, not to prove a causal relationship (Gall et al., 2007). The researcher used multiple regression to test the null hypotheses at a 95% confidence level. This was achieved through descriptive statistics to summarize the data and report the effect size using an alpha, $\alpha = .05$ (Gall et al., 2007).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this research study was to examine how the reading and math proficiency scores of third-grade students predict their social-emotional competence (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making). The criterion variables were reading and math proficiency scores. The predictor variables were self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Multiple regression was implemented to test the hypotheses in this correlational study. This Findings chapter includes the research questions, the null hypotheses, descriptive statistics, data screening, assumption testing, the assumption of bivariate normal distribution, the assumption of multicollinearity, and the results.

Research Questions

RQ1: How accurately can third-grade students' reading proficiency scores be predicted from a linear combination of social-emotional competencies?

RQ2: How accurately can third-grade students' math proficiency scores be predicted from a linear combination of social-emotional competencies?

Null Hypotheses

$H_0$1: There will be no significant predictive relationship between the criterion variable (third-grade students' reading proficiency scores) as measured by the Renaissance STAR reading assessment and the linear combination of predictor variables (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness) as measured by Social Skills Improvement System Social-Emotional Learning Edition Rating Form, for students in an urban school district.

$H_0$2: There will be no significant predictive relationship between the criterion variable (third-grade students' math proficiency scores) as measured by the Renaissance STAR math assessment and the linear combination of predictor variables (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness) as measured by Social Skills Improvement System Social-Emotional Learning Edition Rating Form, for students in an urban school district.

Descriptive Statistics

Descriptive statistics were conducted on all variables. The sample consisted of 62 participants. Reading and math proficiency scores were measured using the STAR Reading and Math assessments. The scaled scores on reading and math are generated using the Unified score scale ranging from 600-1400 (Renaissance, 2022a). The STAR Reading scale score for students in the third-grade ranges from 937 to 992, including low and high scores based on grade equivalency that progresses throughout the school year for each month (Renaissance, 2022b). However, the STAR math scale score for students in the third-grade ranges from 914 to 968, including low and high scores based on grade equivalency that progresses throughout the school year for each month (Renaissance, 2022a).

The social-emotional competencies (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) were measured using the Social Skills Improvement Systems Social-Emotional Learning Rating Form. The standard scores were based on a 95% confidence interval, a mean of 100, and a standard deviation of 15. A standard score of 85 and above indicates that the participant has “Average,” “Above Average,” or “Well-above Average” performance. A standard score of 84 and below indicates that the participant has

"Below Average" or "Well-below Average" performance. The means and standard deviations for each predictor variable are presented in Table 1. The Descriptive Statistics are in Table 1.

Table 1

Descriptive Statistics

	n	Min.	Max.	*M*	*SD*
Reading	59	615.00	1047.00	912.2542	71.73192
Math	59	808.00	1035.00	923.8644	55.24630
Self-Awareness	62	40.00	122.00	87.5161	16.93066
Self-Management	62	50.00	125.00	87.2097	16.20073
Social Awareness	62	54.00	122.00	95.8871	15.08566
Relationship Skills	62	45.00	119.00	91.8548	14.18478
Responsible Decision Making	62	40.00	118.00	85.2742	17.24859
Valid *n* (listwise)	59				

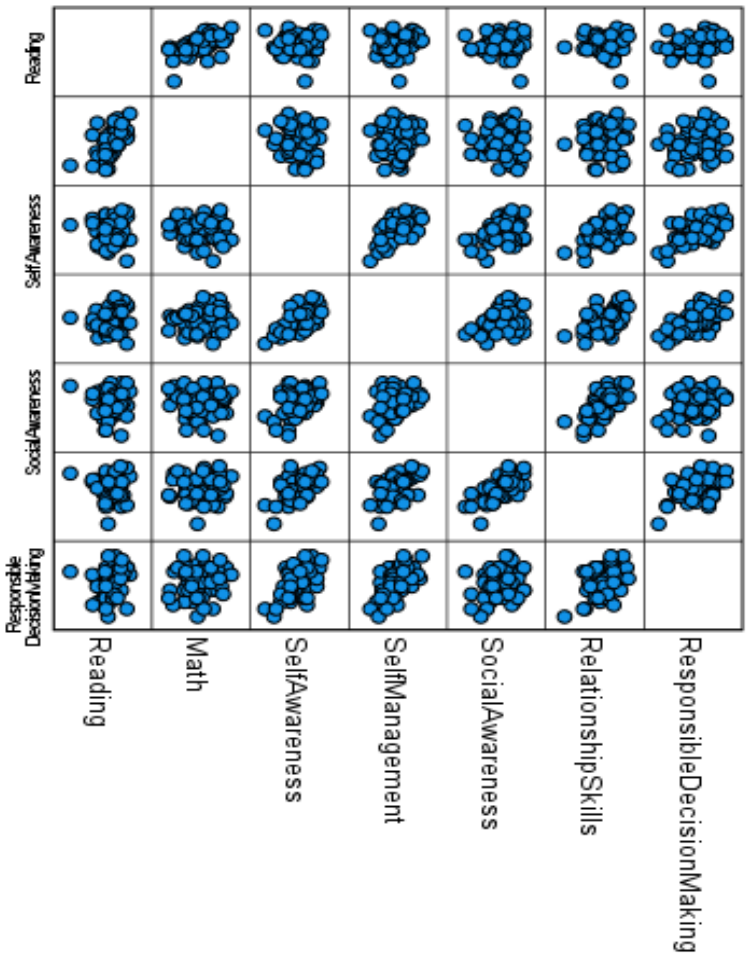
Data Screening

The researcher sorted the data and scanned for inconsistencies in all variables. There were three data errors, and inconsistencies found. Due to the way, the Social Skills Improvement Systems Social-Emotional Learning Rating Form (SSIS-SEL-RF) was distributed, three students who completed the rating form had not completed the STAR reading and math assessments. This created an inconsistency that may have skewed the results. A matrix scatter plot was conducted to identify bivariate outliers between the criterion variables (i.e., reading and math scores) and predictor variables (i.e., self-awareness, self-management, social awareness, relationship skills,

and responsible decision-making). There were no bivariate outliers found. See Figure 1 for the matrix scatter plot.

Figure 1

Matrix Scatter Plot



Assumption Testing

Assumption of Linearity

Multiple regression was conducted, and the linearity was analyzed using a matrix scatter plot. The assumption of linearity was met. See Figure 1 for the matrix scatter plot.

Assumption of Bivariate Normal Distribution

Multiple regression was conducted, and the assumption of bivariate normal distribution must be met. A matrix scatterplot was used to analyze the assumption test, and the assumption of bivariate normal distribution was met. See Figure 1 for the matrix plot.

Assumption of Multicollinearity

A Variance Inflation Factor (VIF) test was used to prevent multicollinearity should one predictor variable is highly correlated with a different predictor variable. The VIF must be less than ten but between 1 and 5, indicating that multicollinearity is absent. There was no multicollinearity between the predictor variables (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making). See Table 2 for the collinearity statistics for reading and see Table 3 for the collinearity statistics for math.

Table 2

Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Self-Awareness	.466	2.146
	Self-Management	.506	1.974
	Social Awareness	.502	1.990
	Relationship Skills	.396	2.527
	Responsible Decision Making	.502	1.990

a. Dependent Variable: Reading

Table 3

Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Self-Awareness	.466	2.146
	Self-Management	.506	1.974
	Social Awareness	.502	1.990
	Relationship Skills	.396	2.527
	Responsible Decision Making	.560	1.786

a. Dependent Variable: Math

Results

Multiple regression was used to examine if a relationship exists between academic performance (i.e., reading and math scores) and social-emotional competencies (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making). The criterion variables were reading scores and math scores. The predictor variables were self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

Hypothesis 1

The first hypothesis examined how accurately third-grade students' reading proficiency scores can be predicted from a linear combination of social-emotional competencies. The first null hypothesis stated that there is no significant relationship between third-grade students' reading proficiency scores as measured by the Renaissance STAR reading assessment and social-

emotional competencies as measured by the Social Skills Improvement Systems Social-Emotional Learning Rating Form (SSIS-SEL-RF). The researcher failed to reject the first null hypothesis at the 95% confidence level where $F(5, 53) = 1.142$, $p = .350$ (two-tailed). There was not a statistical relationship between the criterion variable (i.e., third-grade reading scores) and the predictor variables (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) because $p = .350$. See Table 4 for the results of the regression model.

Table 4

Regression Model Results

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	29015.860	5	5803.172	1.142	.350[b]
	Residual	269421.327	53	5083.421		
	Total	298437.186	58			

a. Dependent Variable: Reading
b. Predictors: (Constant), Responsible Decision Making, Social Awareness, Self-Management, Self-Awareness, Relationship Skills

The model's effect size was extremely large, where $R = .404$. Also, $R^2 = .163$ indicates that approximately 16% of the variance of the criterion variable can be explained by the linear combination of predictor variables. See Table 5 for the model summary.

Table 5

Model Summary

Model	R^2	*R*	Adjusted R^2	*SEM*
1	.163	.404	.084	52.86563

a. Predictors:(Constant), Responsible Decision Making, Social Awareness, Self-Management, Self-Awareness, Relationship Skills

Hypothesis 2

The second hypothesis examined how accurately third-grade students' math proficiency scores can be predicted from a linear combination of social-emotional competencies. The second null hypothesis stated that there is no significant relationship between third-grade students' math proficiency scores as measured by Renaissance STAR math assessment and social-emotional competencies as measured by the Social Skills Improvement Systems Social-Emotional Learning Rating Form (SSIS-SEL-RF). The researcher failed to reject the second null hypothesis at the 95% confidence interval where $F(5, 53) = 2.068$, $p = .084$ (two-tailed). There was no significant relationship between the criterion variable (i.e., third-grade math proficiency scores) and the predictor variables (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) because $p = .084$. See Table 6 for the results of the regression model.

Table 6

Regression Model Results

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	28901.839	5	5780.368	2.068	.084[b]
	Residual	148123.076	53	2794.775		
	Total	177024.915	58			

a. Dependent Variable: Math
b. Predictors: (Constant), Responsible Decision Making, Social Awareness, Self-Management, Self-Awareness, Relationship Skills

The model's effect size was large, where $R = .312$. Also, $R^2 = .097$, indicating approximately 10% of the variance of the criterion variable, can be explained by the linear combination of predictor variables. See Table 7 for the model summary.

Table 7

Model Summary

Model	R^2	R	Adjusted R^2	*SEM*
1	.097	.312	.012	71.29812

a. Predictors:(Constant), Responsible Decision Making, Social Awareness, Self-Management, Self-Awareness, Relationship Skills

CHAPTER FIVE: CONCLUSIONS

Overview

The Conclusion chapter will provide a synopsis of the results of the study and a discussion of the similarities and differences between the current study and existing literature. The research questions, null hypotheses, and results are discussed in comparison to previous research. Furthermore, limitations are identified and used to provide implications for future research. Based on the results of the study, future research is needed to replicate this study and add to the existing literature.

Discussion

The purpose of this quantitative, predictive study was to examine if there's a relationship between third-grade students' academic performance (i.e., reading and math scores) and social-emotional competence (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The first research question examined if there's a relationship between third-grade reading scores and social-emotional competencies. The first null hypothesis stated that there is no statistical relationship between third-grade students' reading proficiency scores and social-emotional competencies. The researcher failed to reject the first null hypothesis because there was no statistical relationship between the criterion and predictor variables, where $F(5, 53) = 1.142$, $p = .350$.

The second research question examined if there was a relationship between third-grade math scores and social-emotional competencies. The second null hypothesis stated that there is no statistical relationship between third-grade students' math proficiency scores and social-emotional competencies. The researcher failed to reject the second null hypothesis because there was no statistical relationship between the variables, where $F(5, 53) = 2.068$, $p = .084$. The

results of the study are similar to previous studies indicating that there is no statistical relationship between academic performance and social-emotional competence (Hennessey & Humphrey, 2020; Hunter et al., 2020; Goldberg et al., 2019).

There are several research studies that yielded results indicating that there was no significant relationship between social-emotional competence and academic performance (Calhoun et al., 2020; Panayiotou et al., 2019). Similar to the current study, Hunter et al. (2020) conducted a correlational study to evaluate if a relationship exists between social-emotional competence as measured by the SSIS-CIP and academic performance on reading and math performance by measuring academic performance using the STAR reading and math assessments as well as ACES and CLOCK. Like this study, the results indicated that there was no relationship between academic performance and SEL competencies for students in the elementary grade levels (Hunter et al., 2020). Furthermore, Hart et al. (2020) used the same SEL program, SSIS-CIP, to evaluate if there's a relationship between SEL competencies and academic performance in reading and math. The results of Hart et al.'s (2020) study also indicated that there was not a strong association between SEL competencies and reading and math state test scores.

Moreover, Both Panayiotou et al. (2019) and Hennessey and Humphrey (2020) used the PATHS curriculum as an SEL intervention to evaluate if there was an association between SEL competencies and academic performance. Overall, both studies yielded the same results as the current study. Panayiotou et al. (2019) conducted a correlational study to evaluate if social-emotional competence was associated with academic performance as well as school connectedness and mental health. It is important to note that Panayiotou et al. (2019) yielded similar results to this study in that social-emotional competence was not a predictor for academic

performance in reading and math. The results of Hennessey and Humphrey's (2020) study suggested that implementing the SEL program did not positively impact students' academic performance in reading and math at elementary grade levels. Additionally, Calhoun et al. (2020) and Thierry et al. (2016) also conducted correlational research studies to determine if a relationship exists between social-emotional competence and academic performance. The results from both studies coincided with the results of the current study in that there is not a significant relationship between the variables (Calhoun et al., 2020; Thierry et al., 2016).

Emotional Intelligence and Achievement Goal Theory are two theoretical frameworks associated with Social-Emotional Learning (Gershon & Pellitteri, 2018; Schunk, 2020). According to Gershon and Pellitteri (2018), emotional knowledge and emotional regulation are social-emotional skills that are associated with improving students' academic performance in later grades. This is important to note as the current study evaluated the academic performance of students in the third grade. According to Dowson and Harvey (2003), achievement goal theory refers to the cognitive representations of the student's purpose for learning in an academic situation. Further, Achievement goal theory influences student behavior in academic situations; It influences student behavior, motivation, attention, self-regulation, engagement, and academic performance (Schunk, 2020). In relation to the current study, the data indicate that the social-emotional skills of the students were not associated with their academic performance in reading and math.

There are several studies that also examined the relationship between social-emotional competence and the academic performance of students in elementary grades that yielded different results from the current study (Jones et al., 2020; Lawson et al., 2019; Wolf & McCoy, 2019). Jones et al. (2020) conducted a research study to determine if a relationship exists

between SEL, academic performance, and school climate. The results of the study suggest that there was a relationship between students' academic performance and social-emotional competence (Jones et al., 2020). However, the relationship was stronger for White students than minority students (Jones et al., 2020). This is important to note as the current study included participants from an urban school district that is in a region in which more than 50% of the population is Black (NCES, n.d.b).

Additionally, there were several other studies that have been conducted that suggest that there is a relationship between academic performance and social-emotional competence (Lawson et al., 2019; Wolf & McCoy, 2019; Corcoran et al., 2018). Both Lawson et al. (2019) and Corcoran et al. (2018) conducted a meta-analysis to determine if students' social-emotional competence is associated with academic performance. In contrast to the results of the current study, the results suggested that implementing universal SEL programs improves academic performance (Lawson et al., 2019; Corcoran et al., 2018). On the other hand, based on the results of Wolf and McCoy's (2019) study, they suggested that academic performance can be used to predict students' social-emotional competence, but social-emotional competence cannot predict students' academic performance. This is important to note as the current study's predictor variables were social-emotional competencies and academic performance in reading and math were the criterion variables.

Implications

Based on the results of Durlak et al.'s (2011) meta-analysis, it was suggested that there were limited studies that measured the correlation between social-emotional competence and include academic performance. More recently, the results of Murano et al.'s (2020) meta-analysis also suggested that there are limited studies that measured academic performance in

association with students' social-emotional competence. Therefore, the results of the current research study were needed based on the existing literature (Murano et al., 2020; Goldberg et al., 2019; Durlak et al., 2011). The results of the current study add to the existing literature that suggests that there is no relationship between students' social-emotional competence and academic performance in reading and math.

In turn, this study minimizes the mixed results in the association between the variables, as discussed in Goldberg et al.'s (2019) meta-analysis. However, the results of the current study provide data that does not coincide with the theoretical framework of Emotional Intelligence and Achievement Goal Theory (Gershon & Pellitteri, 2018; Schunk, 2020). Based on the existing literature, it appears to be more studies suggesting that there is no relationship between students' academic performance and social-emotional competence (Calhoun et al., 2020; Hart et al., 2020; Panayiotou et al., 2019). Improving the social-emotional well-being of students is critically important to meet the social-emotional needs of the child, as it is important to teach the "whole child" and not focus only on academic performance.

However, the results do not suggest that social-emotional competence is associated with academic performance. The interpretation of the study's results does not imply that social-emotional learning is not needed and that it is not beneficial to students. However, it does provide stakeholders in the educational field with more information about research-based interventions and how to best support students and improve student outcomes. Additionally, this study provides stakeholders, policymakers, and government officials with information to guide them in developing policy and school funding. This study provides guidance for researchers on how to further research this topic.

Limitations

There were limitations identified in this study. The limitations include the sample size, effect size, and statistical power. Initially, three elementary schools were approved by the school district to participate in the study. However, only one of the three elementary schools participated in the research study. Therefore, the number of participating schools reduced the anticipated sample size to 62 participants. The minimum sample size needed is 66 participants (Gall et al., 2007). The sample did not meet the requirement for the number of participants needed in a correlational study when assuming a medium effect size with a statistical power of 0.7 at a 0.5 alpha level (Gall et al., 2007).

The results of the study indicated a large effect size, therefore, impacting the statistical power (Gall et al., 2007). There was an extraneous variable, experimental mortality, that impacted the internal validity of this study. There were three students that agreed to participate in the study but were absent during the day the study was conducted. Therefore, three anticipated participants did not participate in the study. Additionally, three students returned a signed parent opt-out form indicating that parental consent was not given for them to participate in the study.

Also, three participants did not complete the STAR reading and math assessments during the testing window at the end of the previous school year. It is important to note that the STAR assessment data used in this research study is archival data from the end of the last school year in 2021-2022. The reason why the three participants did not complete the STAR assessments is unknown. However, the school employees administered the SSIS-SEL rating forms to the participants that did not complete the STAR assessments at the end of the previous school year. This caused inconsistencies in the data, including the number of participants that completed the SSIS-SEL-RF and the number of participants that completed the STAR reading and math

assessments. Therefore, the inconsistencies in the data may have skewed the results.

Recommendations for Future Research

- Future research needs to include a larger sample size to strengthen the statistical power with a medium effect size. The researcher can include more schools in the same school district and/or schools in multiple urban school districts in the study.
- Future research should replicate the study by using the same instruments, SSIS-SEL student rating forms, and STAR Reading and Math scaled scores.
- More longitudinal studies are recommended to allow more time to measure students' academic performance across grade levels.

REFERENCES

Aleksic, G., Merrell, C., Ferring, D., Tymms, P., & Klemenovic, J. (2018). Links between socio-emotional skills, behavior, mathematics, and literacy performance of preschool children in serbia. *European Journal of Psychology of Education*, 1-22. https://doi.org/10.1007/s10212-018-0387-8

Anthony, C. J., Elliott, S. N., DiPerna, J. C., & Lei, P. (2020). The SSIS SEL brief scales–Student form: Initial development and validation. *School Psychology, 35*(4), 277-283. https://doi.org/10.1037/spq0000390

Bailey, R., Raisch, N., Temko, S., Titus, B., Bautista, J., Eniola, T. O., & Jones, S. M. (2021). Innovations in social and emotional learning research and practice: Building from evidence and applying behavioral insights to the design of a social and emotional learning intervention in northeast Nigeria. *International Journal of Environmental Research and Public Health, 18*(14), 1-21. https://doi.org/10.3390/ijerph18147397

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Barnes, T.N. (2019). Changing the landscape of social emotional learning in urban schools: What are we currently focusing on and where do we go from here?. *The Urban Review, 51*(4), 599-637. https://doi.org/10.1007/s11256-019-00534-1

Bavarian, N., Lewis, K. M., DuBois, D. L., Acok, A., Vuchinich, S., Silverthorn, N., Snyder, F. J., Day, J., Ji, P., & Flay, B. R. (2013). Using Social-Emotional and character development to improve academic outcomes: A matched-pair, cluster-randomized controlled trial in low-income, urban schools. *The Journal of School Health, 83*(11), 771-779. https://doi.org/10.111/josh.12093

Bennett, C. (2020). Bloom where you're planted: Spreading the seeds of leader in me everywhere. *Journal of Leadership, Accountability and Ethics, 17*(2), 10-24.

Brackett, M. A., Elbertson, N. A., & Rivers, S. E. (2016). Applying theory to the development of approaches to SEL. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), Handbook of social and emotional learning: Research and practice (pp. 20–32). New York: Guilford.

Brackett, M. A., Bailey, C. S., Hoffmann, J. D., & Simmons, D. N. (2019). RULER: A theory-driven, systematic approach to social, emotional, and academic learning. *Educational Psychologist: Social and Emotional Learning, 54*(3), 144-161. https://doi.org/10.1080/00461520.2019.1614447

Bully, P., Jaureguizar, J., Bernaras, E., & Redonodo, I. (2019). Relationship between parental socialization, emotional symptoms, and academic performance during adolescence: The influence of parents' and teenagers' gender. *International Journal of Environmental Research and Public Health, 16*(12), 1-13. https://doi.org/10.3390/ijerph16122231

Calhoun, B., Williams, J., Greenberg, M., Domitrovich, C., Russell, M. A., Fishbein, D. H., & Fishbein, D. H. (2020). Social emotional learning program boosts early social and behavioral skills in low-income urban children. *Frontiers in Psychology, 11,* 561196-561196. https://doi.org/10.3389/fpsyg.2020.561196

Collaborative for Academics, Social, and Emotional Learning (n.d.). *Connect Your Criteria.* CASEL. https://pg.casel.org/connect-your-criteria/

Collaborative for Academics, Social, and Emotional Learning (n.d.). *Program Guide View All Programs.* CASEL. https://pg.casel.org/review-programs/

Corcoran, R. P., Cheung, A. C. K., Kim, E. & Xie, C. (2018). Effective universal school-based social and emotional learning programs for improving academic achievement: A systematic review and meta-analysis of 50 years of research. *Educational Research Review, 25,* 56-72. https://doi.org/10.1016/j.edurev.2017.12.001

Covey, S. (1989). *Seven Habits of Highly Effective People*. Free press.

Covey, S. R., Covey, S., Summers, M., Hatch, D. K., & Platzer, I. (2008). *The leader in me*. Free press.

Creswell, J. W. & Guetterman, T. C. (2019). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Pearson.

Dewey, J. (1902). *The child and the curriculum.* University of Chicago Press.

Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development, 88*(2), 408-416. https://doi.org/10.1111/cdev.12739

Dowling, K., & Barry, M. M. (2020). Evaluating the implementation quality of a social and emotional learning program: A mixed methods approach. *International Journal of Environmental Research and Public Health, 17*(9), 3249. https://doi.org/10.3390/ijerph17093249

Dowling, K., Simpkin, A. J., & Barry, M. M. (2019). A cluster randomized-controlled trial of the MindOut social and emotional learning program for disadvantaged post-primary school students. *Journal of Youth and Adolescence, 48*(7), 1245-1263. https://doi.org/10.1007/s10964-019-00987-3

Dowson, M. & Harvey, P. (2003). Right motives: A Christian perspective on students' academic motivation. *Journal of Christian Education, 46* (1), 33–42. https://doi.org/10.1177/002196570304600105

Duchesne, S., & Ratelle, C. F. (2020). Achievement goals, motivations, and social and emotional adjustment in high school: A longitudinal mediation test. *Educational Psychology (Dorchester-on-Thames), 40*(8), 1033-1051. https://doi.org/10.1080/01443410.2020.1778641

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. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Eklund, K., Kilpatrick, K. D., Kilgus, S. P., & Aqdas, H. (2018). A systematic review of state-level Social-Emotional learning standards: Implications for practice and research. *School Psychology Review, 47*(3), 316-326. https://doi.org/10.17105/SPR-2017.0116.V47-3

Espelage, D. L., Rose, C. A., & Polanin, J. R. (2016). Social-emotional learning program to promote prosocial and academic skills among middle school students with disabilities. *Remedial and Special Education, 37*(6), 323–332. https://doi.org/10.1177/0741932515627475

Fiester, L. (2009, November 30). *Early warning! why reading by the end of third grade matters. Kids Count Special Report.* Annie E. Casey Foundation. Retrieved November 27, 2021, from https://eric.ed.gov/?id=ED509795

Fiori M. & Vesely-Maillefer A.K. (2019). Correction to: Emotional Intelligence as an Ability: Theory, Challenges, and New Directions. In: Keefer K., Parker J., Saklofske

D. (eds) *Emotional Intelligence in Education*. The Springer Series on Human Exceptionality. Springer, Cham. https://doi.org/10.1007/978-3-319-90633-1_17

Fisher, D., Frey, N., Marsh, J. P., & Gonzalez, D. (2019). The links between social and emotional learning and literacy. *Journal of Adolescent & Adult Literacy, 63*(1), 115-117. https://doi.org/10.1002/jaal.963

Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational Research: An Introduction*. Pearson.

Georgia Department of Education. (n.d.). *Georgia Milestones Assessment System.* Georgia Department of Education. https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/Georgia-Milestones-Assessment-System.aspx

Gershon, P. & Pellitteri, J. (2018). Promoting emotional intelligence in preschool education: A review of programs. *International Journal of Emotional Education, 10*(2), 26-41. https://eric.ed.gov/?id=EJ1197563

Goldberg, J. M., Sklad, M., Elfrink, T. R., Schreurs, K.M.G., Bohlmeijer, E. T., & Clarke, A. M. (2019). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: A meta-analysis. *European Journal of Psychology of Education, 34*(4), 755-782. https://doi.org/10.1007/S10212-018-0406-9

Governor's Office of Student Achievement. (n.d.a). *Georgia School Grades Report (2018-2019) Bibb County*. Governor's Office of Student Achievement. https://schoolgrades.georgia.gov/bibb-county

Governor's Office of Student Achievement. (n.d.b). *Georgia School Grades Reports Bibb County (2019-20)*. Governor's Office of Student Achievement. https://public.gosa.ga.gov/noauth/extensions/SchoolGradesMulti/SchoolGradesMulti.html?SchoolName=bibb-county

Governor's Office of Student Achievement. (n.d.c). *K-12 Student Discipline Dashboard*. Governor's Office of Student Achievement. https://public.gosa.ga.gov/noauth/extensions/DisciplineDASHV1/DisciplineDASHV1.html

Graves, S. L., Herndon-Sobalvarro, A. H., Nichols, K., Aston, C., Ryan, A., Blefari, A., Schutte, K., Schachner, A., Vicoria, L., & Prier, D. (2017). Examining the effectiveness of a culturally adapted social-emotional intervention for African American males in an urban setting. *School Psychology Quarterly, 32*(1), 62-74. https://doi.org/10.1037/spq0000145

Gregory, A., & Fergus, E. (2017). Social and emotional learning and equity in school discipline. *The Future of Children 27*(1), 117-136. https://doi.org/10.1353/foc.2017.0006

Gresham, F. M., Ellitot, S. N., Metallo, S., Byrd, S., Wilson, E., & Cassidy, K. (2018). Cross-informant agreement of children's social-emotional skills: An investigation of ratings by teachers, parents, and students from a nationally representative sample. *Psychology in the Schools, 55*(2), 208- 223. https://doi.org/10.1002/pits.22101

Hart, S. C., DiPerna, J. C., Lei, P., & Cheng, W. (2020). Nothing lost, something gained? Impact of a universal social-emotional learning program on future state test performance. *Sage Journal, 49*(1), 5-19. https://doi.org/10.3102/0013189X19898721

Hennessey, A., & Humphrey, N. (2019;2020). Can social and emotional learning improve children's academic progress? Findings from a randomized controlled trial of the promoting alternative thinking strategies (PATHS) curriculum. *European Journal of Psychology of Education, 35*(4), 751-774. https://doi.org/10.1007/s10212-019-00452-6

Hoffman, D. M. (2009). Reflecting on Social Emotional Learning: A Critical Perspective on Trends in the United States. *Review of Educational Research, 79*(2), 533-556. https://doi.org/10.3102/003465430832

Hunter, L. J., DiPerna, J. C., Cheng, W., Lei, P., & Hart, S. C. (2020). Twice as nice? Sustained exposure to a universal Social-Emotional learning program across multiple grades. *School Mental Health, 13*(1), 84-100. https://doi.org/10.1007/s12310-020-09392-9

Hurford, D. P, Hurford, J. D., Head, K. L., Keiper, M. M., Nitcher, S. P., Renner, L. P., (2016). The dyslexia dilemma: A history of ignorance, complacency, and resistance in colleges of education. *Journal of Childhood & Developmental Disorders, 2*(3) 26. https://doi.org/10.4172-1786.100034

Jones, S. M. & Doolittle, E. J. (2017). Social and emotional learning: Introducing the issue. *The Future of Children, 27*(1), 3-11. https://doi.org/10.1353/foc.2017.0000

Jones, T. M., Fleming, C., Williford, A., Research and Evaluation Team, & Research and Evaluation Team of Seattle Public Schools (2020). Racial equity in academic success: The role of school climate and social emotional learning. *Children and Youth Services Review, 119,* 105623. https://doi.org/10.1016/j.childyouth.2020.105623

Kendziora, K. & Osher, D. (2016). Promoting children's and adolescents' social and emotional development: District adaptations of a theory of action. *Journal of Clinical Child & Adolescent Psychology, 45*(6), 797-811. https://doi.org/10.1080/15374416.2016.1197834

Khazanchi, R., Khazanchi, P., Mehta, V., & Tuli, N. (2021). Incorporating social-emotional learning to build positive behaviors. *Kappa Delta Pi Record, 57*(1), 11-17. https://doi.org/10.1080/00228958.2021.1851581

Lawson, G. M., McKenzie, M. E., Becker, K. D., Selby, L., & Hoover, S. A. (2019). The core components of evidence-based social emotional learning programs. *Prevention Science, 20*(4), 457-467. https://doi.org/10.1007/s11121-018-0953-y

Leader in Me. (n.d.). *What is Leader in Me?* Leader in Me. https://www.leaderinme.org/what-is-leader-in-me/

Legkauskas, V., Magelinskaite-Legkauskiene, S., & Kepalaite, A. (2019). Does learning-related social competence in the 1st grade predict academic achievement in the 3rd grade? *Social Psychology of Education: An International Journal, 22*(3), 673-685. https://doi.org/10.1007/s11218-019-09495-5

Lemberger, M. E., Carbonneau, K. J., Selig, J. P., & Bowers, H. (2018). The role of social-emotional mediators on middle school students' academic growth as fostered by an evidence-based intervention. *Journal of Counseling and Development, 96*(1), 27-40. https://doi.org/10.1002/jcad.12175

Loeb, S., Christian, M. S., Hough, H., Meyer, R. H., Rice, A. B., & West, M. R. (2019). School differences in Social-Emotional learning gains: Findings from the first large-scale panel survey of students. *Journal of Educational and Behavioral Statistics, 44*(5), 507- 542. http://doi.org/10.3102/1076998619845162

Logan, C. (2018, June 12). *Leader in Me is now a CASEL SELect program for preschool and elementary*. Leader in Me. https://www.leaderinme.org/blog/casel-select/

Low, S., Smolkowski, K., Cook, C., & Desfosses, D. (2019). Two-year impact of a universal social-emotional learning curriculum: Group differences from developmentally sensitive trends over time. *Developmental Psychology, 55*(2), 415-433. https://doi.org/10.1037/dev0000621

MacArthur, C.A., Philippakos, Z. A., & Graham, S. (2016). A multicomponent measure of writing motivation with basic college writers. *Learning Disability Quarterly, 39*(1), 31-43. https://doi.org/10.1177/0731948715583115

Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R.J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T. P., VanAusdal, K., & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *The American Psychologist, 76*(7), 1128-1142. https://doi.org/10.1037/amp0000701

McCormick, M. P., Cappella, E., O'Connor, E. E., & McClowry, S. G. (2015). Social-emotional learning and academic achievement: Using causal methods to explore classroom-level mechanisms. *AERA Open, 1*(3), 1-26. https://doi.org/10.1177/2332858415603959

Meyers, D. C., Domitrovich, C. E., Dissi, R., Trejo, J., & Greenberg, M. T. (2019). Supporting systemic social and emotional learning with a schoolwide implementation model. *Evaluation and Program Planning, 73*, 53-61. https://doi.org/10.1016/j.evalprogplan.2018.11.005

Meyers, A. B., & Hickey, A. M. (2014). Multilevel Prospective Dynamics in School-Based Social and Emotional Learning Programs. *Journal of Cognitive Education and Psychology, 13*(2), 218-231. https://doi.org/10.1891/1945-8959.1

Mondi, C. F., & Reynolds, A. J. (2021). Socio-emotional learning among low-income prekindergarteners: The roles of individual factors and early intervention. *Early Education and Development, 32*(3), 360-384. https://doi.org/10.1080/10409289.2020.1778989

Morgan, H. (2021). Restorative justice and the school-to-prison pipeline: A review of existing literature. *Education Sciences, 11*(159), 1-10. https://doi.org/10.3390/educsci11040159

Murano, D., Sawyer, J. E., & Lipnevich, A. A. (2020). A meta-analytic review of preschool social and emotional learning interventions. *Review of Educational Research, 90*(2), 227-263. https://doi.org/10.3102/0034654320914743

Oberle, E., Domitrovich, C.E., Meyers, D.C., & Weissberg, R.P. (2016). Establishing systemic social and emotional learning approaches in schools: A framework for schoolwide implementation. *Cambridge Journal of Education. 46*(3), 277-297. https://doi.org/10.1080/0305764X.2015.1125450

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An empirical basis for linking social and emotional learning to academic performance. *Contemporary Educational Psychology, 56,* 193-204. https://doi.org/10.1016/j.cedpsych.2019.01.009

Rasinski, T., Paige, D., Rains, C., Stewart, F., Julovich, B., Prenkert, D., Rupley, W. H., & Nichols, W. D. (2017). Effects of intensive fluency instruction on the reading proficiency of third-grade struggling readers. *Reading & Writing Quarterly, 33*(6), 519-532. https://doi.org/10.1080/10573569.2016.1250144

Reicher, H. & Matischek-Jauk, M. (2019). Depressive adolescents at risk of social exclusion: The potentials of social-emotional learning in schools. *Improving Schools, 22*(1), 43-54. https://doi.org/10.1177/1365480218763845

Renaissance (2022, September.a). *Renaissance. Star Assessments for Math Technical Manual.* Renaissance Learning. https://help2.renaissance.com/US/PDF/SM/SMRPTechnicalManual.pdf

Renaissance (2022, September.b). *Renaissance. Star Assessments for Reading Technical Manual.* Renaissance Learning. https://help2.renaissance.com/US/PDF/SR/SRRPTechnicalManual.pdf

Renaissance. (2020, September). *Research Foundation for Star Adaptive Assessments Science of Star*. Renaissance Learning. https://doc.renlearn.com/KMNet/R001480701GCFBB9.pdf

Rigney, A. M. (2019). Test review: Social skills improvement system Social-Emotional Learning edition. *Journal of Psychoeducational Assessment, 37*(5), 669-673. https://doi.org/10.1177/0734282918781194

Rodriguez-Izquierdo, R. M. (2018). Researching the links between social-emotional learning and intercultural education: Strategies for enacting a culturally relevant teaching. *Intercultural Education (London, England), 29*(5-6), 609-623. https://doi.org/10.1080/14675986.2018.1528527

Ross, K. M., & Tolan, P. (2018). Social and emotional learning in adolescence: Testing the CASEL model in a normative sample. *Journal of Early Adolescence, 38*(8), 1170-1199. https://doi.org/10.1177/0272431617725198

Sadri, G. (2012). Emotional intelligence and leadership development. *Public Personnel Management, 41*(3), 535-548. https://doi.org/10.1177/009102601204100308

Schunk, D. H. (2020). Learning theories: An educational perspective. Boston: Pearson.

Scott, D. (2017). Developing the prison-to-school pipeline: A paradigmatic shift in educational possibilities during an age of mass incarceration. *The Journal of Correctional Education (1974-), 68*(3), 41-52. http://www.jstor.org/stable/26508032

Soland, J. & Kuhfeld, M. (2021). Identifying students who are off-track academically at the start of secondary school: The role of social-emotional learning trajectories. *British Journal of Educational Psychology*, e12463-e12463. https://doi.org/10.1111/bjep.12463

Sousa, D. A. (2021). Neuroscience research: Support for social-emotional and cognitive learning. *Kappa Delta Pi Record*, *57*(1), 6-10. https://doi.org/10.1080/00228958.2021.1851580

Sutter. (2019). Computer-adaptive reading to improve reading achievement among third-grade students at risk for reading failure. *The Journal of at-Risk Issues : a Joint Publication of the National Dropout Prevention Center and Network.*, *22*(2), 31–38.

Sutter, C. C., Campbell, L. O., & Lambie, G. W. (2020). Predicting second-grade students' yearly standardized reading achievement using a computer-adaptive assessment. *Computers in the Schools*, *37*(1), 40-54. https://doi.org/10.1080/07380569.2020.1720611

Systemic social and emotional learning: Promoting educational success for all preschool to high school students. (2020). *The American Psychologist*, 1-15. https://doi.org/10.1037/amp0000701

Tabassum, R., Akhter, N., & Iqbal, Z. (2020). Relationship between social competence and academic performance of university students. *Journal of Educational Research*, *23*(1), 1-14. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fdocview%2F2435558709%3Faccountid%3D12085

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, *88*(4), 1156-1171. https://doi.org/10.1111/cdev.12864

Thierry, K. L., Bryant, H. L., Nobles, S. S., & Norris, K. S. (2016). Two-year impact of a mindfulness-based program on preschoolers' self-regulation and academic performance. *Early Education and Development, 27*(6), 805-821. https://doi.org/10.1080/10409289.2016.1141616

Tienken, C. H. (2021). Social and emotional learning: Then and now. *Kappa Delta Pi Record, 57*(1), 4-5. https://doi.org/10.1080/00228958.2021.1851579

Turki, F. J., Jdaitawi, M., Sheta, H. (2018). Fostering positive adjustment behaviour: Social connectedness, achievement motivation and emotional-social learning among male and female university students. *Active Learning in Higher Education, 19*(2), 145-158. https://doi.org/10.1177/1469787417731202

U.S. Department of Education: National Center on Intensive Intervention. (2019a). Review of academic screening tools [Review of Star Math]. https://charts.intensiveintervention.org/ascreening

U.S. Department of Education: National Center on Intensive Intervention. (2019b). Review of academic screening tools [Review of Star Reading]. https://charts.intensiveintervention.org/ascreening

Voith, L.A., Yoon, S., Topitzes, J., & Brondino, M.J. (2019). A feasibility study of a school-based social emotional learning program: Informing program development and evaluation. *Child & Adolescent Social Work Journal*, *37*(3), 329-342. https://doi.org/10.1007/s10560-019-00634-7

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Sage Publications.

West, M. R., Pier, L., Fricke, H., Hough, H., Loeb, S., Meyer, R. H., & Rice, A. B. (2020). Trends in student social-emotional learning: Evidence from the first large-scale panel student survey. *Educational Evaluation and Policy Analysis, 42*(2), 279-303. https://doi.org/10.3102/0162373720912236

Whaley, K. D., Wells, S., & Williams, N. (2019). Successful Instructional Reading Practices for African American Male Third-Grade Students. *Journal of Educational Research and Practice, 9*(1), 282-299. https://doi.org/10.5590/JERAP.2019.09.1.20

Wilkens, C. L. & Wilmore, E. (2015). Does implementing an emotional intelligence program guarantee student achievement? *Education Leadership Review of Doctoral Research, 2*(1), 34-46. https://eric.ed.gov/?id=EJ1105696

Willis, J. (2021). Stepping up social-emotional learning to reignite all brains. *Kappa Delta Pi Record, 57*(1), 18-22. https://doi.org/10.1080/00228958.2021.1851582

Wolf, S. & McCoy, D. C. (2019). The role of executive function and social-emotional skills in the development of literacy and numeracy during preschool: A cross-lagged longitudinal study. *Developmental Science, 22*(4), 1-18. https://doi.org/10.1111/desc.12800

Yang, C., Bear, G. G., & May, H. (2018). Multilevel associations between schoolwide Social-Emotional learning approach and student engagement across elementary, middle, and high schools. *School Psychology Review, 47*(1), 45-61. https://doi.org/10.17105/SPR-2017-0003.V47-1

APPENDICES

Appendix A

Permission to Use Instrument

From: HAS-SAT Shared Dist. and Licensing <pas.Licensing@pearson.com>
Sent: Monday, June 21, 2021 6:17 PM
To:
Subject: [External] Re: SSIS assessment

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Dear

Thank you for your email. If you only want to use an existing, commercially available version of the SSIS instrument in your research project without further adaptation, translation, or changes to the instrument, no additional permission or license is required from Pearson regarding your research or the publication of your research results as long as you (or other qualified purchaser) purchase and use in your research an appropriate quantity of original materials (record forms etc) . Such use is subject to Pearson's Terms of Sale and Use and permission to use is inherent in the user qualifications, and no reproduction or publication is permitted of Pearson's copyrighted materials.

Regards,

Pearson Clinical Assessments
Permissions and Licensing

PAS.licensing@Pearson.com

Appendix B

School District Approval Letter

January 12, 2022

Dear [redacted],

The Research Review Committee recently met to review your request for research. Based on the information you submitted, we have approved your request. Please note that approval by the district signifies that the requestor has been cleared to contact schools to invite school administrators/teachers/students/parents to participate in the research study. The researcher must make it clear to the individuals selected for the study that their participation is voluntary. If you have any additional questions, please feel free to contact my Administrative Assistant, [redacted]

[redacted]
Director
Research, Evaluation, Assessment, and Accountability

Appendix C

IRB Committee Approval

Date: 10-10-2022

IRB #: IRB-FY21-22-969
Title: Correlation Between Social-Emotional Competence and Academic Performance
Creation Date: 4-14-2022
End Date:
Status: Approved
Principal Investigator:
Review Board: Research Ethics Office
Sponsor:

Study History

Submission Type Initial	**Review Type** Expedited	**Decision** Approved

Key Study Contacts

Member	**Role** Co-Principal Investigator	**Contact**
Member	**Role** Principal Investigator	**Contact**
Member	**Role** Primary Contact	**Contact**

Appendix D

Recruitment Letter

Dear Parent/Guardian:

As a graduate student in the School of Education at Liberty University. I am conducting research to better understand the correlation between social-emotional competence and academic performance for third-grade students in an urban public-school setting. The purpose of my research is to determine if a relationship exists between social-emotional competencies and academic performance in reading and math for third grade students, and I am writing to invite eligible participants to join my study.

Participants must have participated in the Renaissance STAR reading and math assessments and in the "Leader in Me" program. Additionally, the participants will include students who were enrolled in the third grade during the 2021-2022 school year in ___ County Public Schools. Taking part in this research project is voluntary. Participants, if willing, will be asked to answer questions from the Social Skills Improvement System Social-Emotional Learning Edition Rating Form (SSIS SEL-RF) to evaluate their social-emotional competence (approximately 15-20 minutes).

Also, if you agree to allow your student to be in this study, I will ask for your permission to obtain your student's data from the STAR reading and math assessments.

Participant responses and data will be kept anonymous by using the following process:

1. After any opt-out consent forms and the child assent forms are received, teachers will administer the SSIS-SEL rating forms to the participants and then give the completed forms to a school administrator.
2. The _____ County School District's senior analyst will give the STAR data for the students who complete the SSIS-SEL to the school.
3. A district employee affiliated with the participating school will link each student's SSIS-SEL rating form to his or her STAR assessment data, remove all identifying information, and replace identifying information with a random number.
4. A school administrator from each school with give the data to me, but I will not be able to link the data to individual students.

A parental opt-out document and child assent document are attached to this letter. The parental opt-out document and child assent document contain additional information about my research. If you DO NOT want your child to participate, please sign and return the attached parental opt-out document and provide it to your child's homeroom teacher at his/her school.

Sincerely,

Researcher/ Doctoral Candidate

Appendix E

Parental Opt-Out

Title of the Project: Correlation Between Social-Emotional Competencies and Academic Performance
Principal Investigator: _____, Liberty University

Invitation to be Part of a Research Study

Your student is invited to participate in a research study. In order to participate, you must have participated in the Renaissance STAR reading and math assessments and the Leader in Me program and enrolled as a third-grade student in ____ County Public Schools during the 2021-2022 school year. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to allow your student to take part in this research project.

What is the study about and why is it being done?

The purpose of this quantitative, predictive correlational study is to determine if a relationship exists between social-emotional learning competencies and academic performance of third-grade students in an urban public-school setting.

What will happen if you take part in this study?

If you agree to allow your student to be in this study, I will ask her or him to do the following:

1. Take approximately 15-20 minutes to answer questions from the Social Skills Improvement System Social-Emotional Learning Edition Rating Form to evaluate his/her social-emotional competence.
2. Allow me to obtain your student's data from the STAR reading and math assessments.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include addressing the research gap and providing information about how to improve student outcomes (e.g., social-emotional competence and academic performance).

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks your student would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- The data will be collected by the researcher anonymously by the following process:
  5. Teachers will administer the SSIS-SEL rating forms to all students who have NOT returned this opt-out document to their teachers and then give the completed forms to a school administrator.
  6. The ___ County School District's senior analyst will give the STAR data for the students who complete the SSIS-SEL to the school.
  7. A district employee affiliated with the participating school will link each student's SSIS-SEL rating form to his or her STAR assessment data, remove all identifying information, and replace identifying information with a random number.
  8. A school administrator from each school will give the data to me, but I will not be able to link the data to individual students.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

Does the researcher have any conflicts of interest?

The researcher serves as a teacher in the school district. To limit potential or perceived conflicts, your student's school will ensure that all data is stripped of identifiers before the researcher receives it. This disclosure is made so that you can decide if this relationship will affect your willingness to allow your student to participate in this study. No action will be taken against an individual based on her or his decision to allow his or her student to participate in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to allow your student to participate will not affect your or his or her current or future relations with Liberty University or __ County School District, ___ Elementary School, ___ Elementary School, or ___ Elementary School. If you decide to allow your student to participate, she or he is free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw your student from the study or your student chooses to withdraw, please inform the teacher that you or your student wishes to discontinue his or her participation, and your student should not complete and submit the SSIS-SEL rating form. Your student's responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is _____. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at _____. You may also contact the researcher's faculty chairperson, _____, at _____.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, _____ or email at _____.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Opt-Out

If you would prefer that your child NOT PARTICIPATE in this study, please sign this document and return it to your child's teacher by _____.

_____

Printed Child's/Student's Name

_____

Parent's Signature Date

Appendix F

Child Assent Form

Child Assent to Participate in a Research Study

What is the name of the study and who is doing the study?
The name of the study is Correlation Between Social-Emotional Competence and Academic Performance, and the person doing the study is [redacted].

Why is [redacted] doing this study?
[redacted] wants to know if a person's knowledge and skills about emotions affects his/her performance in reading and math.

Why am I being asked to be in this study?
You are being asked to be in this study because you were a third-grade student during the 2021-2022 school year in [redacted] County Schools who participated in the Leader in Me program and STAR reading and math assessments.

If I decide to be in the study, what will happen and how long will it take?
If you decide to be in this study, you will complete the Social Skills Improvement Skills Social-Emotional Learning Rating Form. It will take about 15-20 minutes to complete the form. The researcher will also receive your STAR reading and math assessments, but she will not be able to tell who the information belongs to.

Do I have to be in this study?
No, you do not have to be in this study. If you want to be in this study, then tell the researcher. If you don't want to, it's OK to say no. The researcher will not be angry. You can say yes now and change your mind later. It's up to you.

What if I have a question?
You can ask questions any time. You can ask now. You can ask later. You can talk to the researcher. If you do not understand something, please ask the researcher to explain it to you again.

Signing your name below means that you want to be in the study.

_____

Signature of Child/Witness Date

Liberty University Institutional Review Board

Liberty University
IRB-FY21-22-969
Approved on 6-2-2022