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African American Males, the Achievement Gap and the Impact of Social Skills and Classroom Climate on Educational Aspirations

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Abstract

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There is a gap in the academic achievement of African American males when compared to their peers, this gap has been maintained for many years. The purpose of this study is to conduct a quantitative non-experimental secondary analysis utilizing a national data set focusing on African American male students from the 4th through the 6th grade. To test the hypothesis that, all things being equal, social skills positively affect academics in African American boys and that social information processing, school commitment, and work habits mediate this effect. In total, 60 African American male students in 4th through 6th grades who participated in the NICHD study were included in the data set. None of the proposed mediators mediated the effects of social skills on academic achievement while controlling for socioeconomic status, classroom climate, school resources, and previous school performance. To better understand the relation between social skills and achievement, it is recommended that future research associated with the variables identified in this research focus on one academic year opposed to a three-year gap.

Table of Contents

List of Tables

Table

List of Figures

Figure

CHAPTER 1: INTRODUCTION

Introduction

This dissertation is a quantitative secondary data analysis study to identify the variables that mediate the effects of social skills on the academic achievement of African American males in the 4th through 6th grade. Research can be located regarding the academic achievement gap yet direct, lasting solutions to increase the academic achievement of African American males in various settings have yet to be indicated. A better understanding of the variables and pathways that influence achievement in African American males may help in the development of interventions.

African American males have and continue to score lower than their peers academically. To address this gap in achievement, variables associated with the academic success of African American males need to be identified and confirmed. This study was conducted to further the knowledge around the academic achievement of African American male students. This study evaluates the effects of social information processing, school commitment and academic work habits in conjunction with social skills on academic achievement. This study adds to existing research by providing evidence regarding the relation between social skills and academic achievement and potential mediators of this relation. Connecting social skills with social information processing, school commitment and academic work habits to address academic achievement has not been researched previously in African American males.

This chapter will provide the background for the academic achievement gap as it pertains to African American males, context regarding attempts made to narrow the academic achievement gap, social emotional learning and school climate, mediators of social skills and an introduction to the theoretical framework associated with the proposed study. This chapter will also include the problem statement, purpose of the study, research questions and hypotheses,

the rationale for the study, the significance of the study and definitions of key terms associated with this study.

Background, Context and Theoretical Framework

Often, the terms African American and Black are used interchangeably. Agyemang et al. (2005) propose that the label Black should be phased out except when used in a political context and that the word African be used as a necessary prefix for an ethnic label such as in African Caribbean or African American. Ghee (1990) supports this shift from using the term Black to African American due to the negative associations for the term Black. For this study, the term African American was used with the exception of direct quotes. According to Bhopal and Donaldson (1998) White is the antithesis to the term Black and refers to those with a light complexion. They recommend abandoning the term in scientific writing (Bhopal & Donaldson, 1998). For this study the term Caucasian was used with the exception of direct quotes.

The state of education in America is regularly in the news with specific coverage related to curriculum use (Chasmar, 2022), disciplinary practices (Siemaszko, 2022), and standardized tests (Maglione, 2022). While these are important issues in education, other equally, if not more important, issues silently fall into the background. The disproportionality of education related success of African American students compared to Caucasian students, for example, deserves far greater attention than has been afforded by the mainstream media. Statistically, African American students have performed lower than Caucasian Americans for many years. According to Camera (2016), “the achievement gap between white students and black students has barely narrowed over the last 50 years, despite nearly a half century of supposed progress in race relations and an increased emphasis on closing such academic discrepancies between groups of students” (paragraph 1). While there are varying opinions as to the cause for this disparity in scores between African American children and Caucasian children, scores have yet to meaningfully change (Howard, 2013).

This phenomenon has been coined “the academic achievement gap” and refers to any significant and persistent disparity in academic performance or educational attainment between different groups of students (“Achievement gap definition”, 2013). Achievement gaps start early in the educational experiences of students and develop from social, emotional, and physical factors (Hertert & Teague, 2003). Examples of early social and emotional contributors to the achievement gap include high family stress levels, parental depression, a lack of sensory exposure (e.g., caregivers reading, singing, or talking to their children), as well as a lack of exposure to oral and written language (Hertert & Teague, 2003). Early physical contributors to the achievement gap include lack of shelter, adequate food, and medical care (Hertert & Teague, 2003). These triggers tend to fall along socioeconomic lines such that the higher one’s socioeconomic status, the less likely they are to experience early social, emotional, or physical triggers associated with the academic achievement gap (Hertert & Teague, 2003).

Previous attempts to narrow the achievement gap have fallen short. For example, the ruling in the 1970 Serrano vs. Priest lawsuit was intended to address unequal school funding perpetuated by differences in property taxes. Plaintiffs charged that school funding was discriminatory and unconstitutional, and the court ruled in favor of the plaintiffs, mandating changes. Changes were evident, but, instead of an increase in funding in poorer districts, there was simply a decrease in spending in wealthier districts (Hertert & Teague, 2003). These changes did not accomplish the goal of the plaintiff, and racial disparities in educational outcomes continue to this day. For 8th grade African American male students from 2011-2019 no reading gains were obtained at the At-Proficient, Above-Proficient and At-Advanced reading achievement levels (Scullin, 2020). Furthermore, there was an increase in the number of students who scored Below Basic on reading achievement levels (Scullin, 2020).

The framework of other initiatives is to address the social, emotional, and physical situations that families face outside the school system in hopes of reducing opportunity gaps and eliminating the academic achievement gap. Programs that have been implemented to

address such early triggers include CalWORKs, Medi-Cal, Women Infant and Children (WIC), the Head Start program, and Title 1 funding (Hertert & Teague, 2003). Head Start programs promote cognitive, social and emotional growth for children 3-4 years of age to support later success in school. They also connect families with access to healthy food sources, employment support and assist in creating goals to support the family's well-being (Dahlin & Reich, 2022). These programs have been instrumental in shaping the success for many families but there has yet to be an effect on the academic achievement gap long term, indicating that the cause of the academic achievement gap is more complex and cannot be fixed by community programs and initiatives alone.

In other attempts to address the achievement gap, researchers have identified the need of African American male students to be viewed as learners who can achieve at the same academic level as their Caucasian peers. Hale states (as cited in Lewis, 2019, p.3) most African American males start school lacking the readiness skills and cultural capital to learn. Ford, Grantham, and Bailey indicate (as cited in Lewis, 2019, p.2) that "African American males are viewed as being physically aggressive and confrontational in language; compared to Caucasian males, who are viewed as articulate, vocal and proven leaders. The clear divide in views of boys in school suggests a system of inequity." For African American male students to view themselves as learners, the experience of African American male students needs to be filled with positive connections with caring educators and consistency in all facets of their education. Many policy makers have pushed back on policies that highlight diversity and have favored policies and ideas that promote racial assimilation and social conformity (Johnson, 2013). Yet, including programs such as racial identity training, which consists of learning about other racial identities, can help teachers and administrators to reach students from diverse racial and ethnic backgrounds by seeing their potential.

In sum, previous research has identified several potential mechanisms for narrowing the achievement gap including revisions to laws and policies, community resources, and training

educators to see the potential of African American males. This study addresses the achievement gap by examining many of the previously identified contributors such as unequal financial resources, social concerns, emotional difficulties, physical barriers, and school climate, because researching any of these concerns individually will fall short of providing the needed answers to closing the achievement gap. This study also expands literature by focusing on the pathways through which social skills influence achievement.

Social Skills, Achievement, and Mediators

There are some potential mediators that may impact the social climate of a classroom. This study focuses on social information processing, school commitment and academic work habits, as potential mediators for social skills and academic achievement. Previous research indicates a direct link between social skills and achievement (e.g., Ogden et al. 2023, Durlak et al. 2011 and Wentzel, 1993), and research indicates that the link between social skills and academic achievement may be particularly important for African American boys. Graham et al. (2015), for example, examined social skills and academic motivation in African American males and found that social information processing and school commitment for African American males were related to work habits and academic achievement. More research, however, is needed to further understand this relation.

Social information processing refers to the student's ability to interact with the teacher and classmates. If students have negative social information processing skills and exhibit conflict behaviors with teachers, they may become alienated from the learning environment and their academic performance might reflect these difficulties. Moreover, social skills may influence social information processing abilities (e.g., Dodge & Price, 1994, Schultz et al., 2004) yet there have been no studies to link social information processing to both social skills and academic achievement. According to Crick and Dodge (1994), as we navigate social situations, we use six steps: encoding of social cues, interpretation of social cues, goal formulation, access to or the generation of responses, response decision making, and representation. Breakdowns at any

one of these six steps may result in social misunderstandings, and consistent breakdowns may result in negative social information processing patterns. Additional research, however, is needed to substantiate this relation.

The experiences of African American children in schools demonstrate a unique link between social information processing and academic achievement. Perdue et al., (2018) indicate early markers of social information processing are important for general cognitive functioning associated with academic achievement. While interacting with their teachers and peers, African Americans experience microaggressions, are placed in positions where they are expected to speak for their racial/ethnic group as an educator or expert when racial concepts are covered and are ignored or excluded by their peers during intellectual conversations (Bonner et al., 2019). These experiences create a sense of being “othered” and create negative classroom relationships. When students develop negative social information processing patterns through these negative interactions, they are more likely to struggle academically, disengage from learning, and drop out of school (Bonner et al., 2019).

School commitment determines how students feel about their school life and is important to academic achievement. The construct of school commitment is closely related to intrinsic motivation which is defined as acting in a certain way simply because we gain pleasure from doing it. Extrinsic motivation, on the other hand, is defined as being driven to act a certain way by external factors such as punishment or reward. Not surprisingly, when children are intrinsically motivated to perform well at school because they enjoy academics, they are more likely to succeed (Robles et al., 2021). In their research on achievement and motivation, emotional development, and social skills in children 6-12 years old, Robles et al. (2021) found academic achievement to be closely related to both social and motivational factors but less related to emotional factors (Robles et al., 2021). The specific relation between social skills, school commitment, and achievement in African American males, requires further research. I hypothesize that students with low social skills will lack a sense of belonging in the classroom,

will then feel less committed to school, and will struggle with academics. This research examines this framework.

Work habits refers to the student's ability to follow the rules and expectations of the classroom as well as submit the required assignments. If students have difficulty with following classroom expectations and fail to submit the required assignments their achievement may be lower than students who are able to follow expectations. Vandenbroucke et al. (2018) reported that social skills such as positive interactions with teachers and peers can positively influence a child's self-regulation and contribute to positive work habits. Additionally, previous research suggests that work habits are linked to an increase in academic performance (McClellan et al., 2103, Lleras, 2018). Also, Simpkins et al. (2020) found that the development of work habits is fundamental in future academic success. Thus, the connection between social skills and work habits (Vandenbroucke et al. 2018) and between work habits and academic achievement (Simpkins et al., 2020) have been studied, but the relation of all three factors has yet to be researched collectively.

Problem Statement

While literature indicates there is a gap in the academic achievement of African American males when compared to their peers and that social skills can have a positive effect on academic achievement, the literature provides little research regarding mediators that explain the relation between social skills and the academic success of African American male students.

Purpose

The purpose of this study is to conduct a quantitative non-experimental secondary analysis utilizing a national data set focusing on African American male students from the 4th through the 6th grade. This data was collected in nine states across the United States of America. The primary independent variable is social skills. Other independent variables associated with this study are classroom climate, school resources and total social skills. The

dependent variable is 6th grade academic achievement. Control variables are socioeconomic status and previous academic achievement. Mediating variables are social information processing, school commitment and work habits in the 5th grade.

Research Questions

This study will answer the following research questions for African American male students in 4th through 6th grade:

RQ1: Does social information processing mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

RQ2: Does school commitment mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

RQ3: Do academic work habits mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

Rationale

This study was conducted to further the knowledge around factors associated with the academic achievement of African American male students. A quantitative research study using secondary analysis was used, the data set was pre-existing and all instruments related directly to the constructs of interest. Data collected from 2000-2004 was used from a pre-existing data set. This data was used to evaluate the mediating effects of social skills through information processing, school commitment, and academic work habits on the achievement of African American males from 4th through 6th grade.

Significance

This study is important as it will help to identify ways to address the disproportionality of academic success for African American male students. It provides a starting point to effectively

address the academic achievement gap. By outlining a way to address the academic success of African American males through social skills and other mediating factors, this study has the potential to provide value to the educational system, to the students who historically have been on the lower end of academic related success and help to change the mindset of our community and society as a whole. Providing an opportunity to rebrand the negative connections that are often perpetuated around African American males in education.

DEFINITION OF TERMS

The following terms are defined to provide clarity and assist the reader in understanding in the context of the proposed study:

Academic Achievement Gap: any significant and persistent disparity in academic performance or educational attainment between different groups of students

Academic Work Habits: the student's ability to follow the rules and expectations of the classroom as well as submit the required assignments.

Black: the label Black should be phased out except when used in a political context and that the word African be used as a necessary prefix for an ethnic label such as in African Caribbean or African American.

Extrinsic Motivation: driven to act a certain way by external factors such as punishment or reward.

Intrinsic Motivation: acting in a certain way simply because we gain pleasure from doing it.

School Commitment: how students feel about their school life, and if a student lacks a feeling of belonging in the classroom their achievement may suffer.

Secondary Analysis: Analysis of data that were collected previously and are available in a database for further use.

Social Competence: the abilities, behaviors and skills required to establish effective social relationships.

Social Information Processing: the student’s ability to interact with the teacher and classmates. Consists of cognitive emotional processes that have the potential to link to several risk factors and the development of aggression.

Social Learning Theory: uses both environmental and cognitive factors and considers how they interact with one another to influence learning and behavior.

Social Skills: interaction and communication with others where social rules and relations are created, communicated, and changed in verbal and nonverbal ways.

White: White is the antithesis to the term Black and refers to those with a light complexion and should be dropped in scientific writing (the term Caucasian will be used for alignment purposes).

CHAPTER 2: LITERATURE REVIEW

Introduction

The experience for African American students in the education system differs from other racial groups' experiences in the education system. According to Noguera (as cited in Anumba, 2015) “African American students, especially males, experience lower expectations, marginalization into non-challenging or non-college bound tracks, disproportionate suspensions and expulsion rates, and special education referrals, as they navigate daily through our school system” (p.6). Not only do these factors influence academic outcomes, but they weigh heavily on students’ emotional wellbeing, and policymakers have taken note.

Reforms designed to impact the academic achievement of African American male students include the implementation of many legislative and state initiatives such as No Child Left Behind (NCLB), Race to the Top (RTTT), Every Student Succeeds Act (ESSA) and Common Core State Standards. The NCLB was introduced in 2001 with the purpose of improving schools; it was highly controversial for its focus on punishment, mandates and privatization (Applequist, 2008). Further, NCLB required that all students complete mandatory reading, math, and science testing in grades three through eight and one time in high school. It also required that states report school progress annually and schools obtain highly qualified educators (Manna & Ryan, 2011). In 2009, RTTT replaced NCLB. One noted change from NCLB and RTTT was relinquishing annual progress reports and implementing state accountability systems. The new policy maintained many of the concepts but added a focus on common standards and changed how good teachers were defined (Manna & Ryan, 2011). To hold the title of a highly qualified teacher, a teacher’s academic ability, preparation coursework, teaching experience, subject matter knowledge and certification status were considered (Wu, 2020).

As more instructional time was spent on tested subjects such as reading and math, less time was given to subjects or activities that some students found of interest. Although this shift may have seemed necessary to administrators trying to raise test scores, diminished interest in school subjects can lead to an increase in behavior concerns (Whitney & Candelaria, 2017). Schools located in low socioeconomic neighborhoods were particularly vulnerable to this shift and were often in danger of failing to make the adequate yearly progress targets leading to restructuring, closures, or other major changes (Whitney & Candelaria, 2017). Thus, additional changes to policy were needed.

The ESSA was signed into effect in 2015 requiring states to provide student assessment scores separated by the following subgroups: each major racial and ethnic group, economically disadvantaged students compared to students who are not economically disadvantaged, children with disabilities as compared to children without disabilities, English proficiency status, as well as gender and migrant status (Sharp, 2016). According to Fryer (2021) the 2021-2022 school year would have been the first year that effects would have been required on school improvement strategies effectiveness, however, the pandemics impact on testing and accountability systems caused a delay in results. Thus, despite the legislative and state initiatives, the outcomes are disappointing causing one to wonder why the data continues to show racial disparities in academic achievement.

The goal of this literature review is to summarize academic achievement data and cover the linkage between academic achievements with social information processing, school commitment, and academic work habits associated with African American male students. Additionally, it will discuss socioeconomic status, school resources, and classroom climate. To accomplish this goal, the literature for this study was collected after establishing an outline which guided the keywords used in search

databases. Keywords included, but were not limited to, *academic achievement, African American, males, social skills, social information processing, academic work habits, and school commitment*. The ERIC and SAGE databases were utilized. Google Scholar was also used to search for information. Resources used include peer-reviewed journal articles, books, government statistics, theses, and dissertations. Sources are included dating from 1969 to present, the majority being published in the last 10 years.

Theoretical Framework

When considering the main schools of thought associated with educational psychology, Bandura's social learning theory, later called the social cognitive theory, provides a helpful framework to guide this study. Bandura distanced himself from the work of Sears who attempted to combine a psychoanalytic approach with operant theory (Grusec, 1992). Bandura (1969) disavowed explanations using mechanistic conditioning and concluded that if society ran solely on a reward and punishment system many people would be unsuccessful. Instead, he endorsed concepts of information processing and developed a framework that eventually became known as social cognitive theory (Grusec, 1992). He suggested that when faced with worse case situations people often emulate the behaviors of others who have socially acceptable behavior. Bandura described this phenomenon as the identificatory process in the social learning theory (Bandura, 1969). African American males, much like others, emulate those who they perceive to be their role model which, depending on the behavior of the role model, can either negatively or positively affect their academics. Unfortunately, many African American males perceive most educational activities as irrelevant and feminine and perceive that teachers attempt to press feminine culture on to them (Davis, 2013). Conversely, positive academic role models may be imperative for the success of African American males and creating a school climate where students are surrounded by positive teachers who serve as role models may enhance learning experiences for African American male students.

Social cognitive theory is chiefly focused on how people think about their social experiences and how those thoughts influence their behavior and development (Schunk & DiBenedetto, 2020). Embedded in the theory are social cognitive processes which include individuals' thoughts regarding their environment, including perceptions of self-efficacy, response-outcome expectations, and standards for evaluative self-reactions; these processes affect how they respond to the environment and the environments that of which people seek to be a part (Grusec, 1992). African American males experience low expectations, cultural mismatches with educators, discrimination, microaggressions and implicit bias from peers and the adults on their school campuses (Jagers et al., 2019). These experiences can be traumatic and as a result, impact their learning. According to Schlund et al. (2020), social emotional learning (SEL) can "create more fertile learning environments and improved developmental outcomes for all individuals" (p.1). Additionally, SEL assists both children and adults in acquiring and effectively applying the required attitudes, skills, and knowledge needed to both understand and manage their emotions as well as make effective and achievable goals, feel and show empathy, and establish positive relationships with others (Jagers et al., 2019). Thus, incorporating SEL into the academic curriculum for African American males may be integral to meeting their needs and closing the achievement gap.

Review of Literature

Socioeconomic Status & School Resources

Inequalities in education are not only perpetuated through legislation, but through the legacy of income disparities. A major factor affecting academic achievement of students is the socioeconomic status (SES) of their family. The amount of funding schools receive impacts the experience of students and the ability of schools to hire qualified educators and staff. Schools located in high SES areas receive more funding, quality teachers, and resources through property taxes that equate to higher academic achievement among students while 39% of African American children and adolescents are living in poverty in the United States (APA,

2017) and are the victims of underfunded schools and the lack of resources. “Across the board, we are providing African-American students less of everything we know contributes to achievement in schools” (Adam 2014, as cited in Anumba, 2015, p.1). Thus, these gaps in opportunity lead to gaps in achievement of students.

Racial stereotypes, how students perceive themselves, and how they are perceived by classmates may also play a significant role in emotional and educational outcomes. Research shows that racial stereotypes are apparent to children before their adolescent years and that stereotypes affect their self-concepts (Harpalani, 2017). Additionally, their belief regarding racial stereotypes is directly related to lower perceived academic competence which becomes stronger when race plays a large factor in their self-identity (Harpalani, 2017). Relatedly, how members of specific racial or ethnic backgrounds view consequences associated with doing poorly in school may affect the ability to narrow the achievement gap. According to Hertert and Teague (2003) the term “undue optimism” refers to believing that doing poorly in school has no effect on one’s future success. Taken together, negative academic stereotypes coupled with undue optimism have a detrimental effect on the emotional and academic outcomes of African American boys.

Social Skills & Classroom Climate

Teaching social emotional learning (SEL) in schools leads to better student academic outcomes. By improving students' social-emotional competence through explicit instruction, an improvement in their well-being and academic achievement levels can be observed (Ashdown & Bernard, 2011). Durlak et al. (2011) conducted a meta-analysis of 213 school based SEL programs with more than 270,000 students in kindergarten through high school. They found that students who participated in SEL programs had significant improvement in Social and Emotional skills, behavior, attitude, and school performance with an 11-percentile point gain in academic achievement.

School climate, a concept related to SEL, refers to the perceptions and experiences of teachers in the classroom and is often considered a precondition for SEL. Specifically, the level of social interaction between members in the classroom (i.e., students and students, teachers and students, etc.) affects school climate in part because, “studies in the perceptions and experiences of students show that the beliefs held by the teacher can have either a positive or negative impact on student achievement” (Williams, 2011; p.69). According to Anguiano-Carrasco et al. (2022) positive school climate and SEL outcomes, such as social skills, are important joint factors associated with students’ ability to achieve academically. They conducted two studies – one focusing on the ACT English test and another using the ACT math and science tests. In both studies they found that students who met or exceeded benchmarks had high marks for SEL skills. For the English test they found that students also had high marks for school climate and that if they had high marks for both SEL and school climate that their English test scores rose significantly. Anguiano-Carrasco et al. (2022) emphasized the connection between SEL, school climate, and achievement. When children are taught SEL by their teachers it can improve the classroom climate thus impacting their academic achievement; however, according to the California child report (2020), only 59% of California 9th grade African American students report a caring relationship with at least one adult. Importantly, California, Massachusetts, Wisconsin, Kansas, Pennsylvania and Washington have all adopted standards or guidance related to SEL for their states (state profiles, n.d).

Not all research suggests a relation between classroom climate and achievement. For example, Xaba & Mofokeng (2021) conducted a study in South African secondary schools to determine the school climate that promoted the highest performing schools in the area. They found that, in the historically disadvantaged areas of South Africa, the highest performing schools had principals with behaviors that were below

average in terms of being supportive and very high in terms of being directive. The teacher's behavior was described as very low regarding being engaged and above average regarding being frustrated. Due to what the researchers described as confusing results they concluded that the measure may need to be validated and standardized for the South African population. Because current research yields conflicting results regarding classroom climate and achievement, further research is needed to clarify any relation between these variables.

Academic Achievement

In this study we will analyze data from locations in 9 states across the United States (Arkansas, California, Kansas, Massachusetts, North Carolina, Pennsylvania, Virginia, Washington, and Wisconsin). According to the National Assessment of Educational Progress (NAEP) data for the 2021-2022 school year, enrollment status, percentage of African American students, math and reading national averages, as well as math and reading averages for African American and Caucasian students for each of the nine states can be located in table 1. The data confirms the persistent finding that African American students score lower than their Caucasian peers on standardized tests.

Table 1

NAEP Data by State

	Enrollment	% African American	Reading Averages	African American Reading Averages	Caucasian Reading Averages	Math Averages	African American Math Averages	Caucasian Math Averages
National public Average			216			235		
Arkansas	489,565	19.61	212	188	221	228	207	236
California	892,073	5.07	214	194	231	230	215	245
Kansas	485,424	6.72	215	195	222	235	209	243
Massachusetts	921,180	9.31	227	207	235	242	223	248
North Carolina	1,525,223	24.94	216	198	229	236	219	246
Pennsylvania	1,695,092	14.55	219	194	226	238	208	246
Virginia	1,249,815	21.84	214	195	224	236	213	247
Washington	1,081,835	4.69	217	210	226	235	220	242
Wisconsin	829,359	8.78	217	186	226	240	201	245

According to the National Center on Safe and Supportive Learning Environments (NCSSLE) six of the nine states discussed in this study are served through their grantee program to improve school climate: California, Kansas, North Carolina, Pennsylvania, Virginia and Wisconsin. The NCSSLE uses 3 indicators when evaluating the Every Student Succeeds Act (ESSA). The three indicators are (1) accountability, used to identify schools for comprehensive support or targeted support and improvement; (2) improvement, used to inform improvement efforts in identified schools or as a collective system; (3) other uses, identifies the use of different efforts to measure or improve school performance. Arkansas, California,

Massachusetts, and Wisconsin fall under the improvement indicator while Kansas, North Carolina, Pennsylvania, Virginia and Washington fall under the indicator of other uses (state indicator table, n.d).

Social Skills and Academic Achievement

Social Information Processing

Social information processing consists of a person's ability to interact with others, the level of the interaction with others, and information regarding the form of interactions (Senol & Metin, 2021). For this study, social information processing refers specifically to how one interacts when faced with conflict situations. Previous research suggests that social information processing, social skills, and school readiness have a direct link to expressive learning and academic performance (Ziv, 2013), and this study will hone in on the link between social skills, social information processing, and achievement in African American boys.

One of the specific social skills that has been linked to academic outcomes is the skill of addressing and resolving conflict with peers and adults (Jennings & DiPrete, 2010). Several variables have been implicated in the development of this skill including socioeconomic status, education, personal aspirations, self-regulatory abilities, and affective states (Bandura, 2001). Additionally, classroom environments may also influence conflict resolution skills. Korpershoek et al. (2016) conducted a meta-analysis on the effects of classroom management strategies on improving student’s behavior and found that four of the five programs they evaluated enhanced behavioral outcomes such as the ability to resolve conflict which is a marker of social information processing. Importantly, they also found that improvements in behavior were related to better academics. Their research also suggests that strategies focused on teaching social and emotional skills have a positive effect on numerous educational outcomes on an individual level. Thus, children who learn socially acceptable behaviors in a positive school environment may develop positive ways to process conflict situations which may result in positive social outcomes and better academic experiences (Albrecht et al., 2005).

Outcomes associated with a lack of social skills and conflict resolution instruction also highlight the need for social skills training. Ongoing peer conflict can result in depression, loneliness, social withdrawal, school avoidance and decreased social learning and academic engagement (Buhs et al., 2005). Hektner et al. (2000) conducted an analysis of 118 7-year-olds over a six-month period. They compared aggressive and moderately aggressive children's ability to establish and maintain friendships. While moderately aggressive children were able to form mutual friendships, highly aggressive children lost mutual friendships. Such students are likely to struggle academically given the need for positive peer interactions for school success (Durlak et al., 2011).

School Commitment

Social skills may be able to influence achievement through motivation, or in the context of education – school commitment. Gresham & Elliott (1990) note that academic motivation and teacher-rated social skills are significantly related. Social skills may help children navigate the academic environment and facilitate the opportunities for students to pursue natural interests. Natural interests, in turn, improve academic achievement. Specifically, the self-determinist theory of motivation posits that greater performance stems from intrinsic interests or extrinsic values that are combined and internalized by the individual (Cook & Artino, 2016). Robres et al. (2021) describes intrinsic motivation as the way we act because we gain pleasure from simply doing and extrinsic motivation as actions being driven by external things such as punishments and rewards. A student's motivational level for learning or their school commitment is determined by their thoughts, feelings, and the classroom climate (Cook & Artino, 2016), and students who are more interested in their studies generally demonstrate higher academic achievement (Von Maurice et al., 2014).

School commitment can be broken down into three main components: behavioral commitment, emotional commitment, and cognitive commitment (Atmaca & Koccu,

2019). In this research we focus on the emotional commitment which refers to the student's feelings towards their school life such as their interests, their happiness, and their anxieties. If students do not feel they belong or are accepted in the classroom environment they may, as a result, struggle with academics. Additionally, emotion use, emotional understanding, emotion regulation, and emotion perception are culture specific and African American boys are at a disadvantage regarding emotional resources (Poulou et al., 2018). Thus, greater emphasis may need to be placed on African American students' wellbeing to build positive school culture and instill a sense of commitment to academic achievement (Iasevoli, 2021). Moreover, if students do not have a strong sense of school commitment, they may allow other things to take precedence over their schooling such as staying home which, in turn, may negatively impact their academic achievement.

Academic Work Habits

Academic work habits are noncognitive skills that are important throughout one's life from elementary school through the work force and beyond (Simpkins, 2020). Work habits at school consist of turning in work on time, working hard, following rules and expectations in and out of the classroom and generally giving one's best effort (Simpkins et al., 2020). Importantly, many of these habits could be considered a subset of social skills. Behaviors such as following rules and expectations and turning in work on time may fall under the umbrella of cooperative behavior. Accordingly, Simpkins (2020) emphasized the importance of developing effective academic work habits early as a foundational tool so that children can academically perform better in later years. Classroom climate may influence student work habits because students may choose to not demonstrate their best efforts due to possible ridicule, perceived incompetence, or low self-esteem. And, if a student lacks school commitment, they may lack positive work habits that could improve their academic achievement.

A student's ability to establish and maintain effective academic work habits such as

remembering to submit assignments and submitting quality work can influence how students' function within the classroom (Simpkins, 2020). Previous research regarding academic work habits have utilized differential continuity to demonstrate that students with strong work habits are likely to maintain their advantage over their peers during elementary and middle school (Simpkins, 2020). Lleras (2008) indicated that after controlling for previous achievement and family SES, significant effects were found for academic work habits on achievement after controlling for cognitive ability. Spending time on homework, having an interest in school, and demonstrating fewer behavior problems were positively related to academic achievement (Lleras, 2008). In sum, social skills may give rise to academic work habits which, in turn, influence academic achievement.

Summary

The three mediating variables (i.e., social information processing, school commitment and work habits) are potential mediators of social skills and academic achievement especially for African American boys. Data shows that the learning environment for African American students is stigmatizing and that African American students' academic achievement is impacted by their experience in the educational setting. Lewis (2019) shares that African American males face numerous obstacles when attempting to self-identify with the current educational curriculum and interventions provided. He shares that the overarching belief around the United States is "this country has failed African American males more than any other racial or ethnic group" (p.1). Lewis (2019) continues indicating that the effect of not allowing equal access to educational opportunities has negatively impacted African Americans. Equal access to educational opportunities are associated with negative classroom climates prompting low school commitment, poor social information processing skills and decreased work habits all which impact the academic achievement of African American males.

CHAPTER 3: METHODOLOGY

Introduction

The focus of this research is to address the gap in literature around variables that mediate the relation between social skills and the academic achievement of African American male students. Utilizing a national data set with participants from 9 states in the U.S, this study looked at African American male students from the 4th through 6th grade during 2000-2004.

Research Questions

This study utilizes secondary data to answer the following research question's (RQ) for African American male students in 4th through 6th grade:

RQ1: Does social information processing mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

To answer RQ1 the path coefficients from social skills to social information processing and from social information processing to academic achievement was calculated to determine the indirect effect of social skills on achievement.

RQ2: Does school commitment mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

To answer RQ2 the path coefficients from social skills to school commitment and from school commitment to academic achievement was calculated to determine the indirect effect of social skills on achievement.

RQ3: Do academic work habits mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

To answer RQ3 the path coefficients from social skills to academic work habits and from academic work habits to academic achievement was calculated to determine the indirect effect of social skills on achievement.

Research Methodology

A quantitative study was employed to answer the research questions, and seven instruments was used from the National Institute of Child Health and Development's (NICHD) database to evaluate variables.

Research Design

This non-experimental, secondary analysis design was selected to test the hypothesis that, all things being equal, social skills positively affect academics in African American boys and that social information processing, school commitment, and work habits mediate this effect. Control variables include socioeconomic status, previous academic achievement, classroom climate, and school resources. The independent variable is the total social skills scores as rated by the participants' mother and teacher. Mediating variables include social information processing, school commitment and academic work habits in the 5th grade. The dependent variable is 6th grade academic achievement. Other independent variables associated with this study are classroom climate and school resources. Control variables are socioeconomic status and previous academic achievement.

Population and Sample Selection

This study uses data from the National Institute of Child Health and Development's (NICHD) Study of Early Child Care and Youth Development (SECCYD). The NICHD is one of the most comprehensive childcare studies conducted to date and was created to determine how childcare differences are related to the development of children. Data was collected from 10 collection centers across the United States located in Arkansas, Orange County, California, Kansas, Massachusetts, Pittsburgh, Philadelphia, Virginia, Seattle, North Carolina, and Wisconsin. Initially, 1,364 children were enrolled in the study in 1991 with 12.7% African

American families. Phase III, which was the focus of this study, was conducted from 2000-2004 and followed 1,061 children from 2nd grade through 6th grade.

Instrumentation

Academic Achievement

The Mock Report Card measured in 4th and 6th; grades was used to measure academic achievement. This measure consists of 3 subscales: current school performance, work habits, and social skills with peers. Current school performance measured at 4th grade was used to measure previous academic achievement (i.e., control variable), while 6th grade scores was used for current academic achievement (i.e., independent variable). Current school performance measured performance in six subjects: reading, written language, oral language, social studies, math and science. Performance is rated on a 5-point scale where 1= below grade level and 5= excellent, and scores across the six subjects are averaged to provide an overall score. Reliability coefficients (alpha) for the current school performance subscale ranged from .92 - 94 (Vandell & Pierce, 1998). Validity was calculated by correlating mock report card scores with achievement tests in the 4th grade and yielded a correlation coefficient of $r = .68$, $p < .001$ (Vandell & Pierce, 1998).

Work Habits

The Mock Report Card measured in 5th grade was used to measure work habits. This measure consists of 3 subscales: current school performance, work habits and social skills with peers. Work habits are rated on a 5-point scale where 1=very poor and 5=very good. Scoring was calculated using the mean of questions 7-12 for the work habits subscale. Reliability coefficients (alpha) for the work habits subscale for 6th grade was .95 (Vandell & Pierce, 1998).

School Commitment

The School Commitment measures students' feelings about homework, teachers, school, and school conduct in 5th grade. The questionnaire consisted of 20 items separated into 4 subscales: school perceived competence, school motivation, school social aspects and school

total score. Only two subscales were used in the current study: school's perceived competence and school motivation. These scales were averaged together to measure school commitment (i.e., mediator). The school perceived competence score is calculated using the mean of reflected question 3 and items 7, 11-14, 18-20. Higher scores indicate higher perceived competence at school. The motivation score is calculated using the mean of reflected questions 2, 5 and items 1, 6, 8, and 17. Higher scores indicate more motivation at school. Reliability estimates was calculated as part of data analysis.

Social Information Processing

The Social Information Processing scale is a child-based questionnaire that was used to measure social information processing at 5th grade (i.e., mediator). The measure includes six stories regarding conflict situations. Three stories (1, 2, 4) demonstrate instrumental conflict such as being cut in line by a peer. The remaining three stories (3, 5, 6) demonstrate relational conflict such as being excluded or rejected by peers. The child selects from four possible conflict management strategies (overt aggression, relational aggression, assertive friendship, and avoidance) for each situation as well as the expected outcome. At the 5th grade level, the mean of items 1, 2, and 4 represent the overt aggression score and the mean of items 3, 5, and 6 determines the relational aggression score. A total overt aggression endorsement score is computed using the mean of the three intermediate overt aggression testing items and the three intermediate relational aggression testing items, this score is imputed by proportional weighting.

Social Skills Rating System (SSRS)

The SSRS is a 38-item parent assessment instrument and a 30-item teacher assessment used to measure a child's social skills which is the independent variable. The social skills scale consists of four subscales: Cooperation, Assertion, Responsibility, and Self-control (C.A.R.S) which are used to identify shortcomings in positive social behaviors. The total social skills scores as rated by the child’s mother and teacher in 4th grade was used to measure social skills for this study. Responses are based on a 3-point scale 0= never, 1= sometimes, and 2=

very often. The SSRS has a standard score mean of 100 with a standard deviation of 15. The reliability (alpha) coefficient for the total social skills score for teachers' assessment is .94 (Gresham & Elliott, 1990). Regarding validity for the teacher assessment, the Social Skills subscale was significantly and negatively related to the Child Behavior Checklist which measures problem behaviors in children (Gresham & Elliott, 1990).

Positive Social/Emotional Classroom Climate Composite

The Positive Social/Emotional Classroom Climate Composite measured at 5th grade was used as a background variable and control for school climate. This composite is included in the Classroom Observation System (COS-5). The Positive Social/Emotional Classroom Climate Composite measures school context at the classroom level providing the emotional climate and classroom management levels. It is computed as the sum of 6 teacher/classroom ratings: classroom over-control (reflected), chaos (reflected), all teacher detachment (reflected), positive classroom climate, negative classroom climate (reflected), and all teacher sensitivity. Scores are imputed by proportional weighting, ranging from 20.25 to 41.25 with higher scores indicating a more positive social/emotional classroom climate. Raw items demonstrated moderate internal reliability (6 items, Cronbach's Alpha= .76).

Principal Questionnaire

The Principal Questionnaire for 5th grade was used to measure the financial security of the child's school and serves as a background variable. This is a 28-item questionnaire that provides information on staffing; professional development; the principal's personal, professional, and educational background; the school's demographics; as well as the areas of study for the students. For this study, only question 15c, which measures the school principal's perception of the school's financial security was utilized. This instrument was used to measure school financial resources.

Family Ethnicity and Cultural Background

The Family Ethnicity and Cultural Background questionnaire identifies the mother's or alternative primary caregivers report of maternal and paternal ethnic heritage using six categories: European, Asian, Middle Eastern, Latina, African and American Indian. In the questionnaire, respondents were asked whether parents emigrated to the U.S, which national or cultural heritage they felt they closest identified with, which language they used in different situations, and their neighborhood ethnic make-up. For this study, only the information regarding the mother and father's ethnic heritage was utilized to select African Americans.

Family Education and Income

The Family Education and Income questionnaire is a 5-item measure used to assess components of family income which is a control variable. The annual income from the mother's employment and partner/spousal income were obtained from the mother's report. The income-to-needs ratio, which was used in this study as a measure of socioeconomic status (SES), is calculated by dividing the total family pre-tax income by the poverty threshold for the house. The poverty thresholds were provided by the US Census Bureau.

Data Collection and Management

This study uses eight instruments from the NICHD's SECCYD. This data is housed in a secure data room in Benerd College. Both measures included in the mock report instrument (school performance and work habits) are teacher questionnaires, and the Positive Social/Emotional Classroom Climate Composite is a teacher and classroom rating scale. The School Commitment and Social Information Processing instruments are student-based questionnaires. Parent questionnaires consist of the Social Skills Rating System, Family Ethnicity and Cultural Background, and the Family Education and Income instruments. The last instrument is the Principal Questionnaire.

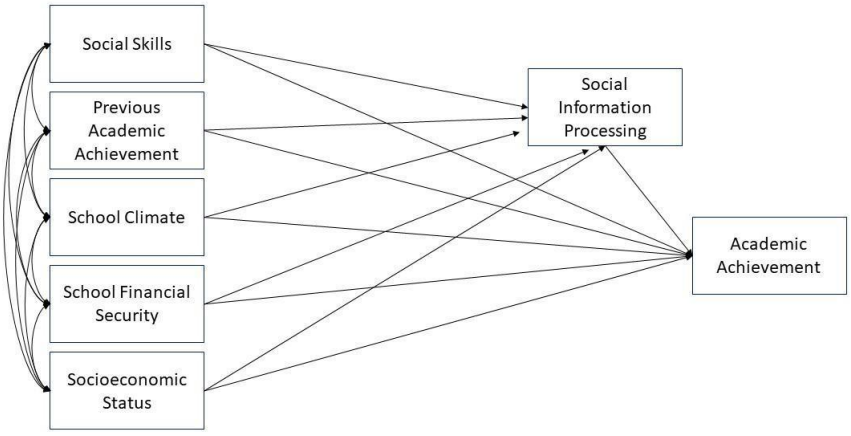
Data Analysis Procedures

Research Question 1

Data was investigated using a series of multiple regression analyses in SPSS. First, academic achievement was regressed on social information processing, social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Second, social information processing was regressed on social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Finally, a Sobel test was used to determine the significance of indirect effects. For the Sobel test to answer research question 1, path coefficients from social skills to social information processing and from social information processing to academic achievement was used to calculate the indirect effect of social skills on achievement.

Figure 1

Social Information Processing Model

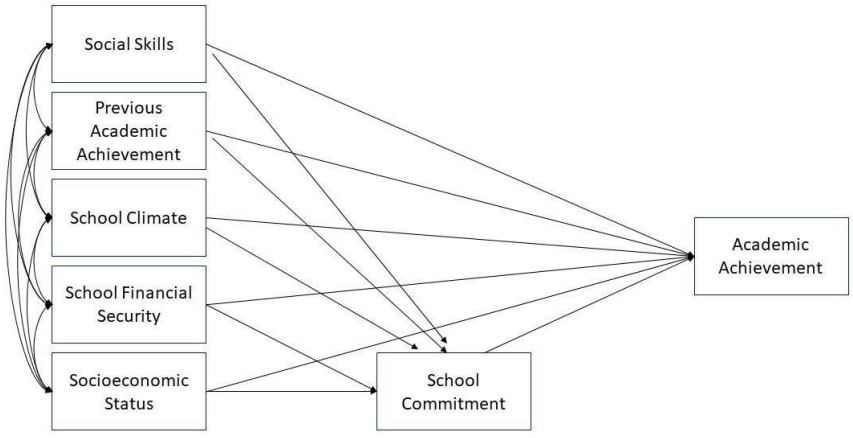


Research Question 2

Research Question 2 was investigated using a series of multiple regression analyses in SPSS. First, academic achievement was regressed on school commitment, social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Second, school commitment was regressed on social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Finally, a Sobel test was used to determine the significance of indirect effects. The path coefficients from social skills to school commitment and from school commitment to academic achievement was used to calculate the indirect effect of social skills on achievement.

Figure 2

School Commitment Model

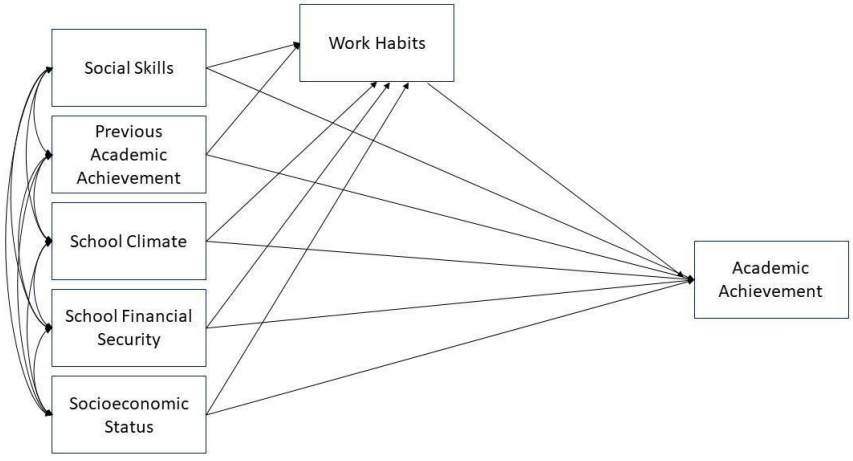


Research Question 3

Data analysis for Research Question 3 follows the same pattern as the previous two research questions. First, academic achievement was regressed on work habits, social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Second, work habits were regressed on social skills, previous academic achievement, school climate, school financial security, and socioeconomic status. Finally, a Sobel test was used to determine the significance of indirect effects. Specifically, path coefficients from social skills to academic work habits and from academic work habits to academic achievement were used to calculate the indirect effect of social skills on achievement.

Figure 3

Work Habits Model



Ethical Considerations

Ethics are a top priority in this study. The validity and reliability of this study was ensured by following the methods outlined in this chapter. As this study uses secondary data, the risk to

human subjects was minimal. Participants are approximately 9-12 years old African American males whose parents previously provided informed consent for their participation in the NICHD study. Subjects were not identifiable as data was previously de-identified by the NICHD. Data from the NICHD study is stored in a secure data room. No data was accessed until approval was received from the Institutional Review Board (IRB).

Limitations and Assumptions

There are possible limitations to this study regarding internal validity and external validity. Regarding statistical validity the protocols were standardized, scores were reliable, groups were homogeneous, and accurate coding and data entry is assumed, which should increase the statistical power of this study. The overall sample size is not yet known, and a small sample could decrease the statistical power of the proposed study. Regarding construct validity, this study uses multiple methods of measurement to maximize inferences which should reduce threats of mono-method bias.

Possible threats to internal validity include statistical regression, attrition, maturation, and subject effects. As this study uses pre and post data there is a possibility of statistical regression if data has extreme high or low scores in 4th grade achievement. Those scores may move closer to the mean when reviewing 6th grade achievement. Attrition may become evident if the number of subjects decreases between 4^{th} and 6^{th} grade. Another assumption is a possible threat of maturation due to the maturity level of participants increasing with age from the 4th grade year to the 6th grade year. The final threat to internal validity is a possible effect on scores due to long term inclusion in the NICHD study.

A possible external validity threat relates to the study population. Results of this study may only generalize to 4th through 6th grade African American male elementary students. This specific population may not translate to other subjects in other locations.

Summary

The goal of this chapter was to provide an outline of the research method that was utilized to answer the research questions. A description of the population, data collection and data analysis provided the specifics regarding the plan for conducting the study, what data was used, and how the data was analyzed. The goal of the following chapter will be to provide the study results and demonstrate whether or not the methodology described in this chapter was followed.

CHAPTER 4: DATA ANALYSIS AND RESULTS

Introduction

This chapter contains the results from the secondary analysis. As indicated in chapter 1, this study presented here identifies the variables that mediate the effects of social skills on the academic achievement of African American males in the 4th-6th grade. This chapter includes information regarding the sample demographics and the analysis of the data. This chapter is organized by the three research questions posed in chapter 1. First discussing the potential mediating effects of social information processing, then school commitment, and finally academic work habits.

Data Analysis

Using initial phase one data, African Americans were selected for the study and all other data in the other category was deleted. Additionally, all female data was removed from the data set. Cases with no data were also removed from the data set. Tests of assumptions were conducted using the 15 remaining cases. Then data was uploaded into MPLUS software for analysis. Missing data was imputed using maximum likelihood and bootstrapping was used to estimate parameters for indirect effects.

Path analysis was utilized through MPLUS to address research questions 1-3. For research question one, path coefficients from social skills to social information processing and from social information processing to academic achievement was calculated to determine the indirect effect of social skills on achievement. For research question two, the path coefficients from social skills to school commitment and from school commitment to academic achievement was calculated to determine the indirect effect of social skills on achievement. For research question three, the path coefficients from social skills to academic work habits and from academic work habits to academic achievement was calculated to determine the indirect effect of social skills on achievement.

Conducting path analysis is appropriate for this study because it allows us to identify whether or not the potential mediating variables are in fact mediating between the dependent and independent variables while controlling for the background variables.

Tests of Assumptions

Assumption 1 test of linearity was conducted by plotting the dependent variable against the mediator variable. The pattern should be linear; a curved pattern suggests a more complex model is needed. Identifies departure from linearity but sample size was small. See figures 4-9 in appendix.

Assumption 2 test for homoscedasticity (HOV) assumes variance are equal or similar in different groupings. This is evaluated by comparing the ratio between the largest and smallest variances, if the ratio is 1.5 or smaller the regression is considered homoscedastic. Variances for three residual groups did not yield large degrees of variance all under the 1.5 cutoff indicating assumption met, see tables 2-4 in the appendix.

Assumption 3 test for normality of residuals indicates data is distributed symmetrically around zero with no skewness or kurtosis; indicating errors to be random and independent. Utilizing a histogram graph this assumption is considered met as data is symmetrically distributed, see figures 10-12 in the appendix.

Assumption 4 multicollinearity is when independent variables are highly correlated indicated by $r = .80$ or higher, a variance inflation factor (VIF) higher than 5, or a correlation between two variables equaling 1 or -1. Statistic VIF regarding research questions 1-3 are all well under 5 indicating assumption met. See table 5-7 in the appendix.

Additionally there was no concern regarding leverage as all numbers were under 1. The Cook test indicated one large value of .56056 that may have significant influence on results. In regards to distance residuals did not indicate any data problems as there were no particularly large residuals.

Descriptive Findings

During the 2000-2004 of the National Institute of Child Health and Development (NICHD) study from the 1,061 participants only 15 African American males in the 4th-6th grade participated fully in the study without missing data. For each analysis, there were participants who did not complete all the test instruments. Each analysis involved a total of 6 variables. Due to previous research around maximum likelihood and information imputation (Graham, 2009), no participants with more than 3 missing pieces of data were included in the analysis. If a participant had 3 or fewer instances of missing data, the missing data was imputed. Missing data for each analysis (as indicated by the mediating variable) is summarized in table 8 and described below. Using MPLUS 60 participants were used in the study by imputing missing data. For social information processing and school commitment 15 participants had no missing information, 25 had 1 missing entry, 15 had 2 missing entries and 5 had 3 missing entries. For academic work habits 14 participants had no missing information, 22 had 1 missing entry, 16 had 2 missing entries and 8 had 3 missing entries. Participants were from 9 states across the United States (Arkansas, California, Kansas, Massachusetts, North Carolina, Pennsylvania, Virginia, Washington, and Wisconsin).

Every instrument had at least 1 individual that did not complete, resulting in missing data. Majority of missing information came from the School Resource instrument that was completed by the school principals at grade 5 with 23 incidents with missing entries and the Child Evaluation: Current School Performance grade 6 with 22 individuals not completing the instrument (see table 9).

Table 8

Quantity, Frequency and Percentage of imputed data for each analysis (identified by its mediating variable).

Mediating Variable	Missing	Frequency	Percent
Social Information Processing	0	15	25.0
	1	25	41.7
	2	15	25.0
	3	5	8.3
School Commitment	0	15	25.0
	1	25	41.7
	2	15	25.0
	3	5	8.3
Academic Work Habit	0	14	23.3
	1	22	36.7
	2	16	26.7
	3	8	13.3

Note. Each analysis had six variables. Participants with more than three missing values were excluded from the analysis.

Table 9

Missing Data by Instrument

Instrument	Complete Data	Missing Data
Child Evaluation: School Performance Grade 4	48	12
School Resources Grade 5	37	23
Classroom Climate Grade 5	56	4
Socioeconomic Status Grade 4	54	6
SSRS Social Skills Grade 4	58	2
Child Evaluation: Work Habits Grade 5	51	9
Social Information Processing Grade 5	59	1
Child Evaluation: Current School Performance Grade 6	38	22
Commit Grade 5	59	1

Research Questions

RQ1: Does social information processing mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

This research question was designed to determine the influence of social skills through social information processing on academic achievement while controlling for socioeconomic

status, classroom climate, school resources, and previous school performance. A path analysis was analyzed wherein Academic Achievement was regressed on social information processing, social skills, school climate, school financial security, previous achievement, and SES; and, social information processing was regressed on social skills, school climate, school financial security, previous achievement, and SES. The standardized path coefficient from social information processing to academic achievement was .015 (β =.072, p= .924) and the standardized path coefficient for social skills to social information processing was -.095 (β =-.001, p= .613). Additionally, the indirect path from social skills through social information processing to academic achievement was not statistically significant when controlling for SES, classroom climate, school resources, and previous school performance (b = -.001, β = <.001, p= .971). Thus social information processing does not mediate the effect of social skills on academic achievement. See Table 10 and Figure 13 for path coefficients. Standardized regression coefficients are estimates of the effect of a predictor on a single outcome. Keith (2019) suggests a rule of thumb wherein standardized regression coefficients lower than .10 indicate small effect sizes, coefficients between .10 and .25 indicate medium effect sizes, and coefficients above .25 indicate large effect sizes. Thus, the influence of previous achievement on academic achievement demonstrated a large effect size. The influence of school climate, SES, and social skills on achievement demonstrated medium effect sizes; although, the coefficients were not significant (see table 10). Such results may indicate that further research using larger sample sizes are warranted.

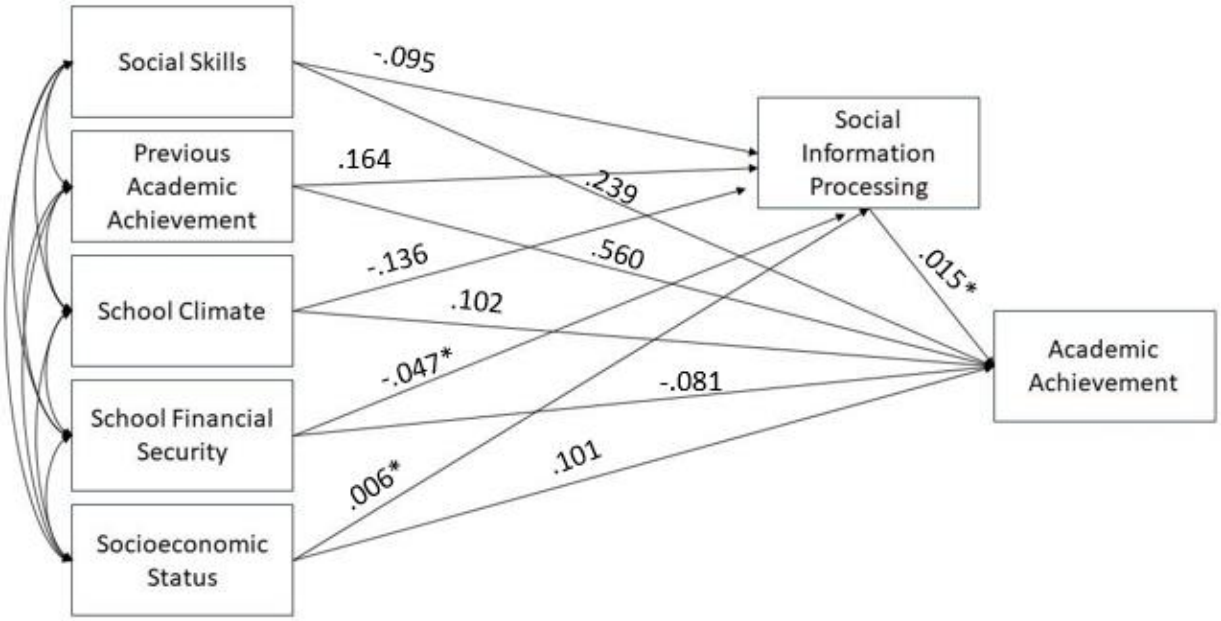
Table 10

Social Information Processing Path Coefficients

Dependent Variable	Independent Variable	Standardized Coefficient	Unstandardized Coefficient	Standard Error	*p* Value
Academic Achievement	Previous Achievement	.560	.562	.199	.005
	School Resources	-.081	-.071	.231	.760
	School Climate	.102	.029	.060	.636
	SES	.101	.051	.186	.783
	Social Skills	.239	.014	.010	.162
	Social Information Processing	.015	.072	.757	.924
Social Information Processing	Previous Achievement	.164	.034	.048	.481
	School Resources	-.047	-.008	.048	.859
	School Climate	-.136	-.008	.009	.373
	SES	.006	.001	.020	.976
	Social Skills	-.095	-.001	.002	.613

Figure 13

Social Information Processing Model



**p < .05.*

RQ2: Does school commitment mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

This research question was designed to determine the influence of social skills through school commitment on academic achievement while controlling for socioeconomic status, classroom climate, school resources, and previous school performance. A path analysis was analyzed wherein Academic Achievement was regressed on school commitment, social skills, school climate, school financial security, previous achievement, and SES; and, school commitment was regressed on social skills, school climate, school financial security, previous achievement, and SES. The standardized path coefficient from school commitment to academic achievement was .053 (β =.149, p= .733) and the standardized path coefficient for social skills

to school commitment was .157 (β = .003, p= .307). Additionally, the indirect path from social skills through school commitment to academic achievement was not statistically significant when controlling for SES, classroom climate, school resources, and previous school performance (b = .008 (β =<.001, p= .799). Thus school commitment does not mediate the effect of social skills on academic achievement. See Table 11 and Figure 14 for path coefficients. The influence of previous academic achievement on achievement demonstrated a large effect size. The influence of SES, and social skills both demonstrated a small effect size on academic achievement; although the coefficients were not significant (see table 11).

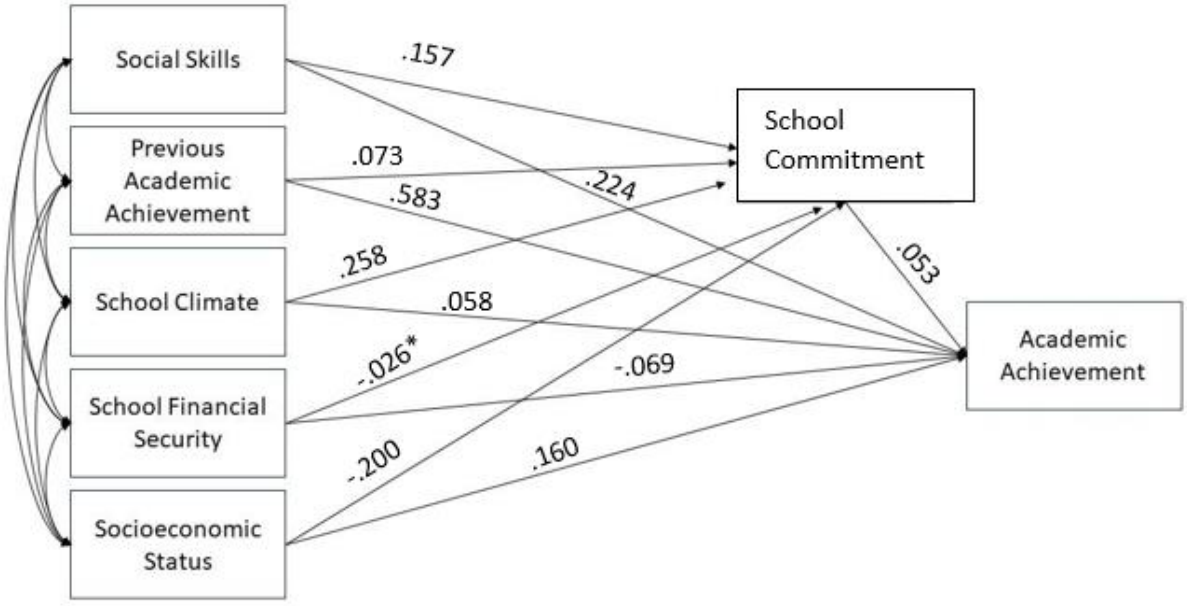
Table 11

School Commitment Path Coefficients

Dependent Variable	Independent Variable	Standardized Coefficient	Unstandardized Coefficient	Standard Error	*p* Value
Academic Achievement	Previous Achievement	.583	.583	.170	.001
	School Resources	-.069	-.060	.195	.757
	School Climate	.058	.016	.060	.785
	SES	.160	.082	.169	.628
	Social Skills	.224	.013	.010	.165
	School Commitment	.053	.149	.438	.733
School Commitment	Previous Achievement	.073	.026	.058	.652
	School Resources	-.026	-.008	.071	.908
	School Climate	.258	.026	.019	.162
	SES	-.200	-.036	.030	.229
	Social Skills	.157	.003	.003	.307

Figure 14

School Commitment Model



**p < .05.*

RQ3: Do academic work habits mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

This research question was designed to determine the influence of social skills through academic work habits on academic achievement while controlling for socioeconomic status, classroom climate, school resources, and previous school performance. A path analysis was analyzed wherein Academic Achievement was regressed on academic work habits, social skills, school climate, school financial security, previous achievement, and SES; and, academic work habits was regressed on social skills, school climate, school financial security, previous achievement, and SES. The standardized path coefficient from academic work habits to academic achievement was .473 (β =.525, p= .025); however, the standardized path coefficient for social skills to academic work habits was .275 (β =.015, p= .068). Additionally, the indirect

path from social skills through academic work habits to academic achievement was not statistically significant when controlling for SES, classroom climate, school resources, and previous school performance (b = .130, β = .008, p= .154). Thus, academic work habits do not mediate the effect of social skills on academic achievement. See Table 12 and Figure 15 for path coefficients. Academic achievement and previous achievement and academic work habits demonstrated a medium effect size. Previous academic achievement and academic work habits demonstrated a large effect on academic achievement. Previous achievement demonstrated a large effect on academic work habits (see table 12).

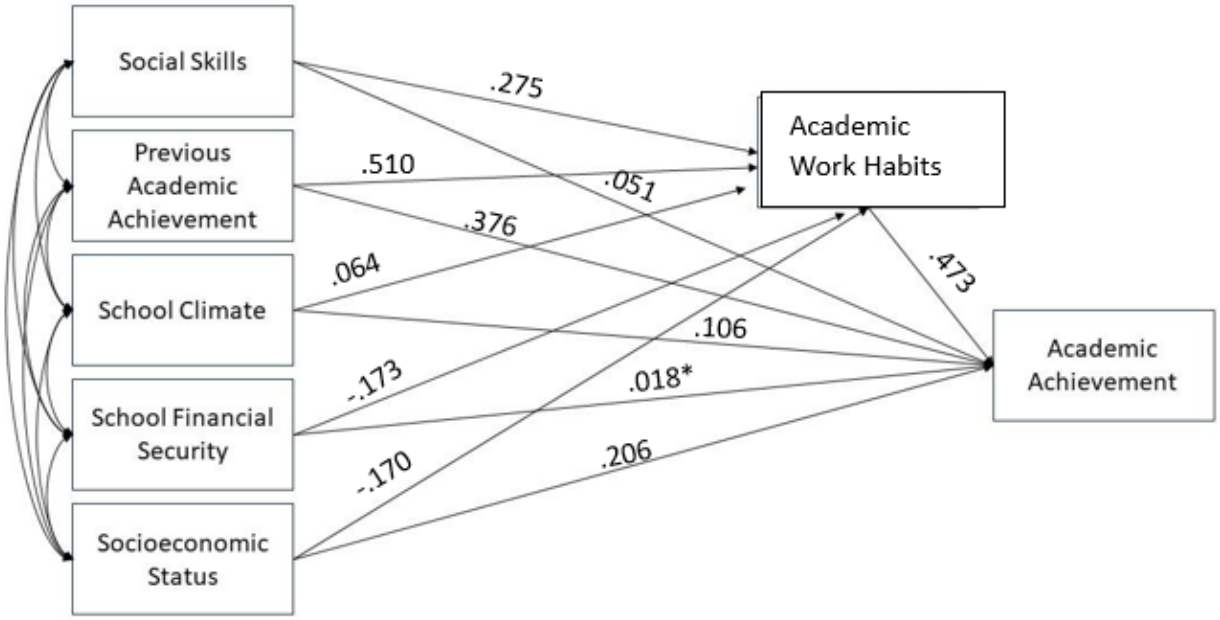
Table 12

Academic Work Habits Path Coefficients

Dependent Variable	Independent Variable	Standardized Coefficient	Unstandardized Coefficient	Standard Error	*p* Value
Academic Achievement	Previous Achievement	.376	.391	.178	.028
	School Resources	.018	.017	.182	.926
	School Climate	.106	.032	.057	.582
	SES	.206	.111	.150	.457
	Social Skills	.051	.003	.009	.733
	Academic Work Habits	.473	.525	.234	.025
Academic Work Habits	Previous Achievement	.510	.478	.148	.001
	School Resources	-.173	-.144	.165	.384
	School Climate	.064	.017	.038	.655
	SES	-.170	-.083	.088	.348
	Social Skills	.275	.015	.008	.068

Figure 15

Academic Work Habits Model



**p < .05.*

Summary

RQ1: Does social information processing mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

Social information processing does not mediate the effect of social skills on academic achievement. Previous school performance was significantly associated with academic achievement.

RQ2: Does school commitment mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

School commitment does not mediate the effect of social skills on academic achievement. Previous school performance was significantly associated with academic achievement.

RQ3: Do academic work habits mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

Academic work habits do not mediate the effect of social skills on academic achievement. Academic work habits and academic achievement was significantly associated as well as previous school performance and academic achievement.

This chapter contains the results of the analysis and connects the analysis back to the three research questions. In total, 60 African American male students in 4th through 6th grades who participated in the NICHD study were included in the data set. None of the proposed mediators mediated the effects of social skills on academic achievement while controlling for socioeconomic status, classroom climate, school resources, and previous school performance.

The goal of the following chapter is to provide a summary of the findings from this study, provide implications from this study and recommendations.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction and Summary of Study

The purpose of this quantitative secondary data analysis study was to evaluate the mediating effects of social skills through social information processing, school commitment and academic work habits on the achievement of African American male students in the 4th-6th grade who participated in Phase III of the (2000-2004) National Institute of Child Health and Development's (NICHD) study. Seven instruments were used in this study. This study was significant due to its ability to identify ways to address the disproportionality of academic success for African American male students and provide an opportunity to change the negative characterization associated with African American scholars in education. The continued lower scores of African American males compared to their peers academically has led to the academic achievement gap. The way in which society, specifically the educational society, views African American males needs to be altered to one that sees them as learners with the ability to achieve on the same academic level as their peers. This study addressed the concerns associated with the achievement gap by examining many identified contributors such as socioeconomic status (SES), classroom climate, school financial resources and previous achievement. The main purpose of this study was to research the pathways through which social skills influences academic achievement through the mediating variables of social information processing, school commitment, and academic work habits.

The research questions detailed below were analyzed through the MPlus software with missing data imputed using maximum likelihood information and estimation of indirect parameters using bootstrapping (1,000 iterations).

RQ1: Does social information processing mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

RQ2: Does school commitment mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

RQ3: Do academic work habits mediate the effect of social skills on academic achievement controlling for socioeconomic status, classroom climate, school resources, and previous school performance?

This chapter includes a discussion of the major findings and a discussion on the connection to social cognitive theory. This chapter concludes with a discussion of the limitations of the study, areas for future recommendations, and a summary.

Summary of Findings

Assumption testing did not indicate significant problematic data patterns. The mediating variables social information processing, school commitment, and academic work habits did not mediate the effect of social skills on academic achievement; however, there were some significant relations between variables. Previous school performance was significantly associated with academic achievement for all analysis, and academic work habits was significantly associated with academic achievement.

The path from social skills to social information processing to achievement was not significant. Theoretical reasons for non-significant findings exist. Chiefly, the measures used could have caused the insignificant findings. Social Skills as measured may not influence social information processing as measured. Social skills were measured using four subscales focusing on cooperation, assertion, responsibility, and self-control; this was completed by the teacher in reference to the students. The social information processing scale looked at instrumental and relational conflict reflected by student selected strategies when faced with a conflict scenario.

Since both measures are coming from different viewpoints one from the teacher and the other from the student these may not coincide to produce the hypothesized relation. Social information processing has been demonstrated by previous studies as previously indicated in chapter 2 to be affected by a classroom environment (Korpershoek et al., 2016; Albrecht et al., 2005). For this study, social information processing may not have influenced achievement due to the ways the variables were measured. The social information processing measure asks children to respond to a hypothetical situation instead of measuring their response to a stimulus and taking an overall understanding of the classroom environment into account. Additionally, for this study achievement was measured through a teacher report using six subjects including reading, written language, oral language, social studies, math, and science rather than a direct measure of achievement. A direct measure of achievement may have produced a more accurate measure of student achievement.

The path from social skills to school commitment processing to achievement was not significant. While previous research indicates that academic motivation or school commitment and teacher rated social skills were significantly related (Gresham & Elliott, 1990), the results of this research did not reflect these findings. A possible theoretical reason for this is that the students' intrinsic and extrinsic motivation were not differentiated. Intrinsic and extrinsic motivation play a role in one’s level of commitment and distinguishing between these types of motivation may have provided different results. Additionally, school commitment in this study focused on the emotional commitment of students. Previous research demonstrated that African American boys were at a disadvantage regarding emotional resources and that greater emphasis is needed to build positive school culture and school commitment to improve academic achievement (Poulou et al., 2018; Iasevoli, 2021). Accordingly, the relation between school commitment and other variables for African American boys may be different than other populations.

The path from social skills to academic work habits to achievement was not significant; however, the relation between social skills and academic work habits approached significance (p = .052), and the relation between academic work habits and achievement was significant. Analyses may not have yielded significant results due to the relatively small sample size and the significant amount of missing data for key measurement instruments between 4th and 6th grade. Additionally, it is assumed that with increased statistical power, results may have proved to be significant. As this pathway approached significance, a focus on ways to increase the academic work habits of African American males may be worth exploring further. Additionally, It was predicted that social skills may give rise to academic work habits which, in turn, influence academic achievement. Yet, it may be better explained based on this study that academic work habits may give rise to achievement which, in turn, influences social skills.

Limitations and Recommendations for Future Research

This study displayed some limitations. These include the sample size, the data collection method and the subjects of focus. The first limitation of concern was the sample size. As previously discussed, the results may have shown significance if the sample size had been larger. Another identified limitation of concern was the data collection method utilizing secondary data analysis from a study conducted over 20 years ago. Additionally this study was not devised to accurately address the focus group of this study, African American males.

To better understand the relation between social skills and achievement, it is recommended that future research associated with the variables identified in this research focus on one academic year opposed to a three-year gap. This will decrease the amount of missing data due to attrition. Another recommendation is for researchers to utilize a single subject experimental design or a secondary analysis with recent data and low numbers of missing data. This will provide up to date and accurate data analysis.This would increase the sample size. Additionally, it is recommended that researchers thoroughly evaluate the measures they plan to use with an eye to differing perspectives and viewpoints. Specifically, it may be important to

select raters who have the best opportunities to observe variables of interest. As previously stated, there is an identified need for additional research to determine potential linkage of social information processing, academic work habits and school commitment to social skills and academic achievement.

The NICHD designers provided categories for race, age, and gender which allowed for data analysis using these variables. Attrition, however, increased over the phases of the study and the African American male subgroup suffered a high loss in participation. It is this loss in participation by African American males that created one of the major limitations of this study. Additionally, some of the study participants completed all assessments, but many participants partially completed assessments requiring the use of data estimation. It is, therefore, recommended that future researchers oversample subgroups that may be underrepresented due to attrition.

An associated limitation that arises according to today's standards relates to diversity and inclusion of minorities. According to Edmunds & Lind (2021), diversity, equity and inclusion work began in the 1960's and focused chiefly on civil rights with a few shifts over the years, but it was not until the early 2010s that the focus shifted to accountability regarding representation. As previously stated, NICHD data collection began in 1990, and data for this study was collected between 2000 and 2004 before major changes in focus of diversity and inclusion work. The focus of diversity, equality and inclusion work at that time was on multiculturalism and having an awareness of minority achievements (Edmunds & Lind, 2021). Thus, measures and sampling techniques for this data set were influenced by the theoretical frameworks of diversity (or lack thereof) at the time of data collection. Using older data sets to examine contemporary problems presents a limitation of this research. Recommendations include the need to create data sets that specifically focus on African Americans. Another recommendation for researchers is to continue to work to identify remedies to address the academic achievement gap associated with African American male scholars.

Conclusion

This research was unable to identify an actionable approach to narrowing the achievement gap, finding a solution to the academic achievement gap associated with African American male students is still a possibility. If academic success among African American male students is going to be a goal for the United States educational system, additional work is needed to effectively change the negative mindset of our community and society as a whole by providing an opportunity to alter the negative connections that are often perpetuated around African American males in education. This can be done by continuing to research the academic achievement gap associated with African American males. Further, the social cognitive process of the educational system associated with African American males needs to be changed. African American males need to be viewed as scholars with the ability to perform with the same academic vigor as their peers. This endeavor requires additional research because we need to better understand the relation between academic achievement and variables such as academic motivation, both intrinsic and extrinsic, as well as ways to increase the academic work habits of African American males early in their educational years. These variables could potentially increase their academic achievement and social skills as well as possibly even their school commitment and social processing abilities.

References

Achievement gap definition. The Glossary of Education Reform. (2013, December 19). Retrieved November 5, 2021, from https://www.edglossary.org/achievement-gap/

Agyemang, C., Bhopal, R., & Bruijnzeels, M. (2005). Negro, Black, Black African, African Caribbean, African American or what? Labeling African origin populations in the health arena in the 21st century. *Journal of Epidemiology & Community Health, 59*(12), 1014-1018.

Albrecht, S. F., Mathur, S. R., Jones, R. E., & Alazemi, S. (2015). A school-wide three-tiered program of social skills intervention: Results of a three-year cohort study. *Education and Treatment of Children, 38*(4), 565–586.

Anguiano-Carrasco, C., McVey, J., & Burrus, J. (2022). How Do Social and Emotional Skills and School Climate Relate to College Readiness in English? *ACT Research. Data Byte*. In ACT, Inc. ACT, Inc.

Anumba, E. (2015). Successfully navigating through college: Voices of African American males. *International Journal of Teacher Leadership, 6*(1), 35-56. http://0-search.ebscohost.com.pacificatclassic.pacific.edu/login.aspx?direct=true&db=eric&AN=EJ1137508&site=ehost-live&CUSTID=s8968023

APA. (2017). Ethnic and racial minorities & socioeconomic status. https://www.apa.org/pi/ses/resources/publications/factsheet-erm.pdf

Applequist, K.F. (2008). No Child Left Behind Act (2001). In Encyclopedia of Special Education (eds C.R. Reynolds and E. Fletcher-Janzen). https://doi.org/10.1002/9780470373699.speced1479

Ashdown, D. M., & Bernard, M. E. (2012). Can explicit instruction in social and emotional learning skills benefit the social-emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal*, *39*(6), 397–405.

Atmaca, T., & Koççu, A. (2019). The predictive level of educational motivation and the perceived social support for school commitment = Egitimsel motivasyonun ve algilanan sosyal destegin okula bagliligi yordama düzeyi. Educational Administration: *Theory & Practice, 25*(3), 469–507.

Bandura, A. (1969). Social-learning theory of identificatory processes. *Handbook of socialization theory and research*, 213, 262.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and human decision processes, 50*(2), 248-287

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology, 52*(1), 1-26.

Bhopal, Raj, and Liam Donaldson. "White, European, Western, Caucasian, or what? Inappropriate labeling in research on race, ethnicity, and health." *American journal of public health 88.9* (1998): 1303-1307.

Bonner, L., Hicks, J., & Pennie, G. (2019). Recreating community among gifted African American students through group counseling. *Journal for Specialists in Group Work, 44*(4), 271–285.

Buhs, E., Ladd, G., & Herald, S. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology*, *98,* 1–13.

Camera, L (2016). Retrieved November 5, 2021, from https://www.usnews.com/news/blogs/data-mine/2016/01/13/achievement-gap-between-white-and-black-students-still-gaping

Chasmar, J. (2022, December 8). Chicago school at center of project veritas hit offers affinity groups for pre-K, says White Kids can't attend. Fox News. Retrieved December 9, 2022, from https://www.foxnews.com/politics/chicago-school-center-project-veritas-hit-offers-affinity-groups-prek-says-white-kids-cant-attend

Children Now. (2020). *California Children's Report Card.* Children Now. https://www.childrennow.org/portfolio-posts/20-report-card/

Cook, D.A.; Artino, (2016). A. Motivation to learn: An overview of contemporary theories. *Med. Educ. 50*, 997–1014.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological bulletin, 115*(1), 74.

Dahlin, M. S., & Reich, S. M. (2022). "Head Start" programme participation and BMI change: Roles of family partnership and age of entry. *Health Education Journal*, *81*(3), 337–351.

Davis, J. E. (2003). Early schooling and academic achievement of African American males. *Urban Education, 38*(5), 515-537.

Dodge, K. A., & Price, J. M. (1994). On the relation between social information processing and socially competent behavior in early school-aged children. *Child Development, 65*(5), 1385–1397.

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., &

Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*, 1428–1446.

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.

Edmunds, M., & Lind, D. (2021). Origins of DEI. https://academyhealth.org/sites/default/files/publication/%5Bfield_date%3Acustom%3AY%5D-%5Bfield_date%3Acustom%3Am%5D/deiglossary_nov_2021_1.pdf

Ford, D. Y., Grantham, T. C., & Bailey, D. F. (1999). Identifying giftedness among African American males: Recommendations for effective recruitment and retention. In V. C. Polite & J. E. Davis (Eds.), African American males in school and society: *Practices and policies for effective education*, 51–67. New York: Teachers College Press, Columbia University.

Fryer, L. (2021). Beyond reading and math scores: Flexibility in federal K-12 accountability law. *In American Enterprise Institute*. American Enterprise Institute.

Graham J. W. (2009). Missing data analysis: making it work in the real world. *Annual review of psychology*, *60,* 549–576. https://doi.org/10.1146/annurev.psych.58.110405.085530

Graham, S., Taylor, A., & Hudley, C. (2015). A motivational intervention for African American boys labeled as aggressive. *Urban Education, 50*(2), 194-224.

Greene, M.L.; Way, N. Self-esteem trajectories among ethnic minority adolescents: A growth curve analysis of the patterns and predictors of change. *J. Res. Adolesc*. 2005, *15,* 151–178

Gresham, F. M., & Elliott, S. N. (1990). The social skills rating system. Circle Pines, MN: American Guidance Service.

Grusec, J. E. (1992). Social Learning Theory and Developmental Psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology, 28(*5), 776–786.

Ghee, K. L. (1990). The psychological importance of self definition and labeling: Black versus African American. *Journal of Black psychology, 17*(1), 75-93.

Hale, J. (2001). Learning while Black: Creating educational excellence for African American children. Baltimore: *The Johns Hopkins University Press*.

Harmon-Jones, E., & Harmon-Jones, C. (2021). Approach motivation and emotion from a biological perspective. *Social psychology handbook of basic principles,* 3, 24. The Guilford Press.

Harmon-Jones, E., Harmon-Jones, C., & Price, T. F. (2013). What is approach motivation? *Emotion Review, 5(*3), 291-295.

Harpalani, V. (2017). Counterstereotypic identity among high-achieving Black students. Penn GSE Perspectives on Urban Education, 14(1).

Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics & Adolescent Medicine, 153*, 226–234.

Hektner, J. M., August, G. J., & Realmuto, G. M. (2000). Patterns and temporal changes in peer affiliation among aggressive and nonaggressive children participating in a summer school program, *Journal of Clinical Child and Adolescent Psychology, 29*(4) 603 – 614.

Henry, A., & Davydenko, S. (2020). Thriving? Or surviving? An approach–avoidance perspective on adult language learners' motivation. *The Modern Language Journal, 104*(2), 363-380.

Hertert, L., & Teague, J. (2003). *Narrowing the Achievement Gap: A Review of Research, Policies, and Issues. Report*.

Howard, T. C. (2013). How does it feel to be a problem? Black male students, schools, and learning in enhancing the knowledge base to disrupt deficit frameworks. *Review of Research in Education, 37*(1), 54-86. http://dx.doi.org/10.3102/0091732X12462985

Iasevoli, B. (2022, June 23). *How to reset school culture post-COVID: Tips for education leaders*. Houghton Mifflin Harcourt. Retrieved November 21, 2022, from https://www.hmhco.com/blog/how-to-reset-school-culture-post-covid

Jagers, R. J., Rivas-Drake, D., & Williams, B. (2019). Transformative Social and Emotional Learning (SEL): Toward SEL in service of educational equity and excellence. *Educational Psychologist*, *54*(3), 162–184.

Jennings, J. L., & DiPrete, T. A. (2010). Teacher effects on social and behavioral skills in early elementary school. *Sociology of Education*, *83*(2), 135–159.

Keith, T.Z. (2019) Multiple Regression and Beyond: An Introduction to Multiple Regression and Structural Equation Modeling. 3rd Edition, Routledge, Abingdon-on-Thames.

https://doi.org/10.4324/9781315162348-1

Korpershoek, H. (2016). Relationships among motivation, commitment, cognitive capacities, and achievement in secondary education. *Frontline Learning Research, 4(*3), 28–43.

Lansford JE, Malone PS, Dodge KA, Crozier JC, Pettit GS, Bates JE. A 12-year prospective study of patterns of social information processing problems and externalizing behaviors. *J Abnorm Child Psychol. 2006 Oct;34*(5):715-24. doi: 10.1007/s10802-006-9057-4. PMID: 17053997; PMCID: PMC2753429.

Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development, 71*(1), 107–118.

Lewis, M. S. (2019). *The exploration of teachers' and administrators' perceptions regarding the influence of culturally relevant pedagogy on middle school African American male students' achievement.* http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:13880337

Lleras, C. (2008). Do skills and behaviors in high school matter? The contribution of noncognitive factors in explaining differences in educational attainment and earnings. *Social science research, 37*(3), 888-902.

Ma, T.-L., Zarrett, N., Puente, K., Liu, Y., Vandell, D. L., Simpkins, S. D., & Yu, M. V. B. (2022). Longitudinal links between profiles of social emotional behaviors in childhood and functioning in early adolescence. *Journal of Early Adolescence, 42*(6), 765–792.

Maglione, F. (2022, December 7). Elite colleges are trying to navigate a world where the SATs are optional. SFGATE. Retrieved December 9, 2022, from https://www.sfgate.com/news/article/Elite-colleges-are-trying-to-navigate-a-world-17637995.php

Manna, P.., Ryan, L. L., (2011) Competitive grants and educational federalism: President Obama's Race to the Top Program in theory and practice, *Publius: The Journal of Federalism*, 41 (3), 522–546. https://doi.org/10.1093/publius/pjr021

McClelland, M. M., Acock, A. C., Piccinin, A., Rhea, S. A., & Stallings, M. C. (2013). Relations between preschool attention span-persistence and age 25 educational outcomes. *Early childhood research quarterly, 28*(2), 314-324.

Mcleod, S. (2023, June 11). Albert Bandura's social learning theory. *Simply Psychology.* https://www.simplypsychology.org/bandura.html

NAEP state profiles. The Nation's Report Card. (n.d.). https://www.nationsreportcard.gov/profiles/stateprofile/overview/CA?cti=PgTab_GapComparisons&chort=1&sub=RED&sj=CA&cj=WI&fs=Grade&st=MN&year=2022R3&sg=Race%2FEthnicity%3A+White+vs.+Black&sgv=Difference&ts=Single+Year&tss=2022R3&sfj=NP

Ogden, T., Olseth, A., Sørlie, M.-A., & Hukkelberg, S. (2023). Teacher's assessment of gender differences in school performance, social skills, and externalizing behavior from fourth through seventh grade. *Journal of Education, 203*(1), 211–221.

Perdue, K. L., Jensen, S. K. G., Kumar, S., Richards, J. E., Kakon, S. H., Haque, R., Petri, W. A., Lloyd-Fox, S., Elwell, C., & Nelson, C. A. (2019). Using functional near-infrared spectroscopy to assess social information processing in poor urban Bangladeshi infants and toddlers. *Developmental Science, 22*(5).

Poulou, M. S., Bassett, H. H., & Denham, S. A. (2018). Teachers' perceptions of emotional intelligence and Social-Emotional Learning: Students' emotional and behavioral

difficulties in U.S. and Greek preschool classrooms. *Journal of Research in Childhood Education*, *32*(3), 363–377.

Quílez-Robres, A., Moyano, N., & Cortés-Pascual, A. (2021). Motivational, emotional, and social factors explain academic achievement in children aged 6–12 years: A meta-analysis. *Education Sciences, 11*(9), 513.

Schlund, J., Jagers, R. J., & Schlinger, M. (2020). Emerging insights on advancing Social and Emotional Learning (SEL) as a lever for equity and excellence. In *Collaborative for Academic, Social, and Emotional Learning*. Collaborative for Academic, Social, and Emotional Learning.

Schultz D, Izard CE, Bear G. Children's emotion processing: Relations to emotionality and aggression. *Dev Psychopathol. 2004 Spring;16*(2):371-87. doi: 10.1017/s0954579404044566. PMID: 15487601.

Scullin, B. (2020). “I can’t find no Black books”: Helping African American males find books they want to read. *Texas Journal of Literacy Education*, *8*(1), 82–111.

Senol, F. B., & Metin, E. N. (2021). Social information processing in preschool children: Relations to social interaction. *Participatory Educational Research, 8(*4), 124–138.

Sharp, L. A. (2016). ESEA reauthorization: An overview of the Every Student Succeeds Act. *Texas Journal of Literacy Education*, *4*(1), 9-13.

Siemaszko, C. (2022, December 2). Florida sheriff signals his support for spanking students. NBCNews.com. Retrieved December 9, 2022, from https://www.nbcnews.com/news/us-news/florida-sheriff-signals-support-spanking-students-rcna59851

Silveira-Zaldivar, T., Özerk, G., & Özerk, K. (2021). Developing social skills and social competence in children with autism. *International Electronic Journal of Elementary Education, 13*(3), 341–363.

Simpkins, S. D., Tulagan, N., Lee, G., Ma, T.-L., Zarrett, N., & Vandell, D. L. (2020). Children's developing work habits from middle childhood to early adolescence: Cascading effects for academic outcomes in adolescence and adulthood. *Developmental Psychology, 56*(12), 2281–2292.

State indicator table - learning policy institute. (n.d.). https://learningpolicyinstitute.org/sites/default/files/ESSA_Equity_Promise_Indicators.pdf

State profiles. Data Profiles. (n.d.). https://selcenter-stateprofiles.wested.org/

State profiles. State Profiles | National Center on Safe Supportive Learning Environments (NCSSLE). (2023). https://safesupportivelearning.ed.gov/stategrantee-profile

Torres, J., Saldaña, D., & Rodríguez-Ortiz, I. R. (2016). Social information processing in deaf adolescents. *Journal of Deaf Studies and Deaf Education, 21*(3), 326–338

Vandell, D. L., & Pierce, K. M. (1998). Measures used in the study of after-school care: Psychometric properties and validity information. Unpublished manual, University of Wisconsin-Madison.

Vandenbroucke, L., Spilt, J., Verschueren, K., Piccinin, C., & Baeyens, D. (2018). The classroom as a developmental context for cognitive development: A meta-analysis on the importance of teacher–student interactions for children's executive functions. *Review of Educational Research, 88*(1), 125-164.

Von Maurice, J.; Dörfler, T.; Artelt, C. (2014). The relation between interests and grades: Path analyses in primary school age. *Int. J. Educ. Res. 64*, 1–11.

Wentzel, K. R. (1991). Relations between social competence and academic achievement in early adolescence. Child development, 62(5), 1066-1078.

Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*(2), 357–364.

Whitney, C. R., & Candelaria, C. A. (2017). The effects of No Child Left Behind on children's socioemotional outcomes. *AERA Open, 3*(3).

Williams, A. (2011). A call for change: Narrowing the achievement gap between White and Minority students. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *84*(2), 65–71.

Wu, M. J. (2020). School resources and subgroup performance gains: What works for whom? *Educational Administration Quarterly*, *56*(2), 220–254.

Xaba, M. I., & Mofokeng, S. K. (2021). The school organisational climates of well-performing historically disadvantaged secondary schools. *South African Journal of Education, 41*.

Ziv, Y. (2013). Social information processing patterns, social skills, and school readiness in preschool children. *Journal of Experimental Child Psychology, 11*4(2), 306–320.

Appendix

Figure 4

Assumption of Linearity Social Information Processing and Academic Achievement

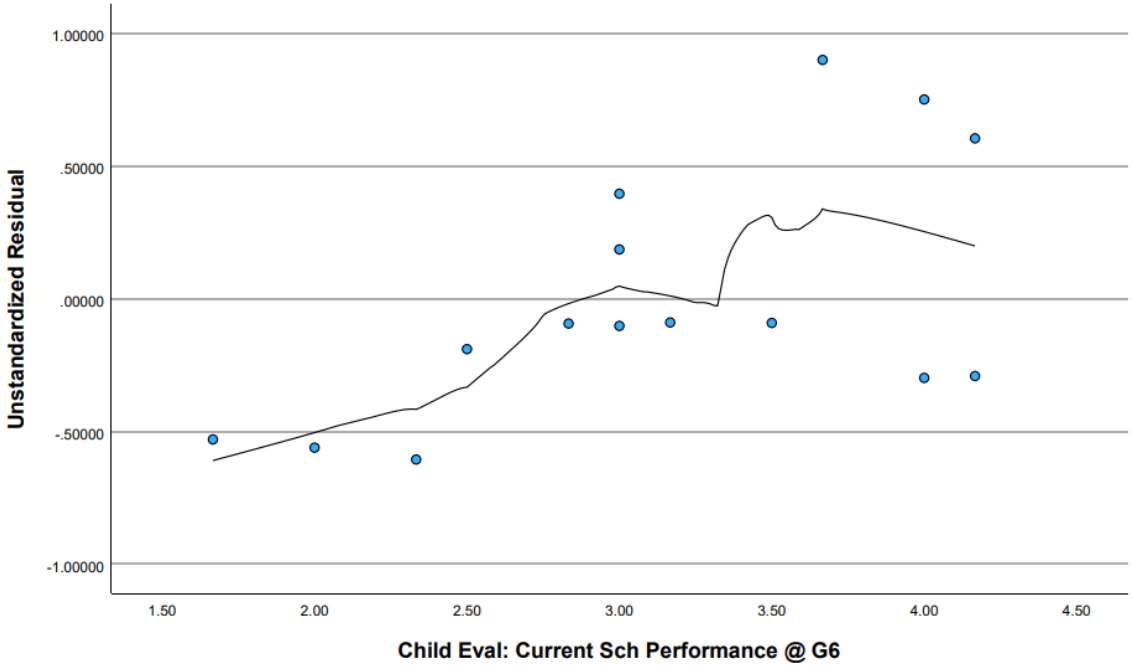


Figure 5

Assumption of Linearity Social Information Processing and Academic Achievement

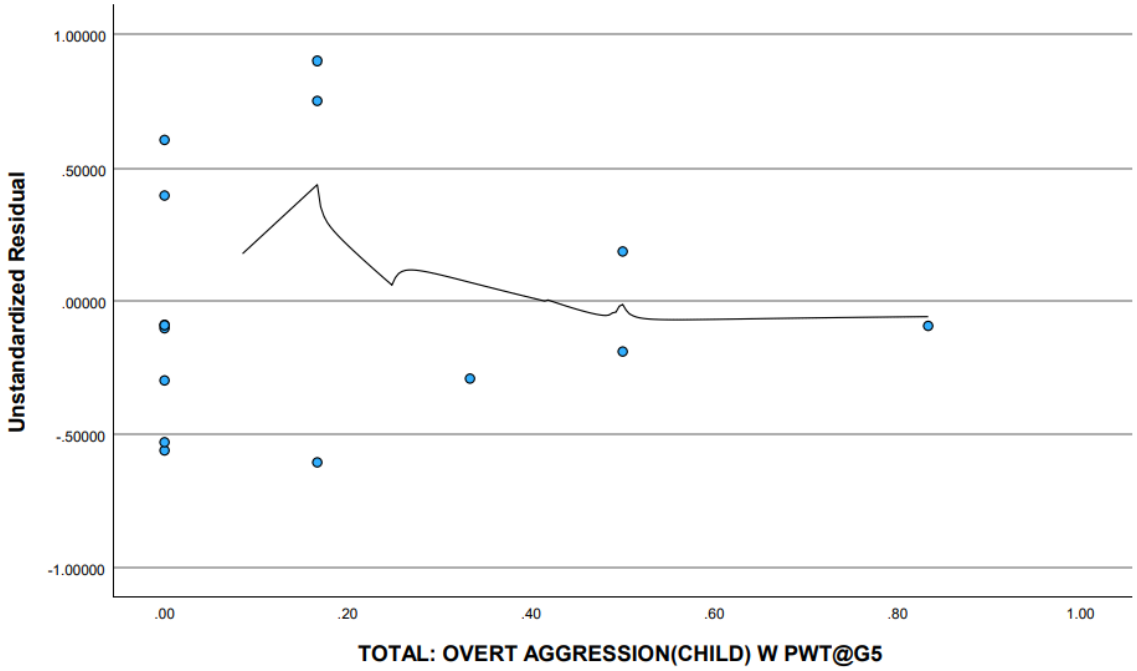


Figure 6

Assumption of Linearity School commitment and Academic Achievement

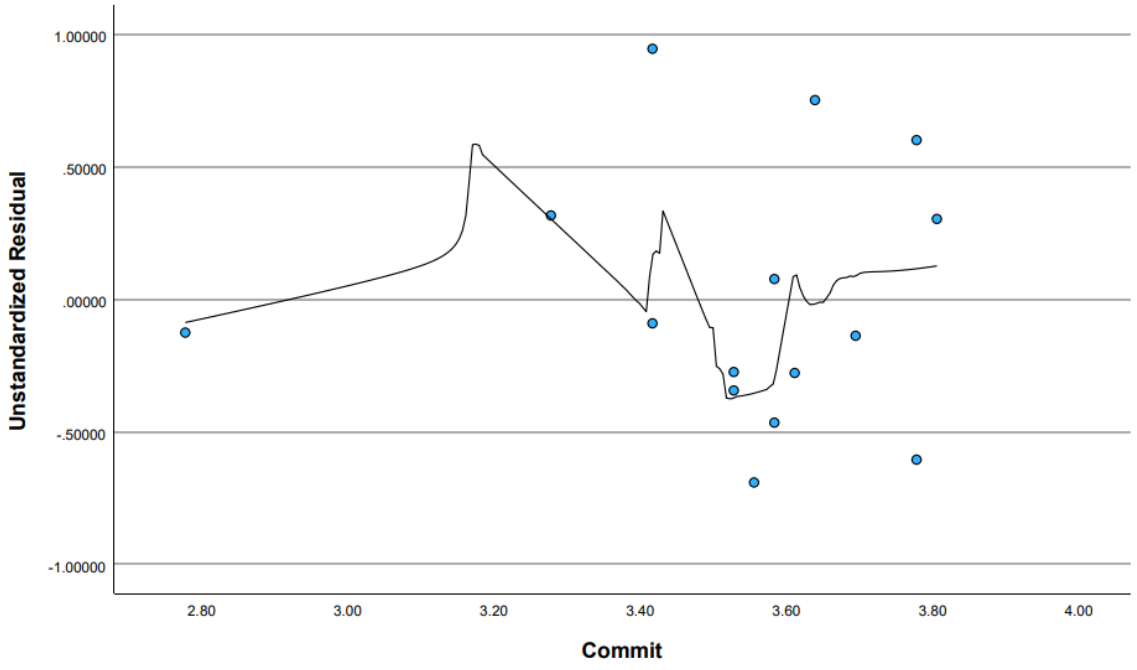


Figure 7

Assumption of Linearity Social Information Processing and Academic Achievement

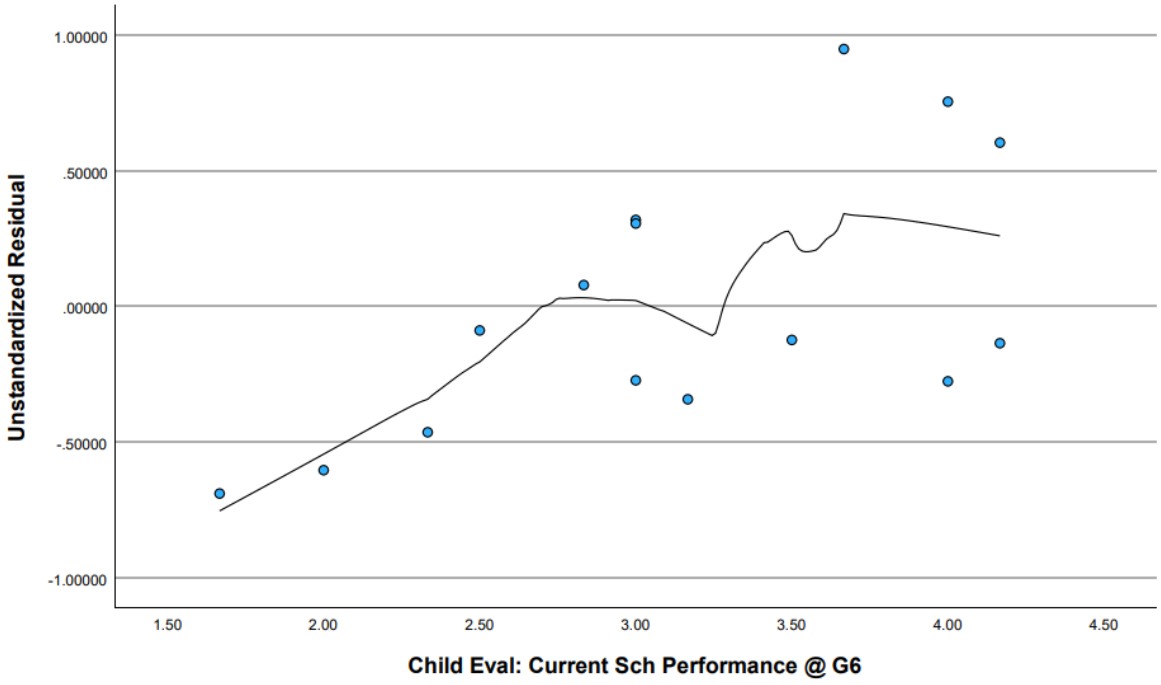


Figure 8

Assumption of Linearity Academic Work Habits and Academic Achievement

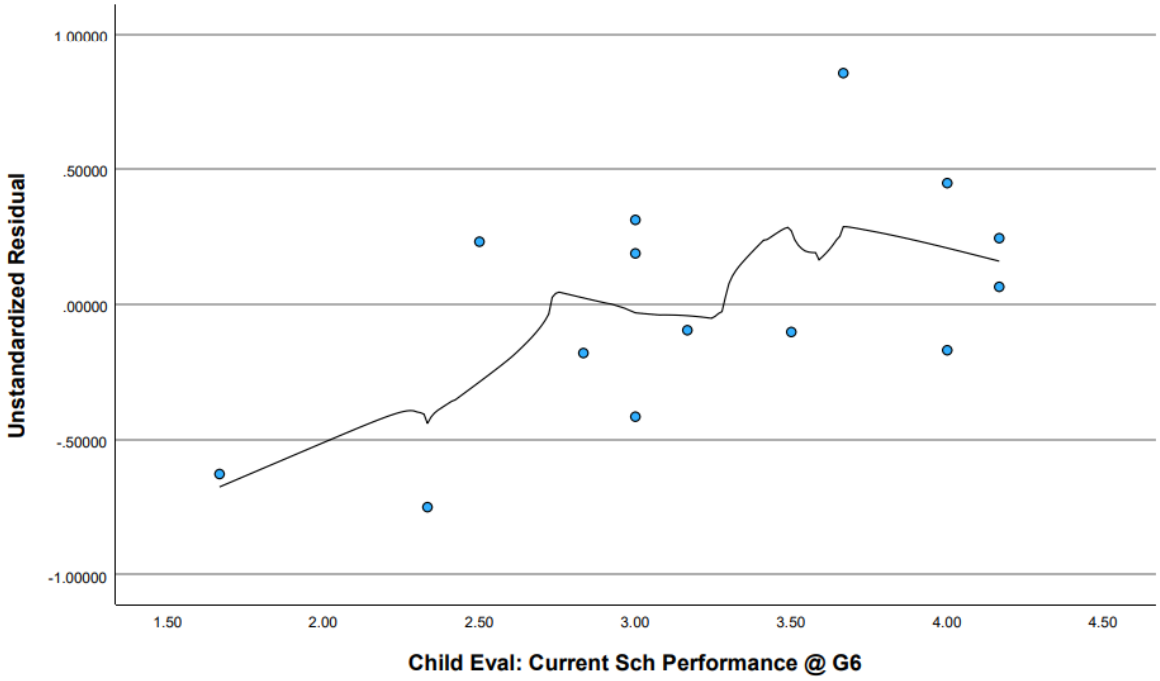


Figure 9

Assumption of Linearity Academic Work Habits and Academic Achievement

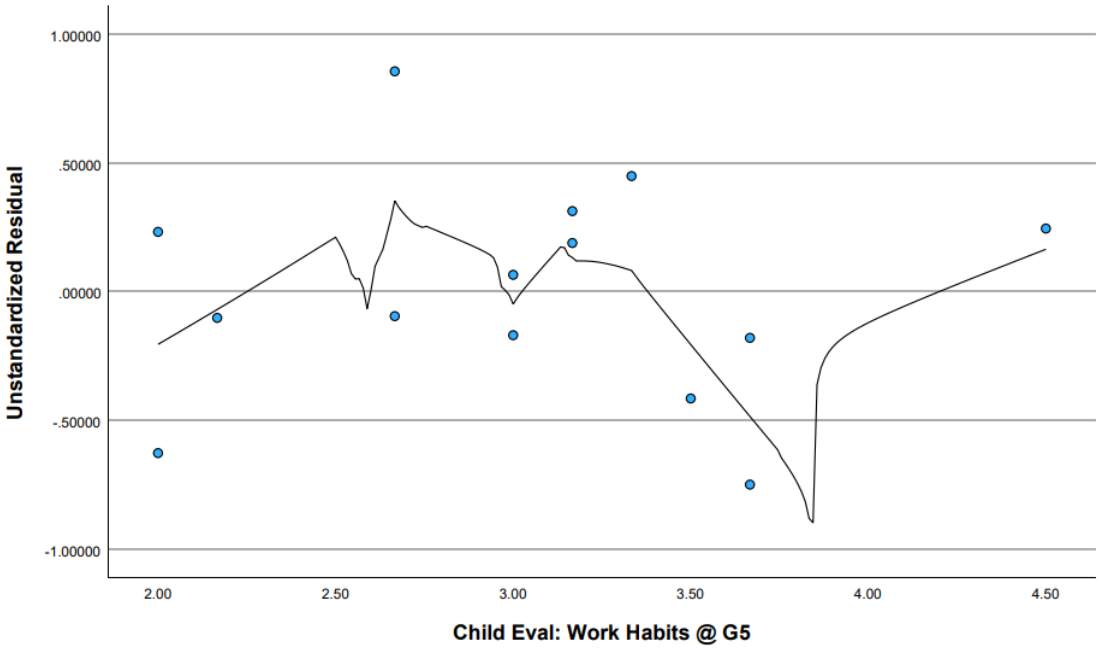


Table 2

Unstandardized residual group 1

RES1grp	Mean	N	Std. Deviation	Variance
1.00	-.5979548	3	.16923012	.029
2.00	-.1372536	4	.04410584	.002
3.00	.1820238	4	.08199133	.007
4.00	.5382612	3	.28241883	.080
Total	.0000000	14	.42899813	.184

Table 3

Unstandardized residual group 2

RES2grp	Mean	N	Std. Deviation	Variance
1.00	-.5258923	4	.15328690	.023
2.00	-.2290485	3	.08012523	.006
3.00	.0972741	5	.20991568	.044
4.00	.7681147	3	.17294189	.030
Total	.0000000	15	.49283141	.243

Table 4

Unstandardized residual group 3

RES3grp	Mean	N	Std. Deviation	Variance
1.00	-.5652010	3	.03808989	.001
2.00	-.1942024	5	.09865755	.010
3.00	.1014133	4	.23636342	.056
4.00	.7536539	3	.14787837	.022
Total	.0000000	15	.47398195	.225

Figure 10

Assumption of normality of residual, residual group 1

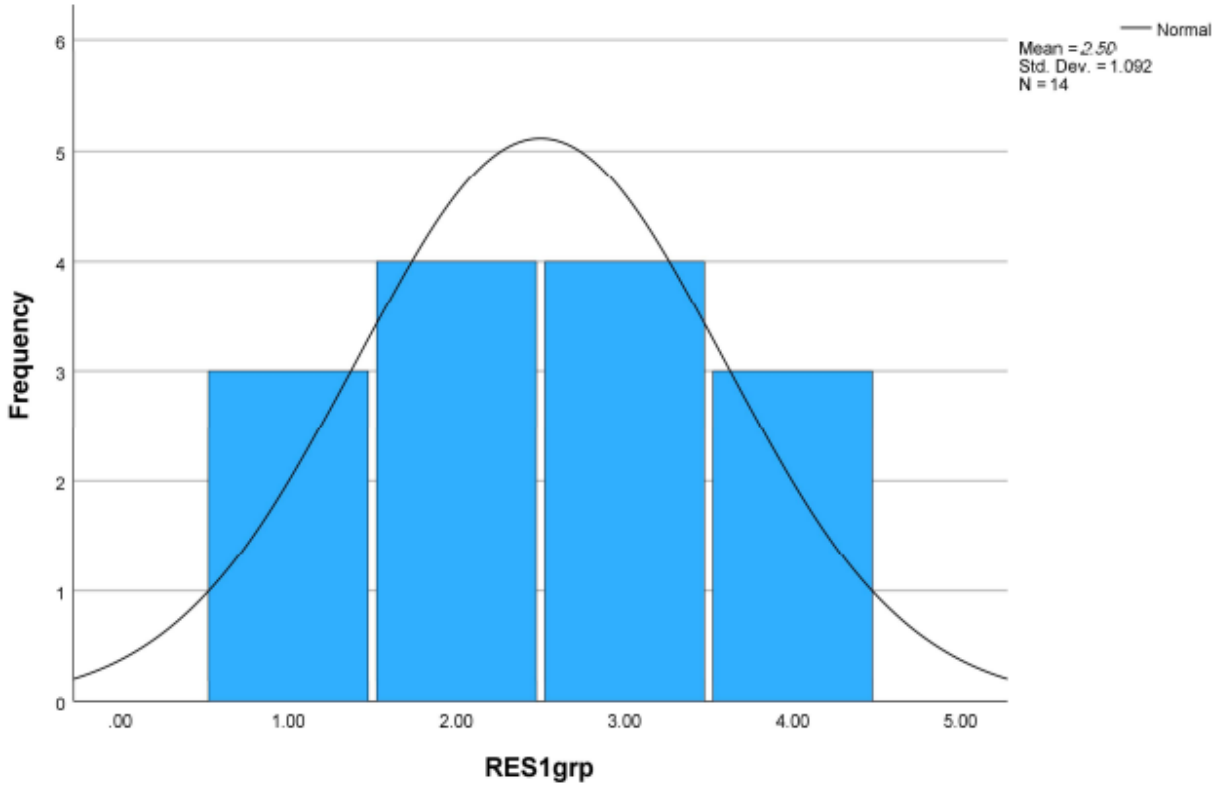


Figure 11

Assumption of normality of residual, residual group 2

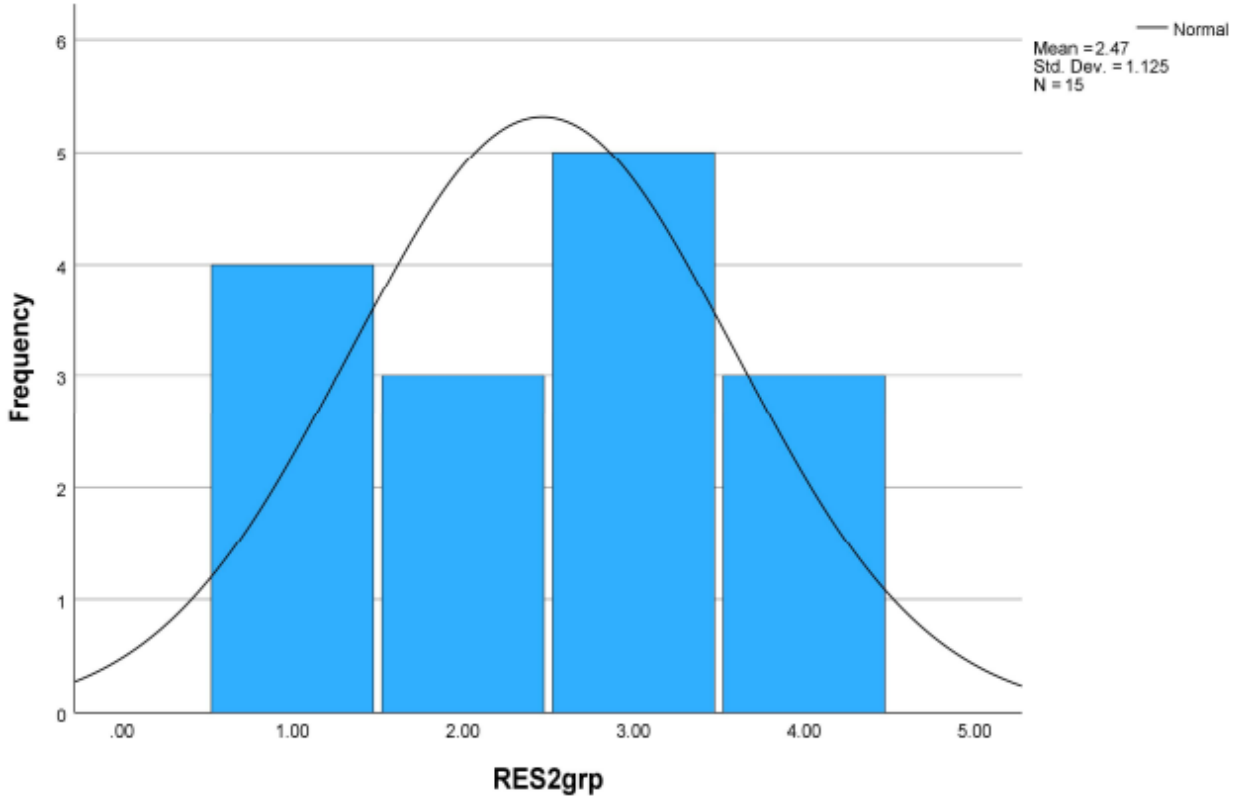


Figure 12

Assumption of normality of residual, residual group 3

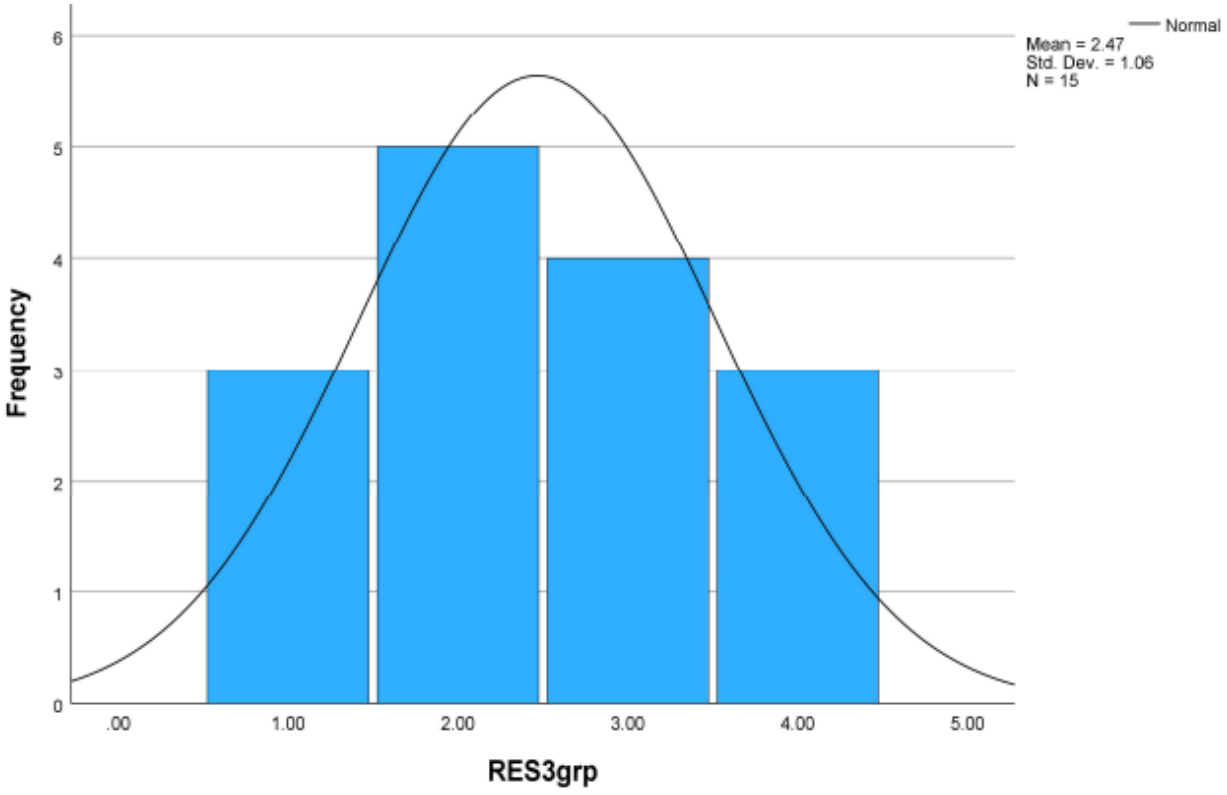


Table 5

Multicollinearity of Social Information Processing

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Child Eval: Current Sch Performance @G4	.951	1.052
	15c. along sch:Estab secure finan base	.710	1.409
	COS QUAL Comp:Pos Soc/Emot Climate @G5	.455	2.195
	INCOME:NEEDS RATIO -2000/2001 INCOME @G4	.643	1.554
	SSRS SOC SKL TOT STD SCORE-MOM/ALTCG G4	.753	1.328
	TOTAL: OVERT AGGRESSION(CHILD) W PWT@G5	.561	1.782

Table 6

Multicollinearity of School Commitment

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Child Eval: Current Sch Performance @G4	.956	1.046
	15c. along sch:Estab secure finan base	.689	1.451
	COS QUAL Comp:Pos Soc/Emot Climate @G5	.654	1.529
	INCOME:NEEDS RATIO -2000/2001 INCOME @G4	.611	1.636
	SSRS SOC SKL TOT STD SCORE-MOM/ALTCG G4	.740	1.350
	Commit	.815	1.228

Table 7

Multicollinearity of Academic Work Habits

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Child Eval: Current Sch Performance @G4	.859	1.164
	15c. along sch:Estab secure finan base	.620	1.613
	COS QUAL Comp:Pos Soc/Emot Climate @G5	.637	1.570
	INCOME:NEEDS RATIO -2000/2001 INCOME @G4	.645	1.550
	SSRS SOC SKL TOT STD SCORE-MOM/ALTCG G4	.642	1.557
	Child Eval: Work Habits @ G5	.688	1.453