Teacher-Student Relationships and How They Encourage Mathematics Achievement Among Black Males

Makeba C. Butler
Concordia University - Portland

Follow this and additional works at: https://commons.cu-portland.edu/edudissertations
Part of the Education Commons

CU Commons Citation
https://commons.cu-portland.edu/edudissertations/37
Concordia University–Portland
College of Education
Doctorate of Education Program

WE, THE UNDERSIGNED MEMBERS OF THE DISSERTATION COMMITTEE
CERTIFY THAT WE HAVE READ AND APPROVE THE DISSERTATION OF

Makeba C. Butler

CANDIDATE FOR THE DEGREE OF DOCTOR OF EDUCATION

Mark Jimenez, Ed.D., Faculty Chair Dissertation Committee
Rebecca Watts, Ph.D., Content Specialist
Anthony Valley, Ed.D., Content Reader

ACCEPTED BY
Joe Mannion, Ed.D.
Provost, Concordia University–Portland

Sheryl Reinisch, Ed.D.
Dean, College of Education, Concordia University–Portland

Marty A. Bullis, Ph.D.
Director of Doctoral Studies, Concordia University–Portland
TEACHER-STUDENT RELATIONSHIPS AND HOW THEY ENCOURAGE
MATHEMATICS ACHIEVEMENT AMONG BLACK MALES

Makeba C. Butler
Concordia University-Portland
College of Education

Dissertation submitted to the Faculty of the College of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education in
Transformational Leadership

Mark Jimenez, Ed.D., Faculty Chair Dissertation Committee
Rebecca Watts, Ph.D., Content Specialist
Anthony Valley, Ed.D., Content Reader

Concordia University-Portland
2017
Abstract

This research study focuses on positive teacher-student relationships and how these relationships influence the mathematics achievement of African American elementary male students. It identifies some of the characteristics relevant to the establishment and cultivation of the teacher-student relationship and sheds useful insights into how African American male students respond to the interactions with their teachers. Extant literature has increasingly shown that positive-teacher student relationships significantly shape academic progress in Black students. Through teacher surveys and teacher interviews, this dissertation offers a synopsis of how teachers facilitate relationships with their African American male students as well as gives a detailed account of how teacher perceptions influence the relationship. It also examines whether or how the relationship encourages mathematics achievement among African American male students. Finally and through interviews with African American male students, the doctoral research describes how Black students build relationships with their teachers and how these relationships influence their academic experience. In its final analysis, the dissertation underscores the importance of paying more attention to the teacher-student relationship amongst Black students and how different facets of the relationship shape their academic achievement in mathematics. These insights are critical in formulating relevant interventional pedagogical practices for African American students in the context of mathematics learning.

Keywords: teacher perception, teacher-student relationship, academic achievement, culture, socio-economic status
Dedication

This dissertation is dedicated to my lovely and supportive grandmother, my beautiful mother, my handsome and supportive fiancé, and my “ride or die” twin- I thank you for your support.
Acknowledgements

I am so thankful to my Heavenly Father for without him I would not have had the desire or the ability to accomplish such greatness. I know that without Him, I am nothing but with Him, I am everything.

To my cohort beauties- Tracy, Danielle, and Debra, you all have played an integral part in motivating me to finish this degree, words cannot express how much I honor and appreciate you.

To my Dissertation Committee- Dr. J, you have talked me off many ledges during this process and I am so glad you agreed to be my advisor. Thank you for keeping me inspired, for pushing me to do “just a little bit more”, and for helping me to see that “you’re almost there.” Thank you for the investment in me. Dr. Valley, I handpicked you because my first impression of you was amazing! Thank you for your guidance during this process and for being a part of my academic success. Dr. Watts, you definitely kept me on my toes and through that, made me a better academic writer. Thank you for the push, every step of the way.

Pastor Myrue Spivey, you have been my spiritual father since I was a kid. Thank you for encouraging me to pursue this degree, you told me I could do it and…I did! Thanks for being a constant in my life. I love you, pops!
Table of Contents

Abstract .................................................................................................................................................. iii

Dedication ........................................................................................................................................ iv

Acknowledgements .............................................................................................................................. v

Chapter 1: Introduction ....................................................................................................................... 1

  Introduction to the Problem .............................................................................................................. 1

  Background, Context, History, and Conceptual Framework ............................................................... 3

  Statement of the Problem .................................................................................................................. 5

  Purpose of Study ............................................................................................................................... 6

  Research Questions ............................................................................................................................ 7

  Rationale, Relevance, and Significance of the Proposed Study ......................................................... 8

  Definition of Key Terms ................................................................................................................... 10

  Limitations of the Study .................................................................................................................... 11

  Delimitations of the Study ............................................................................................................... 11

  Summary .......................................................................................................................................... 12

Chapter 2: Review of Related Literature ............................................................................................. 14

  Introduction to the Literature Review ................................................................................................ 14

  Conceptual Framework ..................................................................................................................... 16

  Teacher-Student Relationships ......................................................................................................... 19
The History of the Black Male, Socio-Economic Status and Cultural Influences ............ 19

The Effect of the Teacher-Student Relationship.............................................................. 25

Why the Need for Teacher-Student Relationships With Black Male Students .............. 27

The Negative Sides of Teacher-Student Relationships ..................................................... 32

Teacher-Student Stereotypes ............................................................................................. 34

Low Expectations .............................................................................................................. 35

Self-Fulfilling Prophecies ................................................................................................. 37

The Positive Sides of Teacher-Student Relationships ...................................................... 39

Culturally Adept Relationships in the Classroom .............................................................. 40

Equality and Concern Among Students ........................................................................... 42

Student Engagement in the Classroom ............................................................................ 43

Factors that Promote Positive Teacher-Student Relationships ....................................... 44

Positive Teacher-Student Mathematics Relationships ..................................................... 47

Review of Methodological Issues ..................................................................................... 51

Synthesis of Research Findings ....................................................................................... 54

Teacher Effect of Student-Teacher Relationships ........................................................... 56

Critique of Previous Research .......................................................................................... 57

Summary ........................................................................................................................... 60

Chapter 3: Methodology .................................................................................................. 62

Introduction ...................................................................................................................... 62
Research Questions........................................................................................................62
Purpose and Design of the Study ..................................................................................63
Research Population and Sampling Method.................................................................65
Instrumentation.............................................................................................................67
Data Collection..............................................................................................................68
Procedures ...................................................................................................................70
Identification of Attributes..........................................................................................70
Relationship ..................................................................................................................70
Communication ............................................................................................................71
Underachievement ........................................................................................................71
Culture ............................................................................................................................72
Data Analysis ...............................................................................................................73
Limitations and Delimitations of the Research Design..................................................74
Limitations ....................................................................................................................75
Delimitations ................................................................................................................75
Validation, Credibility, and Dependability ....................................................................75
Expected Findings.........................................................................................................77
Ethical Issues ...............................................................................................................79
Ethical Issues in the Study ............................................................................................79
Researcher’s position ....................................................................................................80
Conflict of interest assessment .................................................................................. 81
Summary .................................................................................................................. 81

Chapter 4: Data Analysis and Results ..................................................................... 84
Introduction ............................................................................................................. 84
Description of the Sample ...................................................................................... 86
Participant Sample Size ......................................................................................... 86
Research Methodology and Analysis ..................................................................... 88
Qualitative Case Study ........................................................................................... 89
Summary of Findings ............................................................................................... 90
Presentation of Data and Results .......................................................................... 94
Research question 1 ............................................................................................... 94
Research question 2 ............................................................................................... 105
Research question 3 ............................................................................................... 113
Summary ................................................................................................................. 120

Chapter 5: Discussion and Conclusion .................................................................... 123
Introduction ........................................................................................................... 123
Summary of Results ............................................................................................... 125
Discussion of the Results ....................................................................................... 127
Discussion of the Results in Relation to the Literature ......................................... 130
The Facilitation of Positive Relationships With African American Male Students .... 131
List of Tables

Table 1 Teacher Participant Data........................................................................................................88

Table 2 Themes used by Teachers to Facilitate Positive Relationships with Black Male Students.................................................................105

Table 3 Perception of Themes Evident Regarding the Encouragement of Mathematics Achievement among Black Males.................................................................112
Chapter 1: Introduction

Kids don’t learn from people they don’t like (Pierson, 2013)

Introduction to the Problem

Low academic achievement among Black students is a reoccurring and important issue in education. Scholars such as Ladson-Billing and Tate (1995) as well as Moses-Snipes and Snipes (2005) have observed that much of the literature described Black students as deficit, underachievers, and possessing inferior abilities, especially in the area of mathematics. Even more unsettling is the increasing disparity among Black students in how they learn and understand mathematics (Eddy & Easton-Brooks, 2011). According to Grant, Crompton and Ford (2015), the way students perceive themselves and how this perception shapes the way they conduct themselves in the mathematics classroom contributes highly to the overall academic behavior of Black students, particularly Black male students.

Teacher-student relationships serve as one of the most important influences surrounding a child’s life; in particular, teachers are influential with regard to children’s social, emotional and academic development (Greenberg, Speltz, & Deklyen, 1993; Pianta, 1999). How a teacher connects with their students and how those connections translate into increased student achievement through clearly stated expectations, social relevance, and interpreted perspectives plays an important role in the establishment of intellectually developed students (Davis, 2003). In identifying the poor academic achievement of Black male students and highlighting how teacher-student relationships play a role in student achievement, an important question remains. How do teacher-student relationships encourage the continued academic improvement of Black
male students? Going a step further, it is necessary to understand how these relationships encourage mathematics achievement in students in general, and among Black males in particular.

One point that supports the idea of academic relationships is that students who have secure relationships with their teachers have a sense of belonging that contributes to exploring, learning, and mastering goals that are associated with academic learning (Cassidy & Shaver, 1999). Research has also shown that teacher-student relationships are influenced by how the teacher perceives the student (Ferguson, 2003). This research partly underscores the role that student perceptions play in: (a) how the relationship is formed, and (b) how the formed relationship is applied and transferred to the student. One way this role has been viewed as most effective is in the observance of relationships between Black teachers and students. For instance, Zimmerman et al. (1995) have shown that teachers who are of a different race may view Black male behaviors differently, and that such students experience having more behavioral problems notated by Hispanic or White teachers than by Black teachers. Therefore, how a teacher perceives a student to be behaviorally, can play an enormous role in how that relationship contributes to student success or otherwise.

Gibson (2002) found that the more poorly a student performed, the less of a positive regard the teacher held for that student. Gibson also reported that a student’s perception of the genuine care behind a teacher’s action transferred into causing the student to respond favorably when such performance was related to academic behavior. Hence, Gibson noted that a relationship grounded in “realness” and a strict teaching style has positive effects on students. Howard (2002) focused on the level with which Black students believe their academic
achievement was influenced by how a teacher instructs. This belief was necessitated by the idea that students tend to perform better when they know that teachers instruct from a position of care and concern. In the study, the students reported that the teachers who cared and showed concern with helping them made a big overall difference in their academic learning experience.

On a similar note but in the mathematic context, Ladson-Billings (1997) observed that if mathematics education was to be understood teachers must build strong relationships with their Black male students and develop a sense of identification in efforts of building intellectual capacity. Indeed, when students believe that teachers support them in a way that shows genuine care and concern, it not only provides a strong foundation for achievement but also establishes self-esteem and confidence that extend far beyond the classroom (Yeldell, 2012).

**Background, Context, History, and Conceptual Framework**

The effectiveness of an established teacher-student relationship is influenced by how the teacher views student academic and behavioral competence (Cadigan et al., 1988). Pianta et al., (1995, 1997) developed a framework for supporting the need for effective teacher-student relationships that focused on the academic and social development of students in school. Their framework was based on the attachment theory which advanced the idea that all children require warm, caring, and supportive relationships with adults for a healthy and effective development. In the context of Black male students, teacher-student relationships may exert more effects within the classroom, and these relationships or lack thereof may contribute to the overall perception of the achievements of the Black male student.
According to Davis (2007), many Black children fail to do well academically because of the disadvantage they have received through cultural beliefs handed down from generations of academically inept individuals. As a result, there has been a stigma associating Blacks as being amongst the least intelligent cultural group (Davis, 2007). Some form of economic deficiency also offers an explanation as to why many Black children fail to do well academically. To be sure, Socio-Economic Status (SES) plays an important role in understanding this phenomenon partly because of the large number of minorities who fall within this category (Reyes & Stanic, 1988). With the increase in the number of unstable environments facilitating broken family relationships, there seems to be a heightened need for teachers to develop formidable relationships with their students, especially if academic achievement is to increase. Establishing such a connection with students can potentially change the trajectory of a child’s academic experience. In this regard, Dornbusch, Ritter and Steinberg (1991) found that SES exerts a large impact on student grades such that the lower the access to resources, the higher was the chance of academic failure among secondary school students. Some studies lend credence to this relationship between socioeconomic status and achievement. For example, Duncan et al. (1998) found that economic disadvantages are visible and most impactful during the early school years. Such effects tend to negatively impact academic achievement more than they affect the social development of children (Brooks-Gunn & Duncan, 1997; Haveman & Wolfe, 1994). Therefore, building positive relationships with students who come from less affluent environments and introducing them to a mindset that supports academic achievement may begin the process of moving children from becoming products of their unfavorable environment. Serpell and Boykin
(1994) suggested that integrating cultural connections with relationship may mold student motivation and beliefs, as well as guide behavior within students. In this regards, Gordon and Armour-Thomas (1991) suggested that when cultural connections are made and interspersed through learning, thinking and problem solving become natural byproducts. The framework of Pianta et al. (1995, 1997) supports the concept of culturally based teacher-student relationships because his view on teacher perception relates to both student and teacher characteristics, which stem from a place of cultural influence (Saft & Pianta, 2001). Furthermore, these perceptions were believed, in some way, to be connected to how Black male students perform in the classroom setting in that child and teacher ethnicity may be seen as an influential factor according to how the teacher and student actually interact (Saft & Pianta, 2001). Pianta and colleagues have conducted studies that fully support teacher-student relationships through examining how student adjustments in the classroom occur as the relationships develop during classroom activities (Pianta et al., 1995, 1997). In these studies, how the teacher perceives the students’ feelings toward them was the fulcrum used in improving these relationships and interactions (Saft & Pianta, 2001).

**Statement of the Problem**

Black males are among some of the lowest-achieving individuals in mathematics. The extant literature has attempted to explain this. One reoccurring theme was the idea that positive teacher-student relationships promote the social, cognitive and emotional development of students (Brazelton & Greenspan, 2000; Lynch & Cicchetti, 1992; Pianta, 1999; Weare, 2000). Positive teacher-student relationships also assist teachers in understanding what each child needs,
cognitively and emotionally (Davis, 2003). If the effectiveness of the relationship between the teacher and student include cognitive and emotional components, then it may be likely that while there may be growing numbers of Black male students who are inept, more Black males could become successful at Mathematics by understanding the causal relationships between these components and their bearing on the teacher-student relationship. The likelihood of this achievement underscores the importance of understanding exactly how positive teacher-student relationships and the perceptions teachers have regarding the relationships with their Black male students encourage them to become achievers in Mathematics.

**Purpose of Study**

Mathematics achievement data indicated that White students considerably outperform Black and Hispanic students on tests assessing basic skills and problem-solving as well as college entrance exams (Secada, 1992; Tate, 1997). Reyes and Stanic (1998) suggested that a close examination of classroom processes including teacher-student interaction is important in understanding why Black males are performing disproportionately low in the area of Mathematics.

Conversely, although there is a growing body of research that explores success among Black boys in academic domains, it is small when compared to the literature that focuses on deficit models (Noble, 2011). For scholars like Stinson (2006), there is need for more critical examination on the influence of teachers on successful Black male students. Others like Berry (2008) argued that educators should become more aware of their power to influence or deny access to academic opportunities for Black boys.
It was within this conceptual background that this study sought to examine the perceptions of the relationships teachers had with their Black male students and explore how these relationships encouraged the academic achievement of Black male students in mathematics education. Specifically, the research examined if and how these relationships encouraged or influenced students cognitively, socially and emotionally—all of which were characteristics associated with excelling academically. Whereas the study understood the idea that well-trained and qualified teachers were important in ensuring that Black male students were fully prepared academically, it focused on the dynamics of the teacher-student relationship and the associated empathetic impression.

Howard (2006) described empathy as the connective tissue that binds teachers to the realities of student experiences outside of school, their cultural norms, and values. For him, empathetic design can only be discovered through relationships. On this note, the present study sought to examine the meaning of relationship, its meanings to teachers and students respectively, how it applied to the teacher-student dynamic and through that examination, explored how these relationships encouraged Black male students to want to learn mathematics in a way that built success.

**Research Questions**

The research questions addressed in this study are:

1. How do teachers facilitate positive relationships with their Black male elementary students?
2. How do the perceptions that teachers have regarding these relationships, encourage Black male student achievement in mathematics?
   a) How does the relationship itself, encourage Black male student achievement in mathematics?

3. How do Black male students describe the relationship with their teachers?

Rationale, Relevance, and Significance of the Proposed Study

Seyfried (1998) noted that teachers have the responsibility to create environments that will promote academic competence, and that it is the quality of the teacher-student interaction that contributes to the students’ reality of the classroom experiences. The importance of the teacher-student relationship is so instrumental that school psychologists use the nature of these relationships to design preventive interventions for academic problems, conduct problem-focused consultation, and address classroom-level processes that contribute to child adjustment (Cavell & Hughes, 1999; Doll & Lyon, 1998; Greene, Abidin, & Kmetz, 1997; Pianta, 1999).

Examining the teacher-male student relationship and its correlation to the independent variable of Black males is far more impactful than some realize. When studying preschoolers, relationships with girls were perceived to be more close-knit than those with boys (Howes et al. 1992). Furthermore, teachers' perceptions of relationships in kindergarten predict eighth-grade outcomes differently for boys than for girls (Hamre & Pianta, 1999). The significance of these studies and how they related to the proposed study made it necessary to explore an even deeper understanding into why teacher-student relationships were important and how their importance related to Black male student achievement. This study was significant due to the impact teachers
had when the relationships built with students was cultivated and recognized to be an instrumental part in the cognitive, social and emotional development of Black male students.

Teacher-student relationships have become a focus of study in recent years and these relationships have been most frequently assessed by teachers’ perception of such relationships (Saft & Pianta, 2001). Thus, the current study explored both teacher and student perceptions of these relationships and how they shaped student achievement. According to Cassidy and Shaver (1999), safe relationships allowed children to exist and function without concern. The supportive nature behind teacher-student relationships gives the student liberty to focus on the cognitive, emotional social development needed to thrive and excel in school. A wide array of studies have found that positive teacher-student relationships contributed to an increase in academic outcomes, positive attitudes and favorable behavioral choices (Birch & Ladd, 1997; Dubow et al., 1991; Hamre & Pianta, 2001; Pianta et al., 1995; Pianta et al., 1997).

The relevance of this study aligned closely with what research has said about the validity and effectiveness of teacher-student relationships. For instance, Ladd, Burch and Buhs (1999) posited that children who experienced negative teacher-student relationships were less engaged in the classroom. In a similar note, Ladd and Burgess (2001) observed that the strain on these relationships caused students to be more at risk for poor academic achievement.

An even deeper and more relevant dimension of the present study related to the connection between consistency of teacher-student relationships and student’s progress in grade levels, over time. This area was relevant because of the known underrepresentation of Black male students in STEM-related activities and programs. Therefore, it can be presumed that
consistent teacher-student relationships, in the elementary setting, can create a foundational path for long-term and impactful growth. Although this particular area of thought has not been thoroughly studied, researchers have found that teachers’ perception of conflict in their relationships with students is marked by moderate consistency in establishing and maintaining relational closeness with elementary students (Howes, Phillipson & Peisner-Feinberg, 1999; Pianta et al., 1995).

**Definition of Key Terms**

**Teacher Perception.** The understanding that a teacher carries about an issue (situation student, or idea) based on their individual experiences or dialogue concerning that issue.

**Positive Teacher-Student Relationship.** The relationship between a teacher and student that is constructive in nature, depicting hope and good.

**Academic Achievement.** Having overall success in the school setting that includes receiving passing grades and assessment scores that meet school-wide and division-wide criteria (Battle & Scott, 2000; Davis, 2003).

**Culture.** Culture is defined as the values, traditions, and beliefs that influence the behavior of social groups (Parsons, 2003).

**Socio-Economic Status.** The grouping of people with similar occupational, educational, and economic characteristics. It also embeds the relative standing in society based on income, power, background and prestige (Brogan, 2009).
Limitations of the Study

There were a few limitations that affected the outcome of this study. The review of the literature, for instance, was limited by both the amount of recent research applicable to the topic of study as well as the useful data specific to Black males in mathematics education. Also, the study focused on the perspectives of both teachers and students and therefore interviews and the frequency of such interviews were limited by the availability of the participants and the detail of the information provided by each participant. Because of the rural location of the study site and the small numbers of the sample pool of teachers, the study was also limited by the number of eligible teachers. This made the selection of study participants small from a comparative standpoint.

Delimitations of the Study

The study focused on an array of African American male students and their academic experiences. Hence, female and non-African American students were excluded from the study. The study also considered positive teacher-student relationships and how this related to the academic achievement of Black males. Therefore, students within the intermediate grade levels (3-5) with the requisite experience and understanding of how to establish these relationships as well as the capacity to determine whether these relationships contributed to their mathematics success were interviewed. Because the student Teacher Relationship Scale (STRS) – Short Form was a key component in gathering data, teachers who did not complete the Form were excluded from the study.
Summary

The purpose of this study was to examine teacher and student perceptions of the relationships teachers have with their male Black students and explore how these relationships influence the academic achievement of these students in mathematics education. This chapter has offered an introduction of the purpose and significance of the present study and explained its relevance in connection with other comparable research studies. It has also enumerated the research questions that the study seeks to answer. Finally, Chapter 1 has provided the definition of relevant key terms as well as the limitations and delimitations of the study.

Chapter 2 provides an exhaustive review of literature relevant to the theme of the study. The literature highlights thematic similarities, compares differences, details the framework, and elaborates on the historical relevance of how the perceptions of teacher-student relationships guided the achievement of Black males. Chapter 2 also offers a synthesis and critique of the literature with a view to underscoring the conceptual idea of the current study.

Chapter 3 details the research design and methodology that were used in the study. The chapter highlights the tools, instrumentation and methods that were used for data collection and analysis as well as explains how the study was conducted, validated, and analyzed. This chapter sheds some light into the credibility of the study.

Chapter 4 shows the results generated by the study and how the research questions were answered by the data obtained. Furthermore, the chapter shows participant responses and contributions (identified only by pseudonyms) and explains how each contribution supports the overall objective of the study.
Chapter 5 offers a discussion of the implications of the findings of the study and provides insights into how the data connects with existing research. The chapter offers a full discussion on how these implications affect the field of education in relation to the dynamic of teacher-student relationships, and how these relationships influences the Black male student’s ability to succeed in mathematics education.
Chapter 2: Review of Related Literature

Introduction to the Literature Review

This research study took place in the Northern part of Florida. It examined teacher and student perceptions of the relationships teachers had with their Black male students and explored how these relationships encouraged the academic achievement of these students in mathematics education. The study incorporated a qualitative case study design and collected data using semi-structured interviews and a Likert survey. The literature studied was inclusive of, but not limited to, the history of education as it related to mathematics education among Black male students, the personal effects of student academic patterns related to mathematical literacy, and identities of Black male students, teacher-student relationships including perceptions, expectations, and teaching strategies that affected Black male students’ interaction with mathematics, and how these relationships shaped overall student achievement. Literature for this study was chosen from several databases to include ERIC, ProQuest, JSTOR, Sage, Google Scholar, and the interlibrary loan services of Concordia University. The types of documents used included academic journal articles, educational periodicals, dissertations, theses, and books.

Low academic performance for Black males is highlighted most often in the area of mathematics education (Davis, 2003). An large amount of the literature that focused on eliminating the disparity in mathematics achievements depicted Black males as individuals who have inferior achievements compared to their peers from other ethnicities (Ladson-Billing & Tate, 1995; Moses-Snipes & Snipes, 2005; Oakes, 1995; Reyes & Stanic, 1988; Tate, 1997; Davis, 2014; (Davis, Jones-Frank, & Clark, 2013; Stinson, 2010). Indeed, research has indicated
that there is a growing disparity amongst students in understanding the concept of mathematics and their participation in the application of such concepts (Stinson, 2006; Boaler, 1998; Eddy & Easton-Brooks, 2011). Grant, Crompton, and Ford (2015) conducted a study on how math is perceived, how participation encourages observable mathematics engagement, and then connects the participation piece to how Black males identify with the subject. They show that how students view themselves, how such a perception correlates to the way they conduct themselves within the mathematics classroom, and how they connect with others socially are important. This underscores how teachers’ effectiveness contributes heavily to the overall success of how Black students perform socially and academically; therefore, examining the effectiveness of student-teacher relationships is important.

This literature review centered on one central theme: how teacher-student relationships encourage the academic learning of Black male student as it relates to mathematics education. It also examined the perceptions of students and teachers, their teaching/learning styles and expectations, and explored how all of these influenced student learning and achievement. Similar to home relationships between the parent and the child, teacher-student relationships appear to serve as a guiding force in developing children socially and emotionally (Greenberg, Speltz, & Deklyen, 1993; Pianta, 1999). As a result, they can affect the academic development of a child in a positive way. Against this background, this study addressed the following research questions:
1. How do teachers facilitate positive relationships with their Black elementary math students?

2. How do the perceptions that teachers have regarding these relationships, encourage Black male student achievement in mathematics?
   a. How does the relationship itself, encourage Black male student achievement in mathematics?

3. How do Black male students describe the relationship with their teachers?

**Conceptual Framework**

Pianta et al., (1995, 1997) developed and constructed a framework of research supporting the need for effective student-teacher relationships. These relationships are necessary when determining the academic and social development of students. The quality of teacher-student relationships is highly predicated on how children were successful behaviorally and scholastically in the primary years (Cadigan et al., 1988). According to the attachment theory, all children require supportive and caring relationships with adults, regardless of the child’s socioeconomic or ethnic background, and this is most helpful for the healthy cognitive development of children (Ainsworth & Bowlby, 1991; Barnett et al., 1998). Furrer and Skinner (2003) examined the importance of how children relate to educational stakeholders and why these relationships are influential in the academic development of students (Rey et al., 2007). The evidence from this framework supports the focus of this study in identifying the student-teacher relationship and its importance in educating the Black male student within the classroom setting. Certain studies focusing on the dynamics of teacher-child relationships have examined
how the classroom environment contributes to the way a child interacts with academics, both instructionally and socially (Brophy & Good, 1974). Thus, teachers’ perceptions are important in the context of interaction with students. These perceptions, whether good or bad, are used towards relational interaction within the classroom (Saft & Pianta, 2001).

Scholars such as Hamre and Pianta (2010) and Burchinal and Downer (2010) argued for the need to fashion a more specific design in examining teacher-student relationships. This design reflects emotional support, classroom organization, and instructional support as important components to guide interaction. The effectiveness of such a design was substantiated in its support for elementary grades in all instructional areas (Hamre et al., 2010). The Classroom Learning Assessment Scoring System—Secondary or CLASS-S (Pianta et al., 2008) was developed for secondary schools to measure what has already been learned and to provide more intense support. For many, the foundation of teacher-student interaction is closely tied to the characteristics of the student. Teachers may often find themselves “ability-grouping” students without awareness solely on the basis of these characteristics. Allen et al. (2013) suggest that without knowing this bias may exist, teachers tend to be viewed as skillful instead of recognizing the potential missing link to student quality. With regard to emotional support, attachment theorists believe that when students are given emotional support from adults who are genuine and consistent with such behavior, they are able to let down their guard and are then better able to retain information from within such a setting, thus, facilitating academic learning (Hamre et al., 2010). The relativity in understanding the connection in how students perform to that of
positive classroom environments as well as teacher-student relationships is interestingly consistent with the development theory (Allen et al., 2013).

The perceptions that teachers have regarding students and the ethnic similarities and/or differences may play a role in how the teacher interacts with the student. How a teacher develops expectations and how those expectations are communicated may differ tremendously depending on the child’s ethnicity. For example, communication patterns between teacher and child may depend on the ethnicity of the child (Brady et al., 1992) and may contribute to our understanding of the adjustment and achievement of minority students. These patterns may offer deeper insights into how minority students achieve (Saft & Pianta, 2001). In a study that was conducted by Entwisle and Alexander (1988) it was reported that first-grade teachers often respond differently to Black children who were observed doing the same behaviors as White children. This encouraged the notion that interpretation of each student behavior is different based on ethnicity (Saft & Pianta, 2001). Pianta et al., (1995, 1997) contended that a teacher–child relationship that brings safety is one that has: (a) minimal amounts of co-dependency; (b) minimal confrontation; and (c) an increased amount of warmth. One way of efficiently identifying and assessing teacher-child relationships at risk is the Student-Teacher Relationship Scale (STRS) (Pianta, 1993). This is a survey tool that records perception from the teacher’s standpoint. The STRS tool is beneficial in understanding a child’s emotional and cognitive development through the relationship built by the teacher (Birch & Ladd, 1997, 1998). According to Saft and Pianta (2001), teacher-student relationships have most often been assessed from the teachers’ perception and these perceptions can be affected by certain behaviors and
characteristics of the student. Positive relationships are important in establishing boundaries and encouraging academic success with children who are at-risk, underserved or economically disadvantaged. Black males are among those who fall within this category. In 2010, the Schott report reported that the average graduation rate for Black males was at or about 47 percent (SFPE, 2010).

**Teacher-Student Relationships**

There is significant literature highlighting the negative perception with which Black male students are viewed based on the academic outcomes associated within the classroom setting. Thus far, this chapter has underscored the disproportionate representation of low academic achievement among Black male students. Other perspective that will be explored include insights into how socio-economic status and cultural influences affect achievement, the effect of student-teacher relationships as related to social and academic achievement, and how the negative and positive influences resulting from these relationships affect student mathematics achievement. Finally, the chapter reviewed documented practices and strategies suggested to build formidable student-teacher relationships resulting in social acceptance, self-confidence, a strong self-image, and academic achievement.

**The History of the Black Male, Socio-Economic Status and Cultural Influences**

African American males represented in school systems around the country are consistently experiencing unfavorable academic outcomes (Moore & Owens, 2008). Specific indicators include increased school failures (Ford, 2010; Jackson & Moore, 2006; 2008; Saracho & Gerstl, 1992), low matriculation percentages (Jackson & Moore, 2006), plummeting
assessment percentages (Gallant & Moore, 2008), low grades/grade point averages (Jackson & Moore, 2006; 2008; Moore & Owens, 2008), a disproportionately low representation in gifted and Advanced Placement (AP) classes (Ford, 2010; 2013; Moore & Flowers, 2012), and higher numbers in special education (Donovan & Cross, 2002; Jackson & Moore, 2006; 2008; Moore et al. 2008; US Department of Education, 2011). Furthermore, underachievement and low achievement have consistently been a major concern for educators (Henfield et al. 2008; Moore et al. 2005a; 2005b; Moore & Flowers, 2012).

Davis (2007) posited that from a historical standpoint, Black children have an academic disadvantage due to the cultural beliefs passed down from generations, and because of the past experiences still plaguing African Americans today, they have been termed the least intelligent race in America. Accordingly, Steele's (1992) concept of dis-identification referred to the lack of a relationship between academic self-esteem and global self-esteem, assuming that past relationships were somehow connected. The lack of a relationship alone brings concern, especially as it relates to academia, primarily because understanding the concept of academics proves to be an important factor in creating academic success (Finn, 1989; Steele, 1992). Furthermore, the literature notes that African American culture was a product of America in where European Americans instilled the theory that the term ‘African’ in African American suggested inferiority (Davis, 2005; Higginbotham, 1996). Therefore, because of this generational mindset, there is no doubt as to why African American children perform so poorly (Davis, 2007).

According to Reyes and Stanic (1988), socioeconomic status (SES) should be considered with race and sex, and then separately. SES is important because it appears to capture a broad
spectrum of minority groups. Moreover, its representation within neighborhoods is often studied as being predictable in identifying secondary grades. Therefore, students who are products of less affluent environments do poorly in school as opposed to those who are products of more affluent neighborhoods (Dornbusch, Ritter & Steinberg, 1991).

Culture plays a significant role in a student’s cognitive development (Allen, 2015). This important teaching dynamic refers to certain knowledge and skills which contribute to how a student believes and applies the belief system to guide academic behavior (Serpell & Boykin, 1994). There is a vast difference in how culture is displayed at home versus within the classroom (Boykin, 1983; Pai, Alder & Shadiow, 2006). Teachers have a high level of influence on math achievement more than reading achievement (Braun et al., 2006; Dee & Keys, 2004; Nye, Konstantopoulos & Hedges, 2004). When examining the effects of influence regarding reading development, parents play more significant roles because the future development of reading stems from reading more. Generally, more mathematics skills are taught mainly by teachers within the classroom. In order for teachers to be effective with minority students, there should be a strong connection between culture and knowledge, especially the type that incorporates real world experiences (Eddy & Easton-Brooks, 2011).

In this regards, Martin (2007; 2009a) opined that in order to fully benefit Black students, catering to their cultural and social experiences will influence any future policy changes designed to affect practice. For scholars like Martin, mathematics research focuses on policies that are generated to appeal to Black children based on their mathematics experiences (Martin, 2009a). This type of learning has been framed through achievement and learning.
Unfortunately, this learning approach has not done much for the Black student demographic and its constant comparison to students from other ethnicities; this group seemingly continues to be deficient (Martin, 2009a; Stinson, 2006). Flores (2007) noted that achievement gap discussions are mostly engaged through unfair opportunities but no strides have been made in determining why (Milner, 2008; 2010). Similarly, Martin (2009a) argued that it is most common for Black students to be labeled as needing to be “fixed,” when some would suggest that the instructional system is what really needs to be fixed.

Discontinuity refers to very large disparities within a cultural context such as between home and school (Okagaki, 2001). Therefore, a large display of discontinuity remains evident when examining the school and home experiences as well as the academic performances of Black children (Boykin & Bailey, 2000). Boykin (1983) provides a detailed discussion on this increased form of discontinuity which has become more evident in Black youth. Conversely, American schools tend to focus more on the widely accepted approach of controlling one’s self separate and apart, which puts the home-life and school setting at odds with each other (Boykin et al., 2006).

As research increases, it is suggested that the cultural experiences at home and those typical within the classroom setting remain at odds (Boykin, 1983; Pai, Alder & Shadiow, 2006). When the cultural experiences of a student match those within the classroom setting, it can shape their learning in many ways. These include cognitive development, bringing value to the information being taught, and providing a link, contextually, to establishing appropriate behavior (Serpell & Boykin, 1994). When culture is intertwined with cognition, it increases thinking and
problem-solving, which are both cultivated by culture (Gordon & Armour-Thomas, 1991; Vygotsky, 1978). The combination of the two partly explains why merging cultural effect with student-teacher relationships on academic achievement is vital. Rouland et. al. (2014) have examined whether cultural continuity exist within a typical American classroom and whether the characteristics within the classroom aligned to the economic design and makeup represented by the students. They also sought some clarity into whether cultural principles play a role in the behavioral and academic achievement of Black students.

Rouland et. al. (2014) found that teachers of economically-disadvantaged Black students prefer those behaviors by which the student could take responsibility after acknowledging that the behavior was inappropriate. Interestingly, Afrocultural styles, or styles that include a high percentage of relatable values from a cultural standpoint, are likely to be seen in environments saturated with economically-disadvantaged students. Research has shown that while economically disadvantaged children need it the most, Afrocultural styles are less present in their classrooms (Rouland et. al., 2014). It has also been observed that incorporating these styles would bring a positive association with achievement. However, when combining Afrocultural styles with the negative behavior displayed in typical American classrooms, a negative association with achievement could be produced (Rouland et al., 2014).

Rouland et al.’s (2014) research contradict previous research in indicating that discontinuity is a far more prevalent problem among Black students. Although discontinuity is noted as being a contributory factor between the home environment and school setting, reducing it would not totally resolve the issue of lower academic success among Black male students. It is
not surprising that Black youth learn better when they do so in a way that embraces their cultural and social experiences. Rouland et al.’s (2014) study does indicate, however, that having these students converge their cultural beliefs with mainstream values could be beneficial in the long run.

The use of mainstream and Afro-cultural styles significantly influence teacher relationships in educating Black male students. Serpell and Boykin (1994) note that:

Teachers using both styles may be serving as cultural brokers who are preparing children to navigate between mainstream and Afro-cultural spheres. By incorporating both styles into the classroom, teachers allow children to learn the skills they need, while at the same time, not alienate them from the values they are exposed to at home. Also, rather than denigrating the culture of African American students, the teachers may be consciously drawing on the students’ culture to help them learn (p.371).

Regardless of how researchers have debated the effectiveness or ineffectiveness of culturally empathetic studies, research has consistently shown that there is, has been and will be an ever-growing concern with the academic achievement of low-income and underserved African American males. The impact of student-teacher relationships plays a role that builds fortitude, if nurtured. Polite (1993; 1994) noted that Black male students are less likely to put forth an academic effort when they do not feel the teachers have a vested interest in their development. Hence, a “teachers’ low expectations will yield poor results” (p.588).
The Effect of the Teacher-Student Relationship

Regardless the nature of the material resources that are available, the strategies that districts use to acclimate children to schools as well as how children are grouped for instruction, children spend a good part of their days in social interaction with teachers. The most effective teacher-student relationships cultivate a child’s academic, social and emotional development (Brazelton & Greenspan, 2000; Lynch & Cicchetti, 1992; Pianta, 1999; Weare, 2000). Both perceptions and expectations showcase how students and teachers work together to approach achievement goals; how they will accomplish them, and the attendant benefits (Ferguson, 2003). Davis (2003) asserts that teachers are most effective in the facilitation of their classrooms when they are in tune with the specific needs of their students. Furthermore, and although rarely acknowledged, is the disparity identified within the Black-White achievement gap and how the general expectation is that it will continually increase because there is not enough emphasis being placed on the positive effects of teacher-student relationships. The quality and intent of such relationships allows teachers to communicate concerns for, and belief in, Black students so that they can see themselves facing any problem, big or small and in any environment, whether at home, at school or in the community (Douglas et al., 2008).

From a theoretical viewpoint, Rey et al. (2007) noted that children need vested and secure relationships because they create a type of supportive belonging that creates a foundation for cognitive learning and exploration (Ainsworth & Bowlby, 1991; Cassidy & Shaver, 1999). Consistent with this perspective, Furrer and Skinner (2003) examined how a child’s relationship (socially and academically), directly influence classroom engagement. Most children’s
emotional connection in the classroom was mostly related to how they interacted with their teachers. They found that although parents serve as an influential force within a child’s life, the relationship with a teacher creates more of a lasting impact academically. In this regards, numerous studies have found that positive relationships between teachers and children were associated with a variety of scholastic outcomes. For instance, students have been known to increase academically, behaviorally, and establish an overall, well-adjusted attitude about the schooling experience as a whole (Birch & Ladd, 1997; Dubow et al., 1991; Hamre & Pianta, 2001; Pianta et al., 1995; 1997). Hamre and Pianta (2005) found that teacher support protects a child’s best interest, especially in areas that put students at risk for school problems. Looking at the bigger picture, this suggests the idea that children need caring and supportive relationships and when they feel that this type of relationship is in place, they become more interested in school and school-related activities.

Another component of establishing a foundation for a successful student-teacher relationship is the perception of the teacher in terms of how she views the student within these relationships (Ehrenberg, Goldhaber & Brewer, 1995). Teacher and child ethnicity (and gender) have been considered to be a factor when developing a teacher's perception of the student (Ehrenberg, Goldhaber & Brewer, 1995). For example, Zimmerman et al. (1995) reported Black males as creating more classroom disruption when the teachers were Hispanic and Caucasian compared to when these instructors are African American. This echoes the idea that the connection between students and teacher of different ethnicities may be less than authentic. This is interesting when understanding that these relationships are typically guided by the perception
of the teacher, and therefore can negatively affect a student’s adjustment academically (Saft & Pianta, 2001).

**Why the Need for Teacher-Student Relationships With Black Male Students**

The academic failure of Black males is an increasing problem which consistently showcases the overrepresentation of these individuals in various academic categories (Dallmann-Jones, 2002; Martin et al., 2007). Different socioeconomic factors influence the achievement of Black male students. According to the National Center for Education Statistics, African Americans are highly affected by high poverty rates in comparison to other groups. In 2013, 39% of Black children under the age of 18 were living in poverty, this up from 33% in 2008 and compared to 13% of Caucasian children (National Center for Education Statistics, 2013). More commonly than not, students from economically disadvantaged environments are not armed with the educational resources that are helpful in preparing them for school. A study conducted by the Congressional Black Caucus Foundation examined how poverty and the attitude of students relate to academic achievement. The study examined student attitudes with a view to assessing how academic achievement relate to student self-perception. The study results indicated that a student’s attitude regarding self-perception can affect their academic achievement immensely (White, 2009).

Teacher-student relationships can affect how a student perceives himself socially and how it relates to his ability to perform academically. For instance, in the Black culture among the youth, it is almost a behavioral norm to rebel and not conform to traditional status quo (Ferguson, 2001). It is often assumed that Black males who fail to perform academically,
consistently break rules and create a ‘cool’ image for themselves, are more likely to be respected by White male counterparts (Graham, Taylor & Hudley, 1998). Moreover, teachers affect what students have the ability to learn (Stronge, 2002). Successful teacher-student relationships create the opportunity for really good teachers to make lasting impressions on student achievement which can last for three or more years (Stronge, 2002; Tucker & Stronge, 2005; Viadero & Johnston, 2000).

According to Ford and Moore (2013), a student who performs poorly has shown nothing that truly correlates with what his true academic abilities reflect. Rather, it suggests that he is only performing poorly on test scores and assignments. When teaching Black males from urban environments, one must redirect their mindset into creating a focus that develops a plan designed to increase performance so that the ‘below average’ stigma does not become the norm and instead create a level that is commensurate with increased academic ability. Past research has indicated that Black boys do have a desire to do well in school academically. In a study conducted by Garibaldi (1992) of over 2,250 Black males in New Orleans, 95% had expectations of graduating. When asked how they felt their teacher related to them, less than half said that much was not expected of them and 60% believed that they simply were not challenged enough. Additionally, a sample of 500 teachers were asked if they believed their Black male students would go to college (318 of whom responded), 6 out of 10 every 10 responded negatively. Even more concerning was that of this sample, 60% of the teachers sampled taught elementary where the foundation of a child’s academic career is built, 70% had 10 or more years of educational experience, and 65% of them were black. These alarming percentages indicate that the need for
effective student-teacher relationships is even more necessary in relation to the academic future of students.

Gibson (2002) conducted a study that consisted of classroom observations and interviews with Black males, teachers and parents. The sample of students attended a comprehensive and alternative high school in the Bronx, New York. The focus of the study was to evaluate whether teacher-student relationships influence these students toward negative mainstream acceptance and create pathways that may lead these students toward conformity or delinquency with a special focus on school and interaction factor. Gibson revealed that the reason for her study was because of the discovery that teacher-student relationships with Black males had rarely been studied. Gibson presented a strong hypothesis that, the more impactful the relationship is from a positive standpoint, the less likely the students would become delinquent. This hypothesis was substantiated through various observations. Additionally, the study suggested that the more poorly a student performed academically and behaviorally, especially in the first half of the school year, the less of a positive regard the teacher held for the student and the relationship between the two became less of a priority. It also suggested that the more of a negative regard the teacher took, the more disengaged the student became from the school setting.

Gibson’s findings indicated that with Black males, their perception of the teacher’s transparency went a long way, and represented a very meaningful element of the relationship. Transparency shows vested and genuine concern for students. The study also indicated that the most effective teachers not only possessed a sense of transparency but also were effective in how communication was provided to their students. An interesting fact found by Gibson was that the
teachers who were able to show this kind of transparency and a strict teaching style still affected their students positively. However, it must be understood that transparency should occur before discipline. In other words, Black male students should be made to feel that their teachers care for them and these relationships come as a result of the teachers’ transparency.

Relationships with Black male students sometimes represent far more than what meets the eye; they often represent the sternness needed to motivate and inspire academically. Howard (2002) examined elementary and secondary perceptions of Black students on what they thought made teaching relationships effective. The study’s purpose was to gain knowledge of how students believed their teacher’s pedagogy influenced their cognitive and social development. A similar study examining the perceptions of how third grade Black and Hispanic students thought the climate of the school influenced the teacher-student relationship found that these relationships play a big role in establishing the climate of the school, more so for Black students than any other (Slaughter-Defoe & Carlson, 1996). The study further showed that students believed those teachers who showed them a sense of transparency in school and with school-related activities impacted them with immense academic experience.

Miron and Lauria’s (1998) reported that for many Black male students, the idea of being smart is often not a viable option in relation to the type of the teachers they had. For one Black student, “they [teachers] expect more from Vietnamese kids that always [are] smarter and stuff … they never expect a black student to be smarter than a Vietnamese, you know; they always automatically think that we’re dumber” (p.200). Furthermore, many students felt that the teachers’ careless attitude and rude behavior regarding African American students contribute to
their poor performance (Howard, 2002). Phelan, Yu and Davidson (1994) examined, through a 2-year study, Black student perceptions, in relation to teacher relationships, and how they were affected within a classroom environment. Their results indicated that students felt like they were treated differently or singled out because of their ethnicity or cultural convictions. For some, their way of acknowledging these behaviors was showcased in many different ways such as through creating disruptions or completely withdrawing from class. On the flip side, many students felt that the teachers who cared about them encouraged and provided assistance when they are faced with academic challenges (Howard, 2002). Researchers say that to develop effective connections among students, bonding and formed relationships are useful strategies (Corey & Corey, 1987; Deiro, 1994; Peck, 1987). Howard’s (2002) study indicated that when teachers establish environments reminiscent of a student’s home life, the student will begin to differentiate the relationship and apply its effects in a way that can support results. For instance, several of the students in the study said that they liked their teacher because they reminded them of their mother or another close maternal relation. In this regard, certain mannerisms and interactions were similar to those seen at home. While the teachers incorporated a variety of incentives to encourage students, the students in these environments understood the purpose behind such aggressive actions along with the intention and message embedded. According to the students, teachers were considered good if they were perceived to care about them. The students felt that the teachers communicated care and concern on a daily basis and even put a lot of effort into the students who did not want to learn. One student in particular described his teacher as one who tries to help everyone and is committed to helping the students get more out
of learning. Furthermore, the students concluded that a caring teacher would ensure that students learn at school instead of playing and not taking their learning serious (Howard, 2002). Positive relationships like these can help to cultivate the learning experiences of Black students, thus exposing them to great opportunities for success.

The Negative Sides of Teacher-Student Relationships

Albeit difficult to understand, there are instances where teacher-student relationships generate negative effects and can become unhealthy for academic progression. These negative relationships are frequently influenced by factors like SES and race, when Black male students are taught by White educators who are not culturally aware of how to associate themselves with the learning styles and issues facing these students. Children who are products of economically disadvantaged neighborhoods and environments are more likely to be educated in environments that require less student interaction and more firm teacher-direction compared to students coming from more affluent neighborhoods (Pianta et al., 2002). This often leads to negative teacher-student relationships. Additionally, in a study that included a high percentage of White teachers, White children were reported to have closer relationships with their teachers compared to Black students (Ladd et al., 1999).

Another predictor stems from the parent-child relationship and how it is connected with the teacher-student relationship. Upon entering the primary grades, children have developed a large amount of behavioral and relational strategies that impacted future relationships with teachers. Many studies have suggested that children misbehave based on the relationships formed with their parents relative to that formed with their teachers. For example, relationships
that involved close-knit behaviors with parents and other family members may often result in negative behavior problems (Miliotis, Sesma & Masten, 1999). Additionally, there have been some correlation between behavioral issues in primary years with the relationship between teacher and child (Hamre & Pianta, 2001). Howes, Phillipson & Peisner-Feinberg (2000) found that behavioral problems in preschool were the strongest predictor of conflict in teacher–child relationships. Similarly, Ladd et al. (1999) have posited that teacher-student gender relationships may be influenced by male students’ increased need to instigate fights and other types of altercations which, in turn, relate to negative teacher-student relationships. Because of this influence, Black male students who enter school with existing behavior problems are more prone to experiencing negative interactions with teachers which could affect the long-term teacher-student relationship (Jerome, Hamre & Pianta, 2009).

The perception of teachers and how they view the students they teach creates a dynamic that is all too familiar when establishing effective teacher-student relationships. Because these perceptions often generate negative relationships it seems necessary to identify how perception fits into the teacher-student relationship dynamic. Several research studies on whether and if teacher effectiveness is important to educating Black students highlight that many teachers believe these student’s potential will not become a reality in environments where teachers imagine them as incompetent or not being able to perform (King, 1994; Ladson-Billings, 1994; Mitchell, 1998; Quirocho & Rios, 2000). This is especially troubling considering the fact that Black male students are likely to be taught by White teachers (Landsman & Lewis, 2006). Moreover, many teachers describe the relationship with their students in negative terms,
especially those including boys. Indeed, the presence of increased behavioral problems is often an accurate predictor of how students adjust well to school (Pianta & Stuhlman, 2004). A number of scholars such as Boykin (1992), Darder (1991) and Scheurich (1993) have observed that many White teachers work within a hegemonic, mainstream framework that is built on the notion that dealing with Black students requires lower expectations. Such an attitude also assumes that a lack of respect to these students is normal. Unfortunately, this results in a decreased possibility for effective teaching and creates a classroom environment that does not favor academic success. The negative sides of teacher-student relationships may be further examined through more specific lenses.

**Teacher-Student Stereotypes**

In the early 1960s, researchers studied how racial stereotypes affected Black students. Kenneth Clark (1961) conducted a study within urban classrooms. He found that teachers have a tendency to identify African American students as incompetent personally and behaviorally and lacking motivation when it comes to learning as well as within the classroom. His study also revealed that teachers consistently had lowered expectations of Black students and treated them as inferior to White students within the same classroom (Adams, 1978; Cooper, Baron, & Lowe, 1975; Henderson & Long, 1973; Keller, 1986; Murray, 1996; Partenio & Taylor, 1985; Plewis, 1997). However, it is the responsibility of the teacher and other educational stakeholders to promote academic and social competence. When high expectations are set, students will make an effort to accommodate and respond to them. Some research has shown that teacher expectations are associated with student outcomes (Bahad, Inabar & Rosenthal, 1982; Page & Rosenthal,
Rosenthal (1995) further noted that sometimes students who are faced with low expectations perform the opposite, and many teachers fail to reward them with incentives when this happened. Because this is so commonly seen among Black students who adopt “oppositional identities” (p. 171). In this regard, Seyfried (1998) noted that such a behavior may be justified but underneath it lies a perpetual cycle.

**Low Expectations**

When looking at the design of education and how the Black male fits in, they are more likely to be classified emotional deficient, ADHD, and/or suffering from a learning disability, and are more likely to be placed in special education (Milofsky, 1974; Ford & Moore, 2013). Furthermore, they are more likely to be excluded from being considered for advanced-placement and honors courses (Toldson, 2011; Oakes, 1985; Pollard, 1993). As an educator, I have witnessed and observed the classification of African American male students as special education candidates simply because the expectation of those individuals perpetuated failure. Although the commonality of ADHD is relevant among some teachers, the common characteristics of Black students are not. When a cultural connection is not deemed important, teachers may begin to view these students as deficient and behaviorally incompetent. When teachers impose negative thoughts on a student, it can cause the student to have low expectations, resulting in negative outcomes. This is especially true when students are not able to display their strengths accurately (Scott & Moss-Bouldin, 2014).

Special education issues are an even greater concern among Black males. Instead of using this as a way to enhance learning for these individuals, it has become an opportunity to
stigmatize and hold back the potential of such individuals. The validation comes in certain research studies finding that Black males are more likely to be labeled as having behavior problems and less likely to be seen as smart (Meier et al., 1989). In mainstream academic environments that serve Black males, they are typically considered not to be smart, regardless of the age or grade level (Hilliard, 1991). Additionally, Black males are also more likely to be punished for less stringent offenses in comparison to their peers. As a result, schools that serve Black males consistently fail to provide what students need to succeed (Noguera, 2003).

In a study examining student interest by Brophy and Good (1974), researchers found that students were inattentive in a middle class white school, indicating that the teachers needed to creatively ignite student attention. However, the same study found that students in a lower class black school have boredom due to short attention span. This was summed up to mean that teachers in the lower class black school exhibited low expectations towards the students which roughly translated into a low respect for the student’s ability to learn.

Brophy (2004) outlined ways in which low expectations are inadvertently communicated to students: (a) failing to allow students to communicate openly, (b) subconsciously disengaging students by placing their seats farther away, (c) placing their seats closer to manage behavior, (d) not paying attention to their needs, (e) praising or critiquing them at the wrong time or openly, and (f) failing to communicate feedback. Ferguson (2003) notes that writers concerned with bias in estimating potential often claim that it leads to self-fulfilling prophecies. This belief transposes into the idea that if teachers raise the level of expectation, children would undoubtedly achieve more.
Self-Fulfilling Prophecies

A self-fulfilling prophecy is a bias that lies in the expectation a teacher has regarding a student’s performance, which in turn affects the overall student’s performance (Ferguson, 2003). Researchers believe that to successfully incite a self-fulfilling prophecy, teachers: (a) fail to separate false information from creating new perceptions about students, (b) believe false information about students and do so in a way that students begin to perceive what the teacher is believing, and (c) with students perceiving the beliefs, they begin to confirm the expectation through actions. When it is perceived that academic success can be controlled, it creates a strong foundation for academic achievement. However, studies have shown that when students fail to believe that putting forth effort will make a difference, they end up performing poorly (Findley & Cooper, 1983). Therefore, theoretically, when students are confronted with low expectations from their teachers they will begin to believe that they can no longer succeed, and this often transfers to a consistent display of low level performance.

By and large, the magnitude of self-fulfilling prophecies within the classroom, are not too common when studying their effects (Jussim et al., 2009). The expectations teachers carry concerning their students impact them in a way that makes them vulnerable to achieve more. This is especially true of students from low-income socio-demographics as well as low-achieving students (Brattesani, Weinstein & Marshall, 1984; Jussim, Eccles & Madon, 1996; Kuklinski & Weinstein, 2001; Madon, Jussim & Eccles, 1997; McKown & Weinstein, 2008). In recent studies, however, self-fulfilling prophecies have had greater effects on third grade, low-income students in the area of mathematics education in comparison to more affluent students (Hinnant
et al., 2009). Research has shown that this may be linked to math expectations in first grade, low performance in sixth grade, seventh grade math achievement and how teachers perceive sixth grade math academics (Jussim et al., 1996).

Sorhagen (2013) examined the relationship between how teacher estimations regarding first grade student’s math reading as well as language abilities and their academic performance in high school. The study brought attention to the mentioned subject areas as well as the demographic characteristics of each student. Additionally, when teachers made inaccurate expectations it was a further contributing factor to how students performed academically as they matriculated through different schools. Some studies also show that self-fulfilling prophecies are exhibited through all academic subjects as well as for students from various levels of SES. Sorhagen (2013) argued that implementing self-fulfilling prophecies so early to students in primary grades contributed a lasting effect on the achievement of those students who are disadvantaged. This perspective brings attention to the belief that poor children being unable to achieve, academically, may be a contributing factor to why the achievement gap continues to grow between Black students who are economically disadvantaged and others who are not.

Conversely, overestimating a student’s ability may generate a disproportionate help to economically-disadvantaged students. This suggests that these prophecies exhibited within the classroom could contribute to efforts that are designed to improve the achievement gap between low-and high income students. This is especially important considering the need to decrease the ethnic educational gap in America (Sorhagen, 2013).
The Positive Sides of Teacher-Student Relationships

Teachers are gifted with the ability to introduce opportunities to students, including those from economically-disadvantaged backgrounds, by ensuring that they are informed about the educational process, norms and expectations, and considering ideas for a plan that will be inclusive of the student’s background and experiences (Crosnoe et al., 2004; Stanton-Salazar, 1997). Creating a student-friendly climate within the classroom is highly dependent on the established relationship between teacher and student. Treating students with respect generates respect. When students like their teachers, they are more willing to want to make them proud (Boynton & Boynton, 2005).

In a study conducted by Murray and Naranjo (2008), Black graduating students reported that the ability to trust their teachers was a guiding force for completing the academic journey. This is a promising bit of information considering that approximately 80% of youth fail to complete high school. In addition to developing a strong sense of trust between the student and teacher, positive teacher-student relationships also shape how Black students approach academic, emotional and behavioral concerns (Decker et al., 2007; Rey et al., 2007).

The relationship between a teacher and a student goes well beyond the classroom setting. Teachers are designated change agents in the lives of the students they teach, and they bring so much more to the overall picture than what they are collectively acknowledged for. Because of the work that teachers do to cultivate the potential and development of students, there is no argument that teaching is a giving profession (Warren, 2014). When teachers make the genuine attempt to understand how and why a child functions the way they do and enters their world in
an effort to do so, empathetic teaching can begin to take place (Brazziel, 1964). When teachers choose to intersperse empathy with classroom functions, it tends to promote a more nurturing environment and promotes a positive teacher-student relationship (Aspy, 1972; 1975a, b; Black & Phillips, 1982; Coffman, 1981). There are some specific ways through which positive sides of teacher-student relationships may be situated. These may be examined in some detail.

**Culturally Adept Relationships in the Classroom**

Quiocho and Rios (2000) opined that while teachers may be of the same ethnicity as their students, this does not necessarily guarantee success in teaching. However, it has been considered that these situations do contribute to improving schooling for students who share their ethnic and cultural backgrounds. This is especially important because it allows the teachers’ with these backgrounds to empathize with students and to assist them in overcoming the barriers that are typically brought on because of the cultural inability to communicate effectively (Irvine, 1989). Although it is perceived that all teachers are viewed as change-agents through the eyes of their students, studies have indicated that Black teachers build meaningful and impactful relationships with students who come from economically disadvantaged and underserved areas. The benefit of Black teachers educating students from less affluent environments is that students see them as role models because of the ability to relate to their situation of being poverty-stricken. Additionally, they are able to impact the lives of their students as opposed to teachers from the typical mainstream American classroom (King, 1993). For example, Black teachers carry the ability to influence and help students succeed, even though their present circumstances of poverty and discrimination paint a picture to do the inverse (Haynes & Comer, 1990).
Furthermore, when the learning environment caters to the culture of the Black student, reflecting their home environment and not the traditional setup of a traditional mainstream classroom, such students perform at incredibly high percentages (Boykin & Bailey, 2000). Interestingly, when elementary students believe that there is a difference between the culture displayed at home and school, they tend to perform significantly lower and lack motivation (Arunkumar, Midgely & Urdan, 1999; Warzon & Ginsburg-Block, 2008).

Gutstein et al. (1997) suggested that teachers should become culturally connected to their students and view their students through an empowerment lens versus a deficit lens. When considering a student’s deficits, teachers fail to academically challenge students and see their exposed cultures as a hindrance or obstacle. On the contrary, Gutstein et al. (1997) notes further, teachers who view students from an empowerment perspective, “establishing solidarity with students and their families” (p. 727) and continually provide academically challenging work. Culturally responsive teaching is designed to cultivate the academic potential of students who exhibit culturally different experiences by incorporating effective and useful teaching practices in classroom settings (Gay, 2000; Ladson-Billings, 1994; 2001). However, it is a good idea that these teaching practices be embedded in a foundation of successful relationship building. Researchers like Santamaria (2009) note that this type of teaching validates and empowers students to achieve on a more consistent basis, which has been helpful in offering ways on how to improve culturally responsive teaching for practitioners and researchers.
Equality and Concern Among Students

The beauty of school is that it creates, for students, an environment that is ever changing. Such changes occur in different ways including academic levels, curriculum styles, as well as at the levels of expectations and regulations. It is obvious that with the changes that children experience academically, changes with their teachers are also expected as well as being embedded with contextual changes.

Noddings (1984; 1992) introduced the “ethic of care” and felt that in order for the educational system to be effective, there is a need for care to be included. Teachers must involve a high level of care embedded in the relationships forged with their students and allow this to be as important, if not more important than core academic subjects. This coincides with something that I, as an educator, have always communicated. When teaching Black males, it is important to touch their hearts before you can ever begin to teach them. Once they see and feel the exchange of genuine care and concern, they will then open their minds to learning.

Cholewa et al. (2012) conducted a study on a 5th grade mathematics teacher of Black students and her ability to forge lasting relationships through empathy and teacher-student connectedness. The teacher’s focus was to interconnect care with teaching then build connections and a bond of trust with the students as well as a form of equality among students. For these group of researchers, relationship building is structured into four parts: (a) showing students that one cares by listening and empathizing, (b) influencing students to believe in themselves by creating a series of high expectations, (c) creating ways to re-engage students, and (d) making sure that each child is successful. Creating a pathway for student success is not just
dependent on whether a teacher is Black or not, it is dependent on the teacher’s ability to commit to their student’s success. When this is made a priority, it gives students the opportunity to feel safe through the development of a successful and positive teacher-student relationship. When students see this type of care and concern, personally and academically, they feel safe to reciprocate in the relationship and in the learning process. Based on the study results and the analysis of the observations of Cholewa et al. (2012), connecting with students on an emotional level is necessary, especially when it is not only focused on individual students but also the class as well. Additionally, a teacher’s ability to relate through transparency can allow students to let their guard down and trust the relationship, which is something that every teacher should at the very least be exposed to. Finally, if children are expected to value environments that are different from what they see, there should be an understanding that the classroom is an environment that embraces fairness and equity (Davis et al., 2011).

**Student Engagement in the Classroom**

Generally, low academic achievement and poor development of social skills is common among children who attend school in urban poverty-stricken areas (Haggerty et al., 1994). When examining the cause of such high percentages, these areas have schools with extremely low ratings of positive school climate, which highly coincides with student achievement and socialization (Bernstein, 1992; Esposito, 1999). Elias and Haynes’ (2008) conducted a study that examined the protective processes that allows a student to perform socially and academically; the study uncovered two ideals: (a) the ability a child has to successfully adapt socially (Wang & Gordon, 1994), commonly known as social-emotional competence; and (b) providing the child
with the understanding that they are supported and have assistance needed to adapt successfully (Baker, 1999), of which all can consistently affect a student’s engagement socially and academically. A component of the study found that economically-disadvantaged students often felt singled-out and alone because of the notion that they are at-risk for failure. When considering levels of satisfaction, students who are more satisfied with school strive to have better relationships with their teacher, which allows them to receive more academic support. However, when compared with students who are not satisfied with school experienced, less teacher support is received on a consistent basis (Elias & Haynes, 2008).

Based on the study conducted by Elias and Haynes (2008), it was found that when students perceive support, they perform better. This is especially true for low-income environments and students who are economically disadvantaged, particularly Black students, since they make up most of this group (Attar et al., 1994). Also, if teacher-induced interventions are to be effective in classrooms that are designed to educate low-income third-graders, research indicates that these interventions need to incorporate ways that will help to develop the social-emotional competence of these individuals as well as a large amount of teacher support (Elias & Haynes, 2008).

Factors that Promote Positive Teacher-Student Relationships

The teacher-student relationship is part of an interrelated system. It is one that relies on the foundation of the relationship, the history between the two individuals, the cultural connection and how the teacher chooses to intertwine home and school environment, and the relational styles exhibited between the two individuals (Ford & Lerner, 1992; Pianta et al., 2003;
Teacher–child relationships most often occur within the school environment where a child’s educational achievement and cognitive development become major components of the overall environment. Therefore, it is understood that school achievement is also a significant factor that promotes positive relationships between the teacher and child, as perceived by the teacher and within the appropriate context. In fact, teacher-child relationships highly influence the outcome of how a student performs academically (Hamre & Pianta, 2001; Pianta et al., 2002), suggesting that effective educators build positive relationships that cultivate student potential and motivate students to achieve academically. Within the classroom, teachers are often likely to build relationships with children who are actively engaged in learning activities. From a subconscious standpoint, this may generate a more positive form of the relationship between teacher and student. Therefore, it is suggested that teacher-student relationships have a better chance at being effective when children are more developed and academically adept (Jerome, Hamre & Pianta, 2008).

In a relational study conducted by Davis et al., (2011) which was designed to examine economically-disadvantaged, Black first-grade students’ and the perceptions carried about teacher relationships, children uncovered ideas that expressed how they felt about these relationships: (a) to them, the extent of care and concern from teachers were perceived through how the teacher allowed them to have fun time during class, (b) being nice to students, and (c) providing instructional support.

According to many students, the common belief was that when teachers allowed students to have fun time and play with one another, the teacher exhibited relational closeness. Davis et
al. reported that students felt a closeness when the teacher showed an academic interest, captured in expressions such as: “Me and Ms. T are very close because she helps me in the morning with my journal” (p. 11). Additionally, when forming teacher-student relationships, educators are tasked with providing a large amount of influence over their students; which builds trust. When students perceive a level of influence given by their teachers, they are more likely to trust them to do what they promise to do. One student commented that teachers’ providing influence was a good thing because “they always promise stuff” and “making good on her promises means you can trust them” (p. 11). Teachers who show transparency and genuinely care for and protect their students, develop positive and meaningful relationships that result in being influential in the social, cognitive, and emotional development of their students (Calabrese, Goodvin & Niles, 2005; Hawk & Lyons, 2008). Many studies have found that students equate relationship with a need for teacher’s care, interest, listening ear, trust and transparency. Furthermore, when students perceive this to be evident, outcomes for student behavior are positive, academic achievement increases, attendance improves and students develop a more positive outcome toward school completion (Pianta, Steinberg & Rollins, 1995; Wilkins, 2014).

Teachers who incorporate an environment of high expectations hold students accountable by increasing feedback, create more positive relationships with students, challenge students cognitively, and are generally warmer in their interaction. Additionally, teachers have the responsibility to create socially-constructive environments that promote academic ability and are conducive to long-term learning (Seyfried, 1998).
Positive Teacher-Student Mathematics Relationships

It has been and will always be important to understand how mathematics affects the schooling experiences of students, especially Black students. This is most commonly done through the examination of social and historical perspectives and how they connect with Black students, in particular (Stinson, 2006). A guiding tenet in understanding this concept is realizing that mathematics pedagogy is not free from sociocultural influences. Students who are products of various socio-economic backgrounds learn mathematics through different contexts, and it is because of these varied experiences that student mathematics performances fluctuate between low and high levels of disparity (Stigler & Hiebert, 1999).

Researchers have illustrated the ways that “mathematics classrooms have become sites for power struggles that are often related to students’ social identities” (Esmonde et al., 2009, p. 39). These include but are not limited to, racial, ethnic, or gender categories. The link between identity development and learning is further described by Nasir (2007) who observed that the development of identity, or the process of identification, is linked to learning, in a way that acknowledges learning as becoming as well as knowing. Dewey (1997) posited that “the teacher has a peculiar responsibility for the conduct of the interactions and intercommunications which are the very life of the group as a community” (p.58). Cobb et al. (1997) have defined a genre of intercommunication that helps foster mathematics understanding known as reflective discourse. This is characterized by repeated shifts in conversation that reflect what the student and teacher do in action in terms of the learning process.
Black students are often faced with the unfortunate teaching practices of White teachers who are unfamiliar with their cultural experiences and backgrounds. This along with the inability to incorporate cultural diversity within many mainstream American classrooms hinders many Black students from achieving any form of mathematics excellence (Woods, 2009). If mathematics education is to become more equitable, teachers must build strong relationships with their students and relate positively with them to understand their culture and be successful at extracting the intellectual capacity they hold within (Ladson-Billings, 1997, p. 704).

The proposed issue of low Black student achievement in mathematics education can also be viewed through a lens of personal perception and how teacher effectiveness contributes to the overall perspective. According to scholars like Jett (2009), Kirkwood (2012) and Stinson (2004), the effect of teacher-student relationships can be positive or negative when it comes to a student’s ability to learn. Black males are no different from other ethnic groups and genders. Developing positive teacher-student relationships allows them to feel safe and with that level of safety, perform at higher levels. At the same time, when these same individuals experience negative relationships, there arises an increased amount of disciplinary and behavioral issues. These may lead to a situation where academic learning is minimized and such students become completely disengaged from the learning process.

In an interview with students who participated in a study that examined how students felt regarding teacher relationships, particularly closeness and influence and how these characteristics motivated academic engagement in mathematics (Davis et al., 2011), students said they were motivated to entertain the idea of math when opportunities of creativity were allowed.
Additionally, students also said that teachers incorporated incentives and consequences related to math, to spark interest and motivation. When asked why he was motivated to do math, one young man reported: “because she gives us free time on days when we got to do math and that makes me feel happy” (p. 13). Another student stated that working with partners allowed him to try different approaches to math and motivated him to finish. Other students spoke about how their teachers challenged them based on levels and to increase their current knowledge based on their previous knowledge. These findings lend credence to the use of validated best practices in math instruction (Learner Centered Psychological Principles, 1997).

The motivation of a student in the area of mathematics education is based on a number of different factors. Interviews with students reported that many of them were motivated when there was a perception that the teacher would provide academic support during math activities. Other students relied on the emotional support provided during math activities stating that the teacher provided hugs even if students didn’t know the answer (Boaler, 1998). Kamins and Dweck (1999) opined that teacher feedback can be good and bad, depending on the context in which it is used. The finding highlighted the perceptions that students get when receiving feedback and how it motivated them regarding their ability in math. If there is a desire to entice economically-disadvantaged, minority students to consider mathematics-related careers, we must assist in developing deeper understandings and connect them with teachers who motivate them to pursue math without inhibition (Davis et al., 2011).

Davis (2014) conducted a study in a Baltimore school district comprised of a population where approximately 22% fall below the federal poverty level. The study was over a period of
one year and used critical ethnography to examine how Black male students experienced life in school and home and how it related to mathematics education. In this study, Davis interviewed and observed three Black male students over the period of a year. The study used a qualitative method for data collection and data analysis was comprised of a cognitive, formal, and application procedure. The results of the study found that the individuals observed had a deep understanding of math that was unfortunately limited by standardized testing, teachers, and classroom management. Furthermore, observed students reported that they felt unchallenged and disconnected from the teaching styles and distant relationships in their math classes. Davis highlighted that this particular data “debunked” (p. 218) the dominant and more popular dialogue that suggest Black males’ fail in math because they do not have supportive parenting or lack interest in school. Although not the only problem, Davis suggested that this information implied that there were multiple factors contributing to the problem.

The findings of this study indicated that the three students had an individual perception to the way they viewed mathematics education. One student who achieved success attributed it to being able to identify with the concepts of mathematics from grade to grade, and even though there were problems with the math teacher, he was able to overcome by implementing a positive perception of self; the second student developed a positive math identity because his parents were good in math and were able to assist in his learning. Davis suggested that the results regarding the second student were consistent with certain research that supported Black males’ perceptions of how their parent’s abilities were able to shape their own abilities- Preliminary studies found that when Black parents were actively involved with their children’s math studies,
it became a positive regard towards improving their child’s academics; this was especially true when studying young elementary Black males (Mandara, 2006). Research shows when identifying the top factors that contribute to Black student’s math success, parents play an enormous role in assisting with this advancement (Berry, 2003; Kirkwood, 2012; Harbowski et al., 1998).

Davis ended his study by acknowledging, in response to the notion that research and policies purport to help black males that it is both unrealistic and irresponsible to focus on what has been labeled a gap in achievement in math between various ethnic groups. In doing so, Black males are viewed as inferior, mathematically incompetent, and less-than-ideal learners; conversely, although White male students’ academic ability is viewed as prime performance their performance is not considered such when compared with Asian peers. Essentially, Davis projects that students need an environment that is conducive for learning, in order for this to happen mathematics teachers must implement high expectations.

**Review of Methodological Issues**

The extensive researching technique used to locate and review related and supportive literature pertaining to Black male student-teacher relationships focused on the quality of teachers with whom these relationships were built and their ability to relate culturally. The review of literature posited that besides being educated, smart and having an increased amount of credentials, there is nothing more important than the ability to relate culturally when teaching low-income minority male students. Additionally, when we examine the most effective teachers of Black male students, these individuals viewed culture as a necessary teaching tool and make
efforts to become more culturally adept with their students (Ladson-Billings, 1994; 1995). A large amount of research has also shown that there is a credible link between teacher quality, student outcomes and teacher-student relationships (Peske & Haycock, 2006; Presley, White & Gong, 2005).

Positive and negative effects of teacher-student relationships were highlighted as prevalent components to this study. Researchers believe that when teachers and students develop positive relationships with one another, they develop increased outcomes, academically, better classroom behavior and an overall better attitude towards school as a whole (Birch and Ladd, 1997; Dubow et al., 1991; Hamre & Pianta, 2001; Pianta et al., 1995; 1997). This was evident in a study conducted by Rey et al. (2007). The methodology used was qualitative in nature and the study examined students and teacher’s perceptions of the relationships they held. The authors incorporated teacher and student report questionnaires which along with interviews, were a consistent qualitative approach across all studies identified within the review of literature and the interview data were analyzed using a phenomenological approach (Moustakas, 1994).

As related to this study, common suggestions for improvements among all studies included (a) teachers becoming more culturally connected to their African American male students, (b) teachers and school personnel becoming more empathetic towards a student’s total situation instead of just the academic connection, (c) less of the self-fulfilling prophecy exhibited within the classroom, (d) an improvement in the inaccurate early expectation exhibited by teachers of their low-income students, and (e) an overall positive approach taken when
establishing long-term, impactful relationships with students (Sorhagen, 2013; Hinnant et al., 2009; Rey et al., 2007).

The phenomenological qualitative methodology utilized by many of the studies reviewed, assisted in identifying measures relevant to this study (a) teacher perceptions of the relationships with students, individually and collectively, (b) student perceptions of the relationships with their teacher, (c) student interaction with the teacher, (d) teacher perception of how students felt about them; additional measures included (e) how socio-economic status affects student achievement, (f) how family dynamics affect student achievement, and (g) the impact of race on math achievement.

Based on the attachment theory, Pianta et al., 1995; 1997) identified a teacher-student relationship as involving: (a) minimal amounts of co-dependency; (b) minimal confrontation; and (c) an increased amount of warmth. Based on his model, Pianta (2001) created a teacher survey tool called the Student Teacher Relationship Scale (STRS). Studies have indicated that through the use of this tool, researchers have found that children succeed when they perceive a high level warmth and closeness from their teachers. Many of the studies have utilized Pianta’s (1993) STRS. The questionnaire further measures a teacher’s perception of conflict, closeness, and dependency with a specific child. Studies using the phenomenological qualitative methodological approach with the STRS have shown that patterns of certain kindergarten teacher-student dependent relationships are products of how students behave at home and the cultural connections attributed and how these behaviors affect school interaction; especially how

Various research methods and measures, with an intentional focus on the qualitative phenomenological methodology as well as case studies provided a plethora of information regarding the perceptions of teachers and the relationships they hold with students, individually and collectively, and how these relationships encourage student achievement. As demonstrated through many of the studies earlier reviewed, a qualitative case study design was used to examine the perceptions of teacher-student relationships and explore how these relationships have encouraged the academic achievement of Black male students. It was taken into consideration the perspectives of teachers and how they intertwined their knowledge with the cultural development of the students they taught, which added an element of support to the existing literature.

**Synthesis of Research Findings**

The nature of study’s research findings, rested solely on the mathematics achievements of Black males and how teacher-student relationships encouraged these experiences and eventual achievements. The research identified within this review of literature indicated several key facts regarding why Black males are unable to do well as conventional learners. According to Davis (2003); Lattimore (2005); Phillip et al., (2006); Moore (2006) many Black males carry a genuine disinterest in doing well in school. They feel that schools do not consider their desires, fail to take their ability to learn seriously, and impose what they desire on them. Even with these feelings of justifiable excuses, Davis (2003) posited that schools are critical to the development
of young black males by shedding light on who they are, their requirements, and the perceptions of others about them.

From the perspective of mathematics education, many researchers believe that a salient approach to introducing the subject will assist in making the learning environment and teaching moments more conducive to the student’s understanding. One in particular, Lattimore (2005) suggested that teachers of mathematics take into consideration what their students are saying because in doing so: (a) students can significantly contribute to their learning process, (b) students can assist educators in understanding what effective math teachers look like, and (c) certain methods designed to improve math education for Black students can increase overall student learning.

Davis’ (2014) study on the mathematical experiences of black males highlighted key points such as the disparity in math achievement among Black male and other students alike, as well as the student-teacher relationships that support their achievement in mathematics. Davis noted that there is an important connection between Black males, the relationships they form with their teachers, and their ability to identify with mathematics. These relationships are also closely linked to students’ increased achievement. The dynamics of such a relationship changes the perceptions of Black males when it comes to not only learning mathematics but engaging in it also. When students perceive that their teachers truly care about their academic successes, it generates a desire for these individuals to achieve at optimum levels (Cluster, 2012; Thompson & Davis, 2013). Furthermore, students also understand that with the encouragement and genuine care comes a consistent level of high expectation. Depending on the level of expectation and the
manner in which it is communicated, it is possible that teachers can motivate or discourage students from trying in mathematics (Cluster, 2012; McGee & Martin, 2011).

**Teacher Effect of Student-Teacher Relationships**

Studies showed that the nature of positive teacher-student relationships can help students achieve in school. With that said, teachers typically gravitate towards building positive relationships with students who are academically excited about learning (Hamre & Pianta, 2001; Pianta et al., 2002; Jerome, Hamre & Pianta, 2008). Teachers who understand the need to be culturally adept when educating Black male students will seemingly have more positive experiences. Although being a Black teacher does not guarantee the academic success of a Black male student, studies have shown that having teachers who share cultural similarities can play an important role in doing so. Researchers believe that Black teachers carry influential roles and can relate to students from economically-disadvantaged environments by relating to their life’s experiences through genuine care and concern (Quiocho & Rios, 2000; Irvine, 1989; King 1983).

Further study has been done on the perception of teachers and their students in examining how this contributes to the negative form of relationship-building between these individuals. Research conducted by Jett (2009) and Kirkwood (2012) indicated that teachers of Black students must understand and be sensitive to the idea that the full potential of Black male students within the classroom will not be realized when there are situations that emphasize the academic deficiency of these students; furthermore, the implementation of successful teaching strategies and relationship building techniques by these teachers are minimized tremendously
and any relationship that has been established will produce a negative impact long-term (King, 1994; Ladson-Billings, 1994; Mitchell, 1998, & Quiocho & Rios, 2000).

Critique of Previous Research

The research provided throughout this literature review can be described as exhaustive and conclusive in providing data relevant to how teacher-student relationships encourage the mathematics advancement of Black male students. The pith of this focused research does not just rely on the positive effects of these relationships but also the negative side, which we essentially use in assessing how well these relationships influence the goal of student achievement in math. The disparity in achievement, particularly in mathematics, between Black students and their peers, has been substantiated immensely by research (Strutchens et al., 2004; U.S. Department of Education, 2010). One study in particular (Roach, 2000) highlighted the need for a more thorough approach to introducing the pedagogy of mathematics education to teachers of Black males which would provide a better understanding as to why the gap exists in the first place. Theoretically, more extensive study used to research the dynamics of math (Martin, 2000; Reyes & Stanic, 1988) typically include student engagement in math (Moody, 1997; Secada, 1995), the relevance of cultural connections (Ladson-Billings, 1995; Matthews, 2003; Murrell, 1999; Tate, 1995; Wagner et al., 2000), the place of mathematics as a critical need (Frankenstein, 1990; Gutstein, 2006; Gutstein & Peterson, 2005), and the need for historical research with regard to former successes in math (Gieger, 2002; Ladson-Billings, 1997).

The present study employs some of these arguments and substantiates them with relevant data. Hence, it lays an important foundation for validating the need for positive student-teacher
relationships in the area of mathematics education and beyond. Another perspective plays an important role in identifying the position that these relationships hold regarding Black male student achievement. According to Gates and Vistro-Yu (2003):

Those involved in mathematics education (as teachers, researchers, curriculum developers, and so on) do need to look internally for many of the solutions to the problems of underachievement. However, while this is a necessary condition, it is by no means sufficient. We also need to adopt a degree of social consciousness and responsibility in seeing the wider social and political picture. (p. 63)

Although the focus in this particular study was on the relationship of teachers and their Black male students, Pianta’s (2004) study brought considerable attention to and offered insight into the relationships with all students. His study showed how student relationship to their teacher is an enormous contributor to school adaptation and these same relationships serve a function to the student’s social and emotional development, especially at a very young age (Birch & Ladd, 1997, 1998; Howes, Hamilton & Matheson, 1992; Pianta, Steinberg & Rollins, 1995; Greenberg, Speltz & Deklyen, 1993; Pianta, 1999). Consistent with Pianta and Stuhlman’s findings, Rey et al., (2007) found that primary students performed better in class (Birch & Ladd, 1997; Pianta et al., 1997), had decreased behavioral issues (Hamre & Pianta, 2001; Pianta et al., 1995) and displayed better attitudes about the schooling experience (Birch & Ladd, 1997) when there were positive teacher-student relationships. Moreover, the study further suggested that when children perceived a positive teacher-student connection, they were motivated to perform more favorably about school experiences. Although there was an overall theme of culturally-sensitive pedagogy
within the classroom in the development of student-teacher relationships, there was no mention of that in this article; there was however, mention of race and students perceptions of their African American teacher in comparison to their European American teacher. According to Rey et al.’s., (2007) study, Black teachers reported their students to be less engaged, a decrease in overall competency and disengaged in the learning process than did White teachers. Moreover, students with Black teachers reported they were more disengaged than did students with White Teachers. Although Rey et al.’s., study did not intend to focus on the correlation of race-relations and student achievement within the classroom, it was important to relate these findings to the mention of teacher-student relationships with Black male students as a general point of reference.

Similarly, Saft and Pianta (2001) conducted a study that examined teacher perceptions of the relationships they had with Black students, and how those relationships’ positive and negative qualities contribute to the academic experiences of the students. The research illustrated the fact that teacher-student relationships and relationships with caring and supportive adults are a very important piece of what allows children to have positive classroom experiences, furthermore when students share the same ethnicity with their teacher, these relationships are more positive and become stronger over time.

The literature reviewed in this section identified and supported the most common issues among African American male students- low academic achievement when the relationships they share with teachers exude negative characteristics, and low academic achievement when these
same relationships lack a culturally conducive learning environment; however, academic achievement can increase tremendously when these concerns are confronted and resolved. A more in depth study of the perceptions that teachers have with their Black male students, as it relates to mathematics education and how those relationships can influence a more positive mathematics experience, is needed. Irvine (1991), through an examination of many studies on race and relationship, opined that European American teachers carry more negative perceptions and ideologies for African American students than for European American students. This is commonly tied to perceptions of speaking ability, behavior, and certain characteristics that affect learning potential. Identifying strategies that will focus on eradicating the disparity in mathematics achievement between Black male students and their peers by incorporating useful and effective teaching strategies that will reduce the anxiety associated with mathematics, as well as identifying ways that can make student-teacher relationships more culturally connected between African American students and their teachers are both goals of my study.

Summary

This literature review highlighted the many components and factors that contribute to the high representation of Black males’ incompetency academically, especially in the area of mathematics education. As discussed, teacher-student relationships play a significant role in the positive academic display of these individuals. There are a plethora of different factors that impact these relationships and teachers must remain cognizant of such if they are to influence their students toward academic achievement in mathematics.
Most often, but not always, African American male students come from areas that are economically disadvantaged and underserved. The high percentage of these individuals who are not as successful academically, rely on teacher-student relationships as ways to facilitate internal motivation and growth. Because of this, teachers must remain unbiased and professionally adept in strategies that support culturally responsive teaching and learning environments at all times. Eliminating factors that support negative relationships will assist in maintaining an environment of growth and sustainability. This chapter is organized using positive and negative factors affecting teacher-student relationships and establishing strategies that can encourage and contribute to the growth and fortitude of Black male students socially and academically, especially in the area of mathematics and by incorporating positive relational techniques.

While there is some proposed research that targets the Black student population, much of the research presented focuses solely on the male population of this demographic. Many of the research studies have validated the notion that Black male students are in need of a long-term intervention if they are to overcome the issues facing them academically. However, the lack of research supporting the need for this intervention among Black males led to the rationale for this research study.
Chapter 3: Methodology

Introduction

The primary purpose of this dissertation was to examine teacher and student perceptions of the relationships teachers have with their Black male students and explore how these relationships encourage the academic achievement of these students in mathematics education. There were different qualitative traditions, designs, and approaches to investigating the research questions associated with this study; however, the study focused on incorporating a single case study design (Yin, 2003) to observe how Black elementary male students were encouraged academically through the relationships with their teacher. Case study research is a qualitative approach where real-life individuals and situations are studied over a specified period of time using very detailed and structured data collection methods (Creswell, 2013). To facilitate the case study effectively, two methods were incorporated in gathering case study data: a Likert survey and semi-structured; open-ended interviews (Creswell, 2007).

Research Questions

The research questions guiding this study were:

1. How do teachers facilitate positive relationships with their Black elementary math students?

2. How do the perceptions that teachers have regarding these relationships, encourage Black male student achievement in mathematics?

   a. How does the relationship itself, encourage Black male student achievement in mathematics?
3. How do Black male students describe the relationship with their teacher?

**Purpose and Design of the Study**

Research regarding mathematics and the experiences that are shared concerning Black males, has and continues to increase in the United States. Through his research, Davis (2014) placed more of an emphasis on the low academic performances of these individuals on standardized tests represented on every level (Davis, 2014). On the other hand, there is also very little research exploring how the effect of student-teacher relationships encourages Black males’ achievement in academics, namely the area of mathematics education and therefore this study will include perspectives from low, medium and high achieving Black male students.

Circulating the issues of the low academic achievement among Black males is the issue of standardized testing and how this issue causes concern for the future success of Black males, academically. For example, National Assessment for Educational Progress standardized test results suggest that “only 12 percent of Black eighth-grade boys are proficient in mathematics, compared to 44 percent of White boys” (Gabriel, 2010, para. 3). On the contrary, the examination of those individuals who are successful in the area of mathematics can be linked to a number of different factors, one of which is associated with positive mathematics experiences contributing to overall achievement. Berry and colleagues (2011) found four factors that contribute to high-achieving Black males’ development of positive mathematics identities. These factors are summed up to include: (a) third grade math proficiency, (b) recognition of academic achievement and ability by individuals other than school-related personnel, (c) teacher-student relationships, and (d) a long-lasting relationship with mathematics.
The purpose of this study was to examine teacher and student perceptions of the relationships teachers had with their Black male students and explored how these relationships encouraged the academic achievement of Black male students in mathematics education. This research was significant because it brought attention to the importance of student-teacher relationships when considering the disposition types Black male students take while confronting their academic experiences, particularly in mathematics.

The importance of teacher-student relationships can be observed by the impact teachers have on their students, as well as how those students approach the subject of mathematics. (Davis, 2014). Regardless of the level, these students should have the opportunity to encounter positive relationships that can shape their mathematical experiences. Furthermore, these relationships are important to Black males’ ability to learn mathematics and the functioning and application of these relationships allow students to achieve at a much more increased ability (Davis, 2014). An important element to the achievement of Black males lies in the praise that comes from the teachers and the relationships formed. When this is done on a consistent basis, students are inclined to work harder and achieve at more increased levels. Interestingly enough, teachers who build these relationships also establish a series of consistently high expectations (Cluster, 2012; Thompson & Davis, 2013).

For the intent and purpose of this study, a qualitative case study was used as the methodology. Within the study design nine elementary teachers and 20 students were studied. According to Yin (2003) a case study design is most effective when it focuses to answer the questions “how” and “why.” A hallmark of this type of study is the ability to maintain the
integrity of the data collected using a variety of data sources (Patton, 1990; Yin, 2003). To formulate the study, two methods were used in gathering data: a) **Semi-structured interviews**- Rubin and Rubin (2005) notes that qualitative interviews allow the researcher to converse with an individual in hopes of soliciting extensive discussion, using direct and indirect questions, as to allow for detailed and continuous responses. Responsive interviewing procedures allowed the researcher to identify the perceptions of the teacher regarding their teacher-student relationships and examine the relationships they have with their students. Additionally, student interviews to examine how students described the relationship with their teacher. b) **Surveys**- a Likert survey was distributed to each teacher at the onset of the study. The STRS- Short Form quantitative survey tool was used to explore the teacher’s interaction with African American male students.

A review of the relative literature revealed the use of a mixed-methods approach (qualitative and quantitative) to gather data and synthesize results; however, considering the research questions for which this study answered, it was determined that a mixed-methods design would not be useful. Therefore, incorporating a qualitative design and utilizing interviews and surveys for data collection, was the most effective.

**Research Population and Sampling Method**

The study took place at a North Florida elementary school. The school is Title I where 100% of the students are eligible to receive free or reduced lunch. The school serves students in grades PreK-5th grade, and many of the students attend throughout the course of their elementary academic career. Student population (482) is almost an even split where 245 (51%) are male and 236 (49%), female. Of the 482 students, 342 are Black, making this demographic 71% of the
total student population. With 25 teachers, the student-teacher ratio average is 18:1, with intermediate grades being slightly higher. The African American male population of the school stems from a plethora of various backgrounds; however approximately 85% percent come from areas that are economically disadvantaged and/or underserved. Many of the student population are also products of single-parent households where the influence and support towards an increased focus on academics are minimal. The faculty consist of 25 teachers who range in experience, from novice to seasoned, and many of the teachers have spent their teaching career at the school site. The teacher demographic consisted of a mixture of White and Black, with the majority of them residing in a city.

The classroom populations consisted of a variety of ethnic and socioeconomic backgrounds. In addition, many of the Black males come from economically disadvantaged and underserved areas within the community; and there is an increased lack of parental involvement which results in a lack of understanding needed to guide their child’s academic experiences.

Judgment sampling (Creswell, 2007) was used to select nine teachers and 20 students in this study. A judgement sampling method works well when the full sampling population has a limited number of people who qualify as data sources (Judgement Sampling, n.d.). Judgement sampling (also referred to as purposive sampling) is a sampling method that occurs when those selected for the study are chosen specifically by the primary researcher. Choosing this method, allows for a sample to be selected strictly using sound judgment on the part of the researcher, which benefits in saving time and money (Black, 2010).
Instrumentation

When conducting qualitative research, it is understood the researchers serve as the instruments (Henfield & Washington, 2012). However, in order for appropriate and substantial data to be gathered, extensive communication through open-ended responsive interviews and detailed Likert survey data was required. According to Yin (2003) Likert-type descriptive data can be used in qualitative case studies, therefore a quantitative survey tool was incorporated to create more specific interview questions and add more triangulation of the data. Additionally, quantitative survey data was only used for descriptive statistics with regard to this qualitative study. Questionnaires were used within the interviews to assess the relationships based from the perspective of the teacher. Follow-up questions were used based on responses from initial interview questions and were used to provide more validity and substance.

To assess the teacher’s perspective, the researcher used the STRS. The STRS is an instrument (quantitative in nature) designed for teachers of children between the ages of 3 and 12. The tool measures the teacher-student relationship and the characteristics that associate itself with establishing the development of these relationships. This instrument is based from Pianta’s (2001) three-dimensional model of the student-teacher relationship, which describes low levels of dependency and conflict and high levels of closeness as the components of a secure teacher-student relationship. Moreover, Rey et al. (2007) found that when this measure is used within relationships, these characteristics were highly associated with positive school outcomes. Although generally used for quantitative purposes, this form was solely used as a basis for formulating qualitatively semi-structured interview questions and identifying how teacher
participants perceived a relationship with a student was. Approval was granted for the use of the STRS Form from Dr. Robert Pianta and is shown in the appendices labeled Appendix B.

Data Collection

Data gathering consisted of incorporating semi-structured interviews and surveys. Data collection was achieved using the following sources:

1. Interviews: I conducted one semi-structured interview each with nine teachers, lasting 60 minutes. The interviews explored teacher interaction with mathematics students, the facilitation of relationships they have with their students, and how the perception of these relationships encouraged students’ math academic achievement. Student interviews explored the perspectives of Black male students in grades 3-5, which allowed them to discuss, in detail, how teacher relationships encouraged them socially and academically and these interviews lasted 30-45 minutes. All semi-structured interviews were audio-recorded (Davis, 2014; Boaler, 1998).

2. Likert Survey (STRS- Short Form): A Likert survey was initially used to supplement interview data. The survey was administered to each teacher at the onset of the study and then used to formulate and structure follow-up interview questions. The process was used to incite more detailed responses to the interview questions.

3. Member Checking: The notes and summary of each interview were provided to the interview participants as a means to check for accuracy and integrity on the part of the researcher (Gablinske, 2014).
4. *Data Triangulation*: A Likert survey, teacher interview, and student interview were used to get varied perceptions and perspectives as related to the research questions and study. Triangulation provided proof that the research studied was accurate and provided evidence to validate the study (Gablinske, 2014).

These methods, particularly the teacher and student interviews, enabled a comprehensive understanding of the teacher-student experiences and allowed insight on how these perceptions encouraged relational teacher-student success (Hammersley, 1992).

Teacher perception data were collected using the (STRS) Short Form, which is a quantitative instrument. Although a qualitative case study was incorporated, Yin (2003) posits that a quantitative tool can be used provided that descriptive statistics were used to gather rich and credible data. This measure was used to establish teacher perceptions of known student behaviors. The Short Form measured four different aspects of how the teacher perceived a student relationship. These are reflected in the Conflict, Closeness, and Dependency subscales and the Total scale. The instrument was given to the teacher once to determine how and if the relationship contributed to the overall mathematics achievement of their students. In a way to collect rich and useful data, the STRS-Short Form was used by the researcher to create additional follow-up interview questions for the teacher. The data collected were used to identify the relationship between the teacher and their students and established how and if these relationships encouraged students’ success in mathematics academics.
Procedures

The following formal case study protocol was developed to enhance the reliability of this case study research.

The teacher participant completed one audio-recorded interview session; follow-up questions were asked for elaboration purposes. The participant interviews were semi-structured in nature and used a combination of prepared interview questions derived from the STRS Short-Form initial survey and a protocol created by the researcher; the questions from the interview protocol were designed to be interpretive and were drawn from a review of the literature as well as the research questions. Initial questions were the same for all teacher participants and additional probing questions were interspersed by the interviewer for follow-up.

Identification of Attributes

The purpose of this study was to examine teacher perceptions of the relationships with their African American male students and explored how these relationships and the perceptions teachers have of these relationships encouraged the academic achievement experiences of African American elementary male students in mathematics education. There were several characteristics that served as attributes used in defining the current study (a) relationship, (b) communication, (c) underachievement, (d) culture.

Relationship

This was an important component within this study because it is confirmed that the academic success of African American male students rely highly on the successful and impacting relationship between themselves and their teachers. According to Hale (2001) and Murrell
Black students may learn better when the core of their learning and development is geared towards people versus objects. Teacher-student relationships that are founded on increased levels of support predict a more improved performance, academically. (Hughes et al., 2011).

**Communication**

Communication between the stakeholders involved in students’ overall academic achievement endeavors remain to be an issue of priority in establishing successful relationships between students and teachers. The establishment of trust and communication among student and teacher is very important, especially in the classroom where learning is to take place. This becomes even more important and necessary among students who come from high-poverty stricken areas, as these individuals are less likely to trust teachers as a whole (Stanton-Salazar, 1997). Furthermore, parental involvement is a dynamic that could have great influence on improving academic achievement. By offering resources and personal development opportunities for these individuals, parents will become empowered to contribute as a change-agent (White, 2009). Teachers who construct relationships with students and parents, create a dynamic of support that over time, will produce positive academic outcomes (Wolley & Bowen, 2007).

**Underachievement**

Underachievement may be viewed as one of the most observed elements that the student-teacher relationship can improve upon with regard to the schooling experience. When seeking to raise the performance of Black male underachievers, the overarching question is: “What can be
done to help these students reach their academic potential?”... the initial step to begin reversing low achievement and underachievement, as well as closing the achievement gap, is situated in finding and rectifying causal and correlational factors (Ford & Moore, 2013). Thus, a very important component of improving the academic achievement of African American male students can be inclusive of student-teacher relationships and cultural awareness.

**Culture**

Culture as outlined in the form of culturally responsive instruction pertains to classroom practices that draw meaningfully on the foundational interactions students bring from areas of their life that have been taught to them generationally and adaptively (Au, 2006). As diverse students continue to demonstrate culturally-identified behavior, teachers and administrators who are unfamiliar or inexperienced with student diversity, White (2009) suggests that this may cause more harm than good for some African American students because the teacher having failed to familiarize herself culturally, now has appropriated rules and judgments inappropriately.

According to Irving, Gay, and Gutierrez (2010) culturally responsive instruction is important because it connects and links the everyday lived cultural experiences of students to what they are trying to learn. Through culturally responsive instruction, teachers become cultural translators and bridge-builders. Sometimes students from different ethnic backgrounds are forced to learn through another set of cultural filters, and if these filters do not match, then nothing is happening. Therefore, culturally responsive teaching says that, instead of the student having to conform to the culture of the school, the school needs to conform and modify some of
its sending messages to accommodate the student, especially if it highly affects academic learning.

Keeping in mind that certain constructs of a culturally responsive pedagogy includes (a) recognizing that students may communicate differently at school because their home life is not conducive to an effective learning; (b) understanding the deficit that students of color have when it comes to the pursuance of academic, (c) knowing that a child’s educational growth is only part effective if kept inside the classroom and through home connections a child can benefit tremendously, and (d) developing systems that can encourage equality within the school environment and outside (Dutro et al., 2008).

Data Analysis

Data were analyzed following the steps outlined by Rubin & Rubin (2005) for Responsive Interviewing analysis techniques:

  **Recognition.** Finding the concepts, themes, events, and topical markers in interviews;

  **Clarify and synthesize.** Through systematic examination of the different interviews to begin understanding of the overall narrative;

  **Elaboration.** Generating new concepts and ideas after clarification and synthesis;

  **Sort.** Sorting the data units and ranking them and building relationships toward a theory (p. 207).

Data were collected and analyzed in pursuit of how teacher-student relationships encouraged the mathematics performance of Black male elementary students through an initial survey and open-ended, in-depth, face-to-face interviews with the teacher. Open-ended interview
questions were derived from a combination of a researcher created interview protocol and the quantitative STRS short form survey tool. Teachers were given the short survey as a preliminary tool, asked a series of interview questions derived from a researcher created interview protocol and based on the answers a series of follow-up questions were incorporated. Students were also asked a series of interview questions, guided by a researcher created protocol. Interview results were analyzed through the recognition and sorting process. This method included clarifying, sorting and elaborating the identification of themes (Gall, Gall & Borg, 2007). For this study, survey data were analyzed using software called Qualtrics which enabled an effective and efficient data collection and analyzation process. This was done following the transcription of all interviews (Glaser, 1992).

Data analysis, allows for data to be substantiated (Golafshani, 2003). As the researcher, it was my objective to refrain from interjecting personal experiences and biases and allow the participants to express and frame their own perceptions of how the teacher-student relationship affects African-American male students in shaping their mathematics experiences (Yeldell, 2012). Therefore, following each interview, a replay of the audio recordings and review of notes were summarized to reflect and retain information related to the study. This process ensured a trustworthy and unbiased study, a process most commonly referred to as reflexivity (Patton, 2002; Rossman & Rallis, 2003).

Limitations and Delimitations of the Research Design

It is important to examine some of the limitations and delimitations of this study as well as examine its validity and reliability.
Limitations

There were a few limitations that affected the dynamics and facilitation of the study. The review of literature was limited in both the amount of recent research applicable to the topic of study as well as the useful data specific to Black males in mathematics education. The study included the perspectives of both teachers and students and therefore interviews and the frequency of such were limited by the availability of the participants and the detail of the information provided by each participant. Because of the rural location of the study site and the small numbers of a teacher sample pool, the study was limited by the numbers of teachers who actually participated, thus making the selection of study participants small from a comparable standpoint.

Delimitations

The study solely focused on African American male students. Because the scope of the study focused on this demographic, any student who was female and non-African American was excluded from the study. The study also considered positive teacher-student relationships and how this related to the academic achievement of Black males, therefore students from within the intermediate grade levels (3-5) who have had the experience with and understanding of how to establish the basis for these relationships as well as determining whether these relationships have contributed to their math success were interviewed.

Validation, Credibility, and Dependability

In regard to validity with qualitative research, Stake (1995) created a list of ‘Things to assist in the Validation of Naturalistic Generalizations.’
1. Make the research relevant and familiar.
2. Include data that will allow readers to examine their own interpretations about the data.
3. Explain how triangulation processes are carried out.
4. As a researcher, be transparent.

Patton (2002) noted that accurate data is just as important as the person providing it, and therefore trustworthiness is essential for rigorous qualitative research. This is typically done by confirming how dependable the data are (Lincoln & Guba, 1985). Verification, dependability, and credibility of the study were done in two ways. First, the engagement and in-depth interviews with teachers and students was a source of credibility. Additionally, there was an increased amount of time spent interviewing teachers and using these experiences to examine how the relationships formed with African American male students encouraged academic success in mathematics. Second, triangulation of the three data sources provided the means to transfer data and substantiate data sources thoroughly (Davis, 2014). Triangulation is when diverse sources of information is examined to assess whether the data or information being studied proves to be accurate (Patton 2002, Rossman & Rallis, 2003). This study proved to be dependable, credible, and validated through the use of distinct methods and data source triangulation methods in the form of Likert surveys and student and teacher interviews. As previously stated, following each interview, audio recordings were reviewed and transcribed into notes and summarized. A further reflection on the interviews was conducted to retain information related to the study. This process ensured a trustworthy and unbiased study, a process most commonly referred to as reflexivity (Patton, 2002; Rossman & Rallis, 2003).
**Expected Findings**

Patton (2002) concluded that researchers themselves can be a strength and weakness when analyzing qualitative inquiry, most commonly known as– a scientific double edged sword. The suggestion was to work with diligence and equality and to always remain focused on the objective and focus of the study. It is encouraged that researchers use their own perspectives, interpretations, and experiences, according to Stake (1995). In this qualitative study, it was understood that as the researcher, I was the primary instrument and therefore, could often bring bias into the study. Although my position as a former elementary math teacher and a current elementary math coach allowed for an increased amount of bias, my purpose was to gather information that would enhance the study. As a result, there was an intent to remain objective when examining and concluding the findings.

The goal in this study was to examine teacher and student perceptions of the relationships teachers had with their Black male students and to explore how these relationships encouraged the academic achievement of Black male students in mathematics education. When analyzing the data, a selection of case study analysis methods guided by Stake (1995, 2010), Yin (2003, 2009) and Rubin and Rubin (2005) were used. In using the various methods of data collection, it was expected that the study would reveal an established and strong sense of positive relationship building techniques that the teacher participants used to guide academic achievement. Additionally, there was an expectation to uncover major themes and consistent behaviors that might have developed as a result of the relationships as well as interactions that successfully contributed to the learning experiences of the students.
As an educator, I have experienced the significance of teacher-student relationships with Black male students and in having these relationships, it was expected that black males might be relational individuals. My passion and commitment to Black males have confirmed that they are individuals who, when shown genuine care and respect, are able to do remarkable things. In this study, there was an additional expectation to find quality teacher-student relationships that proved to be the bedrock of how Black male students approach math academics. My interaction with Black males indicated that when a teacher touches the heart of these individuals, Black males put forth great effort to achieve. Through this study, I expected to find a distinct connection between known interrelationships and academic achievement. I expected to find that genuine relationships between teacher and student would clarify causal implications as to why these students are behaviorally and academically incompetent. Traditionally, Black male students fear mathematics education. However, my experiences have shown that through relationship building, students actually gain a better academic understanding and gain more confidence. An ideal that has been proven time and time again is that in order for the teacher-student relationship to be most effective, there should be an increased effort towards building the relationship outside of the school environment. Knowing student’s strength and weaknesses are not just linked to the classroom; these weaknesses are often related to other contextual factors (Delpit, 1995). When this is done, teachers can then use the cultural knowledge gained and attach it to ideas and application that will be effective in pedagogy and with the student (Noguera, 2003). Finally, I expected to find that teaching Black male students in a way they can
understand, through the use of culturally responsive instructional strategies (Rajagopal, n.d.), students will feel more comfortable with engaging in the learning process.

**Ethical Issues**

Ethical Considerations can be identified as one of the most important components of the study (Bryman and Bell, 2007). According to Bryman and Bell (2007), there are 10 principles that should guide an effective research study:

1. Research participants should be free from anything harmful.
2. Participants should not be subjected to anything that will bring disrespect.
3. Permission should be granted by the participant before beginning the study.
4. Participant contribution should be protected at all times.
5. Any conversations or contribution should remain confidential.
6. Pseudonyms should be used when communicating results.
7. Keep the integrity of the study a priority.
8. Communicate and declare any known conflict of interests.
9. Communication regarding the study should be transparent.
10. Data should not be misleading or proven to be bias in any way.

**Ethical Issues in the Study**

A study is considered credible and authentic when the voices of the participants are communicated truthfully and accurately. The use of dual data collection methods consisting of interviews and surveys, triangulated the data in this study by adding a layer of richness and making the findings more believable, while validating the interpretations given by the researcher.
(Yeldell, 2012). The clarification of researcher bias allowed a reflection of my own subjectivity, and how it was used and monitored during the research study (Glesne, 2006). There was a strong sense of passion about this study. As an educator, I have witnessed the failing academic experiences of Black male students. Observations of negative and positive teacher-student relationships and how those relationships encouraged and discouraged student academic behavior was common. As the researcher, the biggest bias confronted in this study was knowing the benefit of what positive relationships could do for a student, especially in the area of academic achievement. Keeping the initial and follow-up questions objective minimized personal bias. Because I have been an educator of Black male students, I have observed some of the causal effects students experience when not placed in a position of priority. Therefore, as the researcher, I remained as unbiased as much as possible and kept the nature of the study the true objective.

**Researcher’s position**

My position as the researcher sought to explore how and if positive teacher-student relationships encouraged mathematics student achievement. A formal letter was sent to the potential study participants briefly explaining the study and asking for their participation in the study. Student participants were given a parent consent form requesting consent for participation. The participants were informed that their answers to any of the researcher’s questions are maintained in confidentiality and protected throughout the study. Pseudonyms, were selected and used in lieu of the participants’ real names to maintain confidential reporting of their
thoughts and perceptions. All records and tapes of interviews have been stored in a confidential and secure location and are being held for 3 years following the research study (Yeldell, 2012).

Conflict of interest assessment

As the primary researcher in this study, it was important to acknowledge the possible conflict of interests, if any, that existed based on my professional interest in the nature of the study and personal relationship with the study participants. My personal experience as a teacher included a one-year stint at the school study site, five years prior. As a result, I had a professional relationship with some of the faculty members and shared a joint concern for the academic improvement of the students and school as a whole. The teacher participants are admired as very knowledgeable elementary school teachers. Because of the relationship and information that was exchanged between myself and the participants, ethical considerations were followed with the greatest of intention (Deyhle et al., 1992). Although the study required me to spend large amounts of time with the participants, I took great effort in remaining objective with a sole interest in the teacher-student dynamic of the participants. As a math coach, my job is to assist the teachers in developing instructional strategies that will best assist in maximizing student achievement. In doing so, I had access to large amounts of data, which contributed to some level of biased behavior when performing the study, however, as previously mentioned I attempted to remain unbiased and remained focused on the study.

Summary

The purpose of this chapter was to identify the methods and designs that were used to examine teacher and student perceptions of the relationships teachers have with Black male
students and explore how these relationships encouraged the academic achievement of Black male students in mathematics education. The disparity in studies conducted on the teacher-student relationship has provided an increased focus on classroom interaction and how teacher instruction and interaction helps to develop these relationships (Brophy & Good, 1974; Howes, Phillipsen & Peisner-Feinberg, 2000). This dictates a belief that classroom interaction plays a big part in the academic and social development, with other students as well as their teachers, and allows the teacher additional insight into how to make interaction effective (Howes et al., 2000; Pianta, 1999).

The current study and its action steps not only explored the facts that make teacher-student relationships a necessary component for the success of Black male students, it also went a step further in examining how and why these relationships were necessary. Incorporating a qualitative method which included a semi-structured interview process allowed for a more strategic approach in dissecting how these relationships were formed and the steps that were taken to transfer the effects of these relationships into academically successful students.

Teacher-student relationships have become more of a focus as researchers develop new ideas to increase its effectiveness. Relationships have most frequently been examined from the teacher’s perspective, which shows that teachers have the greatest ability in directing the relationship along with the contributions made by both individuals (Saft & Pianta, 2001). However, this study aimed to examine student perspectives and explored how these perspectives guided the relationship as students developed academically. Therefore, the major purpose of the current study was to explore the facilitation of teacher-student relationships through the perceptions of
nine teachers and 20 students and explored how these relationships and the perception of these relationships encouraged the mathematics academic success of Black male students.
Chapter 4: Data Analysis and Results

Introduction

Teacher-student relationships have long been considered to be one of the most important components of academic interaction (Saft & Pianta, 2001). The ability for teachers to create positive relationships with their students can be the difference between success and failure. In almost 10 years of teaching and working with students, the researcher observed the need for students to be desired, motivated, accepted, and encouraged towards achieving academic success. As a result, there was a deeper desire to further examine the dynamics of the teacher-student relationship and explore how and if it encourages the academic success of a certain demographic.

The purpose of this study was to examine teacher and student perceptions of the relationships teachers have with their Black male students, and explore how these relationships encourage the academic achievement of these students in mathematics. The findings of this study answered three distinct research questions which told a story of how teachers and students truly viewed the power of a relationship.

The research questions that guided this study were:

1. How do teachers facilitate positive relationships with their Black male elementary students?
2. How do the perceptions that teachers have regarding these relationships, encourage Black male student achievement in mathematics?
a. How does the relationship itself, encourage Black male student achievement in mathematics?

3. How do Black male students describe the relationship with their teacher?

For the purpose of establishing a true and equitable display of why and how positive teacher-student relationships are formed, and how these formed relationships benefitted the students involved, a qualitative case study was used as the methodology. A combination of a Likert survey along with open-ended teacher and student interviews were conducted to develop perspectives, and to identify ways in which teacher-student relationships positively encouraged students toward mathematics achievement.

Judgement Sampling was used to reach a total of nine teacher participants and twenty student participants. Data were collected using the STRS Short Form, a survey tool administered to teachers to establish a precedent on how they perceived the relationship with a particular student. Open-ended, face-to-face interviews were also administered to both teacher and student participants using an interview protocol. The protocol was designed to ask specific questions relating to the objective of the study, guided by the research questions from which this study was designed.

A qualitative case study was used as the methodological approach to attempt to ensure that any information received was as accurate as possible. The credibility behind the interview process, in allowing the participants to speak freely, provided a more detailed understanding of how they perceived the effectiveness of the teacher-student relationship to be. Throughout the interview process, there were times in which the researcher chose to ask follow-up questions
which allowed the participant to provide further elaboration in an even more detailed form in response to a specific question; doing this provided a richer, more credible perspective to the overall study. An enlightening part of the process was the passion and excitement that exuded from both teacher and student participants when giving their commentary on how relationships contribute to building the whole child. There was and is a true connection to how the two very different entities view the relativity of the teacher-student relationship, its effectiveness when incorporated daily, and its usefulness in developing an academically adept student.

As the opening quote of this literary work states, “Kids don’t learn from people they don’t like” (Pierson, 2013), there is an inferred belief that in realizing the benefit a genuine relationship with their African American male students bring, teachers will observe that the relationship encourages students to have a much better academic experience.

**Description of the Sample**

The study took place in a rural part of North Florida where a high percentage of students live within an environment of economic disadvantage. For 17 of the 20 student participants, the school site is the only school they have attended, and all of the teacher participants have consistently taught at the school site or at a similar site demographically throughout their teaching career. Additionally, all teacher participants have taught more African American students than any other ethnicity and many have consistently taught more Black males.

**Participant Sample Size**

There was a vast range in the demographic of teachers as well as their experience. Five African American teachers and four White teachers were interviewed for the study and teaching
experience ranged from 2.5 to 29.5 years within the classroom (Table 1); additionally, all of the teachers have taught within a Title I school where the design of their classrooms included more African American males than any other ethnicity and gender group. African American male students were selected from grades 3-5 and were selectively sampled using the judgement method, a sampling method where the researcher chooses participants according to the perceived usefulness to the research (Creswell, 2007). A mix of low, medium, and high academic level students was selected for the study. Student participants included five African American male students enrolled in the 4th grade; seven of the African American students were in the 5th grade and eight of the African American students were in the 3rd grade, at the time of data collection. Student selection was accomplished using student performance data and teacher input.

Two separate consent forms were dispersed to all teacher participants. A parent consent form was given to the student participants describing the researcher’s intent for the study and its participants. Participation was requested of each individual; however, each individual was informed that participation was voluntary and of their right to decline. Participants were also informed of the commitment to privacy on the part of the researcher and that all data would be kept securely for a total of 3 years.
Table 1

*Teacher Participant Data*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Ethnicity</th>
<th>Number of Years Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss Lemon</td>
<td>Black</td>
<td>Over 10 years</td>
</tr>
<tr>
<td>Miss Grapefruit</td>
<td>Black</td>
<td>Less than 10 years</td>
</tr>
<tr>
<td>Miss Kiwi</td>
<td>White</td>
<td>Over 18 years</td>
</tr>
<tr>
<td>Miss Cantaloupe</td>
<td>White</td>
<td>Less than 10 years</td>
</tr>
<tr>
<td>Miss Banana</td>
<td>Black</td>
<td>Over 10 years</td>
</tr>
<tr>
<td>Miss Orange</td>
<td>Black</td>
<td>Less than 10 years</td>
</tr>
<tr>
<td>Miss Grape</td>
<td>White</td>
<td>Over 10 years</td>
</tr>
<tr>
<td>Miss Apple</td>
<td>White</td>
<td>Over 10 years</td>
</tr>
<tr>
<td>Miss Peach</td>
<td>Black</td>
<td>Over 10 years</td>
</tr>
</tbody>
</table>

**Research Methodology and Analysis**

Low academic achievement is a very prevalent issue among African American males, especially in the area of mathematics (Davis, 2003). Research has suggested that the achievement of the Black male demographic is far below that exhibited by peers of other ethnicities (Ladson-Billing & Tate, 1995), which suggests an even more concerning notion in that this very wide gap of disparity has increased tremendously over time with no identifiable means for improvement.

One very important factor, however, has been identified as a viable and useful solution to the ever-present problem, if in fact, it continues to be utilized effectively- the proven strategy of relationship-building between teacher and student. Effective teacher-student relationships and
the quality these relationships hold are necessary when determining the academic and social development of students in school; there has been no other ideal presented that would produce otherwise. Simply put, there is a need for children to develop and cultivate healthy relationships with adults, regardless of their economic affiliation, in order for a healthy cognitive development to occur (Ainsworth & Bowlby, 1991).

**Qualitative Case Study**

Blaxter, Hughes and Tight (2010) define a case study as something that identifies a problem or good practice. Case studies are generally based from a theoretical framework and its results provide new evidence relating to the problem or practice being studied. Case studies, as in the design of this particular study, links itself to an environment in which the researcher has a connection (school) and can observe and follow the subjects in real situations.

This study was designed to tell a story through the perspectives of those most affected by the idea of teacher-student relationships and how it has personally affected them. In order to produce a credible display of the study participant’s perspectives, a qualitative case study was chosen as the research methodology allowing opinions, perceptions and thoughts to be accurately portrayed. Surveys were used to gain a small amount of insight into how teachers perceived the relationship with a certain student was- in this case a Black male student; the survey provided a foundation for the interviews that would follow.

As previously mentioned, raw data were collected using a combination of survey and structured, open-ended interviews. Member checking was performed using a system that provided the teacher participants with a copy of the interview, allowing for credibility
verification on the part of the researcher. Data triangulation was completed in the integration of survey and structured interviews, validating the information and ensuring that it was both credible and substantiated.

Raw data were analyzed through recognition, clarifying and synthesizing, elaboration, and sorting. Survey data were collected and analyzed using the Qualtrics software and a theming pattern was utilized in identifying the common thoughts and processes viewed and expressed by each study participant. Recognition and sorting was used to categorize participant data into relatable themes that substantiated the theory identified throughout the research questions.

Analysis was initially conducted through transcription and two types of coding—descriptive and topic coding (Creswell, 1994). Participants were first recognized through descriptive attributes—race, gender, and years of teaching experience for teachers and grade level for students. Next, interview data was transcribed and broken down by assigning topics based on the nature of the research question and the discussion therein. These topics were furthered analyzed by assigning themes most prevalent among each participant from within the discussion of each question. Once themes were identified, the researcher sorted and compiled each theme based on its frequency and similarity throughout the discussion.

Summary of Findings

According to the results of the study, there was a noticeable and verifiable similarity in how teachers and students viewed the teacher-student relationship. A 14-item Likert Survey was administered to teacher participants. The questions were derived from the STRS- Short Form created by Dr. Robert Pianta whose purpose was to identify and assess the way teachers
measured their relationship with a certain student. Prior to completing the survey, each teacher was asked to identify a student they were currently teaching or had taught previously. The survey data were gathered and analyzed using the Qualtrics software which used a Net Promoter Score (NPS) to determine the relationship that existed between a teacher and their student. The NPS uses three fields to determine the actual score- *detractor*- less likely to exhibit the behavior; *passive*- less likely or more likely to exhibit behaviors; and *promoter*- likely to exhibit behaviors. Based on the answers provided to a question, each teacher participant was placed in a field category where calculated percentages and data were summarized as such: 41% of the teacher participants scored as Detractors, 12.5% scored as Passive and 46.5% scored as Promoters. These results were used in establishing follow-up questions for the teacher interviews and to cross-verify data in efforts of identifying emerging themes evident between teachers and Black male students.

Further analysis of the interview data revealed a high emphasis placed on the elements of *care and concern, communication* and *respect* as top priorities described in establishing a basis for building a positive teacher-student relationship. Because of the environment in which the teachers had gained most of their experience, more of an emphasis was placed on a sincere desire to generate care and concern for those students who are not typically afforded such interaction. A large amount of the data confirmed teacher’s ability to provide a soft, spoken word or a gentle touch when speaking to their Black male students because culturally, it is not something that is provided on a regular basis. In fact, one teacher revealed that it is common practice to hug one of her Black male students every morning because he told her that he doesn’t receive hugs.
Many of the teachers attributed touch to an emotion that generated a desire for students to work harder in class; this essentially spoke a language of love and concern to the students in their class. Miss Kiwi said, “I treat my students like my own kids and therefore I greet them with a hug every morning. To them, this shows that I care about them.”

Communication, High Expectations, and Physical Touch were the three themes that emerged as most prevalent when teachers and students discussed building positive relationships. Communication was important among those interviewed because there was a belief that regular communication regarding academic and non-academic topics, built a foundation of trust. Students believed that talking openly allowed them to get to know their teacher better at the onset of the school year and throughout. Student #1 stated that a positive relationship between he and his teacher was about being able to talk to one another about anything. An interesting observation emerged when interviewing the male students, many of them did not understand what a relationship was and therefore had a hard time describing its characteristics. Equally interesting, however, was that once they knew what a relationship was, their thoughts were able to imagine that communication was indeed a much needed requirement. As confirmed by many of the teacher participants- Black males are not natural communicators and it is not easy for them to convey their thoughts. Therefore, when building positive relationships with Black male students, it becomes evident that communication is not an initial pre-requisite but rather an additive to an already established relationship.

Teacher participants agreed that establishing trust, through communication, was an integral part to building a positive-teacher student relationship. Teachers who have the ability to
explicitly communicate with their Black male students will always establish the beginning stages of a solid teacher-student relationship.

Five of the nine teachers expressed a level of high expectation when building teacher-student relationships with their Black male students. Mrs. Lemon suggested to her students from day one that it will take a unified effort in building the relationship and although she understands certain things, she will not accept anything less than what her expectations require, regardless of the objective. Several of the student participants stated that their teacher was strict but that the strictness spoke more of the expectation they had and less of the assumption that they were mean. An important notation is that the teachers who held a higher level of expectation were all Black teachers building relationships with Black male students. This is not to say that the other teacher participants (Caucasian) were at a disadvantage because they did not carry high expectations, but it is intended to say that we will never know if their ability to carry high expectations would have generated a different type of relationship.

Physical touch was a theme that was prevalent among all of the teacher participants. Because Black males operate from an emotional premise, observation indicates that the best and most effective way to show them that care and concern is a priority is to provide some form of physical touch - a pat on the back or the head, a hand on the shoulder to redirect, or a simple form of eye contact will communicate to them that there is a supportive relationship in place. Mrs. Peach, a veteran teacher with more than 20 years of experience said, “The touch works well for my male students when it concerns me and our relationship, as does a calm and soothing tone.” In some form, the teacher participants all agreed that in building quality relationships with Black
male students, physically touching them in a way that brings warmth and communicates safety, encouraged them to do better academically.

The themes mentioned were highly prevalent among the teacher and student participants when describing the quality of teacher-student relationships. Although not exclusive to the design of a positive teacher-student relationship, teachers who integrate these themes may be successful at forging positive teacher-student relationships with Black male elementary students.

**Presentation of Data and Results**

**Research question 1.** How do teachers facilitate positive relationships with their Black male students?

Trust, Care, Communication, Respect and Cultural Awareness were highlighted as the themes that emerged from data collection and became evident as research participants discussed relationship-building behaviors with their Black male students. Among the themes noted as prevalent, Communication, Trust and Cultural Awareness appeared to be common between many of the teacher and their students.

**Trust.** To combat the distrust issue and to facilitate a more positive relationship-building process, teachers collectively believed that a mutual bond of trust and open communication should be established at the beginning of the relationship-building process. These successful teachers help their Black male students develop an opinion and then teach them how to communicate that opinion without exuding negative energy. Most of the teachers agreed that taking an interest in the outside activities of the child and taking a genuine interest in their personal interests helped to generate a trusting relationship with the student, which contributed to
building the total child. One teacher in particular prides herself in being able to connect with her Black male students, she stated:

I try to build a safe relationship with the kid so that they can feel comfortable in and out of the classroom…In my relationship-building process, I feel comfortable talking, touching and trying to build a positive environment by including talks about the family component.

Being able to do this in an effective manner means that the teacher must know each student and be able to construct viable relationships based on what they know about the student. One teacher mentioned that although she tries to build relationships with all of her students, there are certain students who do not need as much as another, in her interview she said:

I try to understand each student and build trusting relationships in whatever manner best suits them. With one of my Black male students, I noticed that we had some things in common that we liked to do, so with that in mind I was able to build a bridge of trust that allowed him to open up to me. I provided a lot of praise even if it was for a tiny thing and I began to notice that the one tiny thing would eventually build into much bigger things.

Teachers agreed that a lack of trust was a noticeable hindrance in building relationships with their Black male students and so in building these relationships there is a need to focus on ways that incorporate trust into the equation. One teacher shared that “resistance among Black males is common, not knowing if the person is genuine about wanting to help them.” Another teacher replied that “depending on how the students are approached in the past by teachers who
didn’t care, it would affect how they learn from a teacher who genuinely wanted to help them learn…knowing this, influenced how I related to my Black male students.”

Trust plays an important role in building quality, effective relationships with Black male students. Teachers realized that in order for their Black male students to be successful in math, they have to first trust their teacher, wholeheartedly.

The experiences that these students have, whether internal or external, contribute to the lack of trust they experience. One student stated, “If the relationship is good and I feel like I can trust my teacher, I would choose to do good in school and in my math because I like to learn and I wouldn’t want to let her down.” Another student added, “I think that the two should trust each other and be able to talk to each other. I do have a good relationship with my teacher now. She lets us make music while we learn and I think I can talk openly with her.”

Care. Among the teacher participants was the idea that building positive relationships with Black male students required firm interaction. A consensus of those interviewed also revealed that Black males are emotional individuals and because of their individual situations, should be handled with extreme care. Miss Peach, a Black teacher believes that her commitment in going the “extra mile” for her Black male students, helps tremendously with understanding the emotionalism of her students. She states,

I give the most to the ones who need me the most and unfortunately that has always been the Black male. I have to because they don’t get much at home…I find myself having to do extra for my other ethnic groups, it is more common for the Black male. They are so emotional and we have to deal with it accordingly.
Miss Kiwi, a White teacher opined that “an effective teacher concerns herself with the personal issues her students deal with first before any teaching takes place.” She remembers a specific student with whom she had a difficult time establishing a positive relationship with, “Every morning he arrived angry and viewed school and me as part of his overall problem.” This student came with very evident academic issues, the greatest of them being math; however she quickly realized that the most of his issues were a direct result of an internal problem and she understood the need to break down the barriers; however, she also knew the student was not going to make breaking down those barriers easy. She chose to build the relationship with this student in a way that spoke directly to the heart of a Black male student and brought clarification as to why they are most commonly coined as emotional individuals.

Miss Kiwi chose to greet this student every morning and ask him questions in a joking manner to break the ice and build a reliable rapport. Over time, this student began putting in effort which resulted in eventual, noticeable improvements, most apparent with his behavior. Mrs. Kiwi confirmed that she was 100% sure the change came from the positive relationship that was built with him; “the relationship was there, and then it led to an increased amount of academic improvement.”

Throughout the interview process, many of the teacher participants spoke about the external component of the relationship-building process with their Black male students. There was a realization that an interaction with their students outside the confines of school helped to establish a basis of care and concern for many of the students. Because of the demographic associated with the population of students, teachers agreed that these types of relational
interactions were beneficial in building relationships with Black male students. One teacher suggested that,

Teacher-student relationships consist of both an academic and non-academic interaction…if the student is participating in an outside sport, it’s always nice for the student to see me in the stands cheering them on, this allows the student to know that I not only care about them from an academic standpoint, but I also care about them completely; there’s an interest in the total child.

For a few of the teachers, physical touch emerged as prevalent in showing the student they really cared about them. It has been established, throughout this study, that the experiences of working with Black male students uncovers increased emotionalism and therefore dictates a need for hugs, pats on the back, shoulder touching or any other form of physical interaction that communicates genuine care. Miss Peach suggested that because Black male students lack this type of engagement, they seek it more. She states the following,

It seems to me that a lot of our Black children lack hugging, encouragement, build up, etc. Even in comparing them with the Hispanic children, those families are close knit, the children run to hug their parents. However, with our Black children, there is more of a nervous approach when they see their parents. There isn’t any more quality time with our Black children. Sometimes the Black males will pull away from you because they aren’t used to that type of engagement. There is also a lot of anger from within the Black household which trickles down to the child. Mothers excuse a lot of behaviors because of the lack of father influence. Because of this, the children become angry and at this age it
becomes frightening to see them in their anger. So as a teacher I create my relationships in a way that tries to help them to understand that they don’t have to be that way.

Another teacher offered that respect between the two must be established—teachers have to gain the trust of the student by showing them that they care...she feels that students can’t learn if they are emotionally unstable. The relationship she builds with her students begin with a morning hug and greeting so that the students begin their day in a warm and caring environment. Laughter is brought into her classroom because for many of her students, they rarely laugh; many don’t even know what a joke is. She also says, “I’m a hugger and I show affection through always hugging my students.”

The results of the study suggest that showing genuine care to Black male students can go a long way in building teacher-student relationships. Furthermore, Black male students implicitly seek for the attention of their teacher in ways that would affirm them. The teacher participants in this study brought clear direction into how they build relationships with their Black male students by incorporating a genuine, caring attitude toward their students.

Building relationships with the Black males also requires that the teacher meet the student where he is. Miss Kiwi, a White teacher says that she builds the relationship by asking the student, “What can I do to help you feel better about the learning process?” She said that this relays to the student that “You’re good right where you are, so how can we build on this to make you even better?” She also believes that teachers can’t always judge children on what they are able or not able to do, she says, “we need to meet students where they are and build on their
potential...as a white teacher, I know that it may sometimes be difficult for me to reach my Black male students, but I try to meet my students where they are.”

**Communication.** The households of many of the Black male students within the environment are without fathers which makes, as one teacher stated, “Cracking the code” with these students much harder. Many of the teachers agreed that building rapport “went a long way” when it came to building viable relationships. Miss Lemon, a Black teacher expressed that good rapport with an open line of communication was important, “I want my students to know that they can come to me for anything.” She also stated that at the beginning of the year, upon meeting her Black male students, it is made clear that the relationship-building process is a two-way street requiring both of them to play a part in making it successful. One student participant offered insight into how communication played an integral part in the relationship with his teacher, “I always told the truth to her if I did something bad. I would always communicate with her. I trusted her and she trusted me. We would talk a lot and she helped me in math by walking me step by step through the problems.”

It was rather common among the teachers, that they created an environment in which their Black male students could talk to them about anything- one key connection that made building a positive teacher-student relationship most successful among all of these teachers was ensuring that their Black male students had a place to vent about the life experiences they were involved in. Another common issue among Black male students is their inability to communicate effectively. Even though the teachers put effort into providing a platform that allows their students to communicate freely, several teachers admitted that when given the
opportunity, many of their students don’t understand how to communicate. Miss Banana, an
Black teacher stated that she had to teach a specific child about his issue with talking back to adults-

Many of our students don’t have the structured home setting where parents teach their
children appropriate conversation, our kids just don’t know what’s appropriate and
what’s inappropriate…in establishing relationship with one of my students, I had to let
him know that although having an opinion is good, there is a time and place for him to
verbalize it. Since doing that and consistently reinforcing it, he has begun making
progress in realizing that some things I can say and some things I can’t say because they
are not appropriate when speaking to an adult.

The teachers admit that they are not just teaching academics, they are teaching life
lessons with their Black male students. They teach the students the importance of having an
opinion and realizing that their opinion does matter. One teacher, Miss Orange, offered insight
into how she builds the initial relationship with her Black male students,

I make sure that the student feels comfortable asking questions and challenging me to
explain when they don’t understand. The relationships I build allow my students to have
an opinion; the classroom environment is more student-focused, the environment is
positive and it’s not about what I think, it’s about what we think.

**Respect.** The idea that Black male students are emotional makes building relationships
with them sometimes challenging. There is an ongoing need to converse with them in a way that
takes into consideration their feelings and levels of understanding. Miss Grape, a White teacher
said that she likes to give praises to students so that they know what they are doing right, and corrects them in a way that does not make them feel bad; “when I correct a student, I do so in a non-derogatory kind of way.”

Taking into consideration the household experiences of many Black males, the consideration cannot ignore the fact that many of the households are without father figures. In understanding this, several of the teacher participants felt they were at best when they know their students and take on the responsibility of figuring out how to implement ways that can assist the student in dealing with certain issues, like self-regulation and understanding consequences to their actions. This problem also leads to an issue of respect within the young Black culture as well. Miss Banana adds, “Black males don’t like to be called out, so when I’m angry, I have to approach the anger in a calm way. I choose to be a listener and care about how I speak to my Black male students.” When asked what elements he thought made up a positive teacher-student relationship, one student said,

To me, a relationship has different privileges and different standards and the teacher expects you to be good. So, in a positive relationship I think that there should be respect and communication. People should also like each other because if they didn’t it would be a negative relationship. If you’re in trouble you should be able to talk to your teacher. With the teacher I have now, she respects us and what we are able to do. If we know how to do something she doesn’t call on us because she already knows that we can do it. To me, that’s a positive relationship.
**Cultural awareness.** Among the challenges of building positive relationships with Black male students are the specific behaviors held exclusively by this demographic. Almost unanimously, the teachers agreed that anger was among the most prevalent and common behavior held by Black male students. It was surprising and no less sad to hear of some of the factors that affected the student population within the school site. According to the teachers, many of the students have fathers who are not in the home because of incarceration or some other concerning issue and the Black male students are placed in environments where the weight of these situations negatively affect them. Children have had to deal with domestic situations, drugs, alcohol, fatherless environment, motherless environments, inconsistent expectations, and a lack of physical affection and all of these factors affect the Black male student demographic in different ways. Miss Orange, a Black teacher said, “A lot of my students have fathers who are incarcerated and many teachers who can’t relate may perceive their actions as an extreme behavioral problem that requires discipline.” Another teacher added that, “Not wanting to be corrected was a big hindrance with Black male boys, so I try to do it in private…Black males are also more defensive.”

One White teacher who has a knack for building great relationships with her Black male students has taught many of the students whose fathers has been incarcerated. She also believes that the incarceration hugely affects the relationship-building process between teacher and student because the trust factor has been compromised with other leaders of influence. During her interview, she offered this statement,
I notice that the anger mechanism within the Black male student is so off-balance because of this and they don’t know how to tell anyone if or why they are angry; they don’t have the skill to communicate that to anyone, so it just comes out.

Identifying the cultural connectedness some teachers have with their Black male students, truly assist in understanding the student all together. Miss Banana says that working closely with her Black male students gives her the ability to build confidence within her students.

I notice that my Black male students respond positively and favorably with Black teachers because they understand them and they feel that it’s easier to build rapport with the teacher who looks like them…even though I have some differences than my students’ experiences, I still believe that I have the ability to connect with my students based on what I know and have observed from within the Black community.

The data revealed several emerging themes that contributed to ways in which teachers facilitate positive teacher-student relationships with their Black male students. The participants agree that a positive relationship should be in place for academic seed planting and if cultivated with effectiveness and intentionality, can generate a harvest of learning for years to come.
Table 2

Themes Used by Teachers to Facilitate Positive Relationships with their Black Male Students

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Trust</th>
<th>Care</th>
<th>Communication</th>
<th>Respect</th>
<th>Cultural Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lemon</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiwi</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Apple</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Banana</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Orange</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grape</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Peach</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Mango</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Research question 2. How do the perceptions teachers have, regarding these relationships, encourage Black male student achievement in mathematics? How does the relationship itself encourage Black male student achievement in mathematics?

There was an established precedent that supported the need to understand how and if a teacher’s perception of a student played a part in how the relationship was built and if that perception contributed at all to the mathematics success of the student. The study revealed that many of the teachers’ initial perceptions were true to previous knowledge about a student, but systematically changed as the relationship evolved. Teachers are often presented with information about students that affect the way they relate; however, the difference in the varying
types of teachers that exist is the ability to differentiate these notions and implement an approach that will allow for an organic relationship-building process to take place.

**High expectations.** Many of the teacher participants interviewed perceived that the relationships they held with many of their Black male students contributed enormously to their academic success in math. Several of the teachers admitted to holding high expectations for their Black male students because it does not give them an excuse for anything less. When speaking about one of her Black male students, Miss Orange stated,

> I think the relationship I have with this student has allowed him to progress in math tremendously. Our relationship allows him to receive the information from me in a way that helps him to learn because he sees me in a positive way…sometimes when there isn’t a positive relationship, students have negative thoughts about their teacher which hinders their learning in math, but this student has a desire to want to do good, he has a willingness to learn and I know it has a lot to do with how I see him and how he views our relationship.

Miss Lemon noted that having high expectations within her classroom is something that encourages a high level of student achievement among her Black male students in math. “I have great relationships with many of my students, but one in particular came to me a bit apprehensive about math and was concerned about not being the best student in math.” She insisted that after building a relationship with the student and helping him to understand that with hard work and intense focus, he could be successful, she observed the student getting more and more comfortable in math. She continued with, “of course now, he is in high school and has surpassed
his math understanding. He recently received an award for his academic ability in math and so now he has learned that exceeding in math holds awesome possibilities.” High expectations are something that Miss Lemon converges with the concern that she has for her students. She believes that her students should know from day one what her expectation philosophy is, she states,

Getting the student to understand my overall purpose which is to help him excel is priority. From day one, I make sure to create a positive climate that allows my Black male students to exceed beyond what they think they are capable of doing. I want them to know that I am passionate about teaching and that I have high expectations of them, which I make clear from the beginning. I make sure they know that there is no failure in them.

For Miss Grapefruit, an environment of high expectation has certain characteristics. She communicates to her students from day one that she holds a certain level of expectation and further demonstrates what her support looks like and how a successful student excels in her class:

I encourage my students often in math because I know many of my Black males struggle. We currently have a low percentage of Black males who are proficient in math, so I work with them to try and increase their proficiency. I may pat them on the back to give them that extra push when I notice they aren’t putting forth effort. I motivate them against being lazy and I talk with them many times a day about what I expect and how laziness
will get them nowhere. I notice that when I give them that type of attention, they manage to put forth more effort and do a little better.

Occasionally, there will appear the teacher who takes care of her students as if they were her children; within this teacher lies the ability to change the world. Mrs. Banana, a Black teacher prides herself on being able to connect with her Black male students, “I view my students as my own children and I wouldn’t give them any less than what I would give my own children.” She reveals that her perception is simple in that she believes all children can learn mathematics, especially Black male students. However, teachers must meet them where they are and not perceive them to be better or worse than what they actually are. She incorporates a perception that creates an environment of high expectation and cultivates a relationship that responds accordingly. In return, her students try to give their very best and although they may fail at sometimes doing so, her expectation never changes.

**Praise and positive communication.** Many of the teachers have observed their Black male students struggle in mathematics. Not knowing whether it’s the lack of foundation or a struggle with cognitive number sense, one of the teachers, Miss Grape, offered insight into how she coped with one of her struggling Black male students and how she allowed the relationship to assist him in mathematics achievement.

I had to get to know him and I realized that his math was really low. One of the things I did was work with him on-on-one and gave him many encouraging words. Meeting with him and encouraging him to do his best helped along the way. He still needs a little help because he didn’t have the concepts of addition and subtraction but now he has improved
in doing that. Most of me getting to know him was through teacher observation, seeing how I could help him and in what ways I could help him…I will say that without a doubt the relationship I have with him helps him in math- you have to make them feel special, make them feel like you want them there.

One teacher in particular admits that her initial perception of one of her Black male student was that he would operate in the same manner that he always had with other teachers. His academic behavior in her class validated this perceived notion and she was sure that being in her class would be no different. However, as time went on she realized that his academic behavior had nothing to do with inability, but instead had more to do with, what she referred to as, him choosing not to “step up to the plate” because it was what he had always displayed with other teachers. “I realized that he produced from a perception of what he believed, which was the teacher doesn’t care and therefore I don’t need to try.” As she continued working with him, praising him for the small wins and showing him that her expectation was high, he began to change his mathematics academic behavior, resulting in a changed perception on her end.

More and more the teachers communicated an established relationship with their Black males in an effort to show that someone genuinely cared about their academic achievement. One student described praise in this manner, “Positive means happy or good so I think I should make her happy and she makes me happy by helping me and telling me to try again when I make a mistake. The teacher that I have now helps me on a regular basis. She helps me in math by guiding us and showing us what to do.”
As the study revealed, the ultimate consideration in any relationship between a teacher and a student is to provide confidence, motivation and reassurance that they can achieve and be successful. Moreover, the ability to impress upon a student that, with hard work and dedication, they can overcome the insecurity of not being good enough, certainly allows for misconceptions and skewed perceptions to be eliminated.

The demographics of the school included students who had attended since pre-kindergarten, and therefore it was likely that teachers may have had previous interaction with siblings, parents or the students themselves. In the past, this often shaped the perceptions that teachers held regarding the students they taught. Several of the teachers realized that a negative perception often presented a hindrance to the construct of a newly established relationship with Black male students. Although this was sometimes the case, several teachers acknowledged that when receiving Black male students at the beginning of the school year, they most times, attempted to not allow preconceived perceptions dictate how they established relationships with those students.

Although all of the teacher participants confirmed that they generally do not allow preconceived perceptions dictate the relationships they build with their Black students, a few did admit that based on student behaviors and academic abilities, they became more cognizant in how they dealt with some of their students. One teacher offered that many of the Black males she has taught had always struggled in math and therefore she knew that if she was going to be successful in helping them to be successful in math, she would need to build a trusting relationship that would offer the students additional help in the subject. In how she interacts
with her Black male students, one teacher approaches the relational interaction with her students from a parental perspective,

Maybe it’s because I have a child and I know how I want the professors to treat my child. I give extra attention to my math students because I know their parents will expect me to. If it requires me to touch or nurture, I will do that; I get to know my students on a very personal level before I attempt to help them overcome the barriers they may encounter with math.

In speaking with many of the teacher participants, it became clear that there was a type of nurturing that takes place between teachers and their students. Teachers made and continue to make intentional attempts toward not allowing certain perceptions to dictate the establishment of formidable relationships with their students. Although teachers have admitted to having had preconceived perceptions about some students, based on previous behavior, they have also said that they make genuine attempts to not allow those perceptions to interfere with establishing relationships that could help children succeed in math. Miss Peach remembered a Black male student who was lacking foundation in knowing basic mathematical skills. She offered insight into how relationship-building helped this student to succeed in mathematics.

Having taught for so long, the tone of my voice helped this child. The softer I spoke to him, the more I showed affection in the form of touch which showed that I cared, allowed him to work hard for me. I put him in leadership positions, sometimes he didn’t go to enrichment so that we could have one on one time math time. It really helped for him to work hard and want to please me in all that he did. In my opinion, the calmness was key.
when dealing with him because the opposite caused him to shut down. Math was one of his worst subjects so I began to see him improve tremendously. The touch worked well for him when it concerned me and our relationship in helping him to do well in math.

Almost unanimously, the teachers agreed that the relationship itself was far more important than the perceptions they held, and considering those relationships where the perception may have held some truth, it was far more rewarding to observe those perceptions transpose themselves into academically successful math students.

Table 3

*Perception of Themes Evident Regarding the Encouragement of Mathematics Achievement among Black Male Students*

<table>
<thead>
<tr>
<th>Teachers</th>
<th>High Expectations</th>
<th>Praise &amp; Positive Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lemon</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kiwi</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Apple</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Banana</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Orange</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Grape</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Peach</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mango</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Research question 3. How do Black male students describe the relationship with their teacher?

Throughout this interview segment, it was absolutely amazing to hear the varying depictions of how Black male students referred to the relationships they had with the teachers they had been exposed to. What one student felt was important, another may not have felt similarly. A commonality across the board however, was that each of the students automatically assumed and viewed the teacher-student relationship to be highly connected to the academic component. For instance, when asked what a student-teacher relationship looked like to him, one student replied, “When a student pays attention to the teacher and respects the teacher…most of the conversation is about school work and special privileges- you get to do other things to get better grades.” Another student said,

If I do good in school and then me and the teacher can become good friends, she might take me out to eat or something…in order to do good in school and have that relationship, I would need to pass tests and do good things in class.

In listening to these students, there was often a reference made back to what their idea of a positive teacher-student relationship really looked like and if they only thought it was connected to a school setting. Miss Kiwi offered insight into how her relationships are established with her African American male students:

I don’t believe that my relationships are different within the classroom. I believe that because building relationships are more important, there isn’t a need to approach any of my students differently. I do say that in knowing certain life situations of my students, I
may deal with them differently in an effort to make them feel comfortable. I love going
to the local grocery store because I do like to make connections on a level that separates
them from how they see me on a daily basis. I attempt to not only build relationship with
my students, but I also attempt to build relationship with the family.

Several of the students interviewed understood that a relationship included some form of
personal connection to the child- a cultural connection or an identifiable connection that would
allow the student to trust, but a few of the students primarily viewed the teacher-student
relationship as an academic connection used to spark or motivate mathematics progress.
Although the sample size was fairly even, there were more Black teachers who viewed the
personal relationship as an integral part of the overall teacher-student connection than White
teachers. The demographic design of many of the student participants represented single-parent
households. Several of the students stated they look to their teachers as role models and desired
to have a relationship with them. One student spoke about how he looked forward to being able
to talk with his teacher during lunch time every day because she listens to him and shows that
she cares about what he does. Another student was very specific about how he views the
relationship he has with his teacher,

To me, a relationship has different privileges and different standards and the teacher
expects you to be good… With the teacher I have now, she respects us and what we are
able to do. If we know how to do something she doesn’t call on us because she already
knows that we can do it. To me, that’s a positive relationship.
**Communication and trust.** A 4th grade student offered insight into what he thought the teacher-student relationship should look like and how the relationship with his teacher means to him. “Me and my teacher talk about our grades. We study together for math and my teacher tells me my grade so next time I know where I need to improve.” One 3rd grade student described the relationship with his teacher as one where his teacher was “very good and very cooperative. She’s always telling me good job and I trust her a lot. I can talk to her about my problems.”

One of the student participants, a 5th grader provided what he thought the nature of the relationship with his teacher stemmed from, “I always told the truth to her if I did something bad. I would always communicate with her. I trusted her and she trusted me. She helped me in math by walking me step by step through a problem; she even came to one of my football games.”

**Mutual respect.** Another common theme in describing relationships was “respect.” Many of the student participants described respect as being a key requirement in building positive teacher-student relationships. There was a similarity in the need to provide a universal code of respect among both individuals, in order for the relationship to be a successful one. One student described the relationship with a former teacher,

I had a really close relationship with a male teacher I had last year too. He had a program in his class called “scholars” and in the program you can earn positions in the program. You could also learn different ways to do things which made it easier to learn and in a fun way. He really helps students who don’t always do well in math, he does different things that help those students do better. Our relationship was special because I can learn
better from “grown dudes”, I respected him and he respected me too… We grew to be really close and he helped me a lot with certain math things like exponents and multi-digit multiplication.

Another 5th grade student explained that it took time for him and his current teacher to build a good relationship. He said that he doesn’t think she liked him at first because he didn’t always make the right choices. He says:

I had to focus and get to know her better and not act up in class. I was new to the class so she helped me to do the things that I needed to do. I do think that the more she knew me the more she understood the kind of person I was and what I needed help with. I agree that the teacher would encourage the student more if the relationship was there.

**Care and concern.** Considering the aforementioned behaviors specific to Black male students that prohibit the effective construction of a positive teacher-student relationship, it became necessary to identify, from a student’s perspective, whether and how difficulties contributed to the building of a positive teacher-student relationship. One student in particular offered an insightful view into the difficulties encountered:

There has to be a comfortable relationship between the teacher and the student and some of my teachers I have had did not have that positive attitude and I didn’t feel comfortable around those teachers. I think that what makes it a positive relationship is that the student has to be able to get along with the teacher. That’s what makes a positive relationship.
Based on the answers provided by the student, the question was asked “Do you think students don’t learn from teachers they don’t like?” Student: “not necessarily because I think you learn something every day but there has to be a connection with the teacher.”

One third grade student was very specific when describing the relationship with his teacher,

This teacher would teach us songs about math-addition and subtraction…she was consistent with us and made sure that we performed well. I feel that if I wouldn’t have had that relationship, I would not have done well in math. She took an interest in what I was doing, broke things down in math so I could understand it better.

This 4th grade student believed that it was necessary for teachers to be involved in his life. He acknowledged that there were times when he felt like his behavior caused his teachers to not motivate him or even want to have a relationship with him. His most recent relationship with his teacher is described like this,

The teacher knew me and she told me that she would always be there for me. Anytime I need help with anything she is always there for me. I think it is important for teachers to come to their student’s games because it shows that they love them. A positive relationship with my teacher helps to improve my grades and helps to control my anger.

Honesty. A few of the students highlighted that lying would make it difficult to build a positive relationship with a teacher. They described lying as something that would cause a lack of trust and would make it difficult to build a good relationship with them. When asked to further elaborate, one student replied,
When a teacher lies to you, I think it would make it difficult to build a relationship with her. Like when she tells us that there is only one way to do a math problem but there really isn’t…I just think that if a teacher lies to me, I can’t trust her and I don’t want to build a relationship with her.

For the most part, students attributed difficulty in building relationships with teachers to the parameters of the classroom structure. Understanding that the majority of the student participants viewed the teacher-student relationships through an academic eye only, forced them to view the difficulties as one that may be triggered by negative classroom behavior, or activity that would make the teacher upset. There was an obvious disconnect between the teacher having a relationship with the class as a whole and having a relationship with a specific individual. The question then becomes, if the students were able to understand the difference between the two, would they be able to generate a different set of responses to how a positive teacher-student relationship was formed.

Finally, students were asked about the negative teacher-student relationships they had experienced and if those negative experiences had affected their academic experience in any way. The variation in understanding what constituted a negative relationship was interesting in that it further confirmed that the students had no understanding of the teacher-student relationship dynamic nor did they have a definitive understanding of the word “negative,” as they only defined it as meaning “bad.” When asked, “Have you ever had a negative relationship with a teacher,” here are what a few of the students replied,
**Student #1.** I think so. For instance, there’s a girl who sits next to me in class and she’s always kicking my seat, well when I tell my teacher, she doesn’t do anything about it, but my teacher last year would’ve done something about it immediately and it wouldn’t get so bad.

**Student #2.** Yes. One teacher I had would hurt my feelings with the stuff she would say about us. I didn’t trust her because she would deny what she said when people would ask her. She would tell us to go home and take baths and I didn’t feel like she cared about me. I felt like she was negative and didn’t care about building relationships with us at all.

**Student #3.** Yes; my behavior affected the way my teacher responded to me. I don’t think the teacher really cared for me because I didn’t have a good start to the year. (The student started to cry and explained to the researcher that he never really felt like the teacher motivated him to do good that year).

**Student #4.** I had a teacher one time who was just really mean. She would yell at you sometime for no reason. She wouldn’t let me help some of the students who needed help. I am not sure if she did it personally but she did it to me and some of the other students as well. I have always had teachers I could trust, except for this one.

There were also, however, student who informed that they had never experienced a negative relationship with their teachers or if they had tried to imagine a way in which they could make the relationship better.

An interesting conclusion to this study came from a 3rd grade student who offered vivid insight to his interaction with a previous teacher. When asked if he had ever had a negative
relationship with a teacher, he responded “Yes because I don’t think my teacher last year taught me what I needed to know.” Based on some of the answers the student were providing, the question was asked if he thought the relationship was negative because the teacher did not treat him fairly or simply did not teach him, his response, “She probably didn’t have time to teach me because everyone was placing stress on her shoulders and she couldn’t really take it”. He was then asked if he thought this kept her from building a good relationship with him and he said, “Yes.” The student happens to be a high-performing student, and it was interesting that the detail of his answers allowed him to identify what could be seen as “trigger” in not building positive teacher-student relationships.

Summary

The results of this study provided a very detailed view of the intrinsic and extrinsic attitudes and behaviors that develop positive teacher-student relationships. Additionally, the study gave an account of how relationships impact the learning process of students within a particular school and how the encouragement of these relationships offers students the opportunity to approach mathematics differently. The study’s results were individual in nature and analyzed as according to each research question. A complete and detailed elaboration was provided and highlighted through the perspectives of teachers and students, respectively.

The teacher and student perspectives provided, offered insight into the overall theme of teacher- student relationships and how the need for positive interaction helped to develop the foundation for and encourage successful mathematics academic experiences among Black male
students. The participants brought credibility to much of what the previously mentioned research suggested in former studies alike.

Each research question expounded on the various elements deemed important in the encouragement of mathematics success among Black males. In exploring how teachers facilitated the relationships with their Black male students, the study revealed that teachers understood that the overall dynamic of the Black male student required a connection that provided comfort and genuine understanding; furthermore, there was a belief that in order for academic learning to take place, there should be intentional effort placed on establishing this type of connection.

Through the exploration of teacher perceptions and how these perceptions encouraged the success of Black males, it was found that preconceived perceptions were narrowly held by the teachers interviewed. Many of the participants recognized the disadvantage to holding such perceptions and admitted that the perceptions they did hold were more relevant in developing the total child- academically, socially and behaviorally.

Finally, while examining how Black male students described the relationship with their teachers, student participants agreed that the times they felt most loved and cared about by their teacher was when they felt the need to try harder and put more effort in their daily scholastic achievements. They further stated that communication and mutual respect were among those elements most important when building and cultivating a positive teacher-student relationship.

The presentation of data within this chapter has provided a strong foundation to the final chapter of this study. Chapter 5 will delve into the meaning of the findings and connect them to
previous research studies by identifying similarities and any differences not covered in related studies. The chapter will culminate with a final look at the focus of the study and summarize the core questions, providing a complete and comprehensive view of the teacher-student relationship with African American male students.
Chapter 5: Discussion and Conclusion

Introduction

There has been a considerable amount of published research providing insight into the nature of teacher-student relationships and how the structure of these relationships both affect and encourage student success. Further, the dynamic of these relationships and their attributions are largely connected to how Black male students succeed academically, and how they view these relationships as being a prime contributor to such success (Davis, 2014). Within the same context, Hamre and Pianta (2001) identified a need, and together constructed a research-based protocol supporting the notion that positive teacher-student relationships are an integral part of the development of successful children. Research also suggests that a healthy cognitively developed child stems directly from the positive interaction with caring and supportive adults, regardless of their social or economic status (Ainsworth & Bowlby, 1991; Barnett et al., 1998). This then suggests that children who benefit from the positive interaction of cultivated and nourished relationships stand a much better chance of becoming academically responsible and successful students versus those children who may experience negative or no interaction at all.

Some literature suggest that a large percentage of Black male students experience an enormous amount of academic failure (Moore & Owens, 2008). Furthermore, research has also confirmed that the academic disparity between Black male students and their peers has yet to be fully explained, and the extent of growing failures continues to concern educators (Henfield et al., 2008; Moore et al., 2005a, b; Moore & Flowers, 2012). Although much emphasis has been placed on parental involvement being a primary influence on how a student succeeds, the
Professional interaction that teachers have with their students may, at times, provide more influence while in the moment of direct interaction. This notion brings on more of an understanding in realizing that teachers play a pivotal role in how their minority students are perceived and more importantly, how those students produce. This is not to say that teachers are their students’ sole influence, this is to say, however, that students are more likely to rise to the expectation of academic success if they perceive a genuine care and concern from the one who teaches them. There is an ability that teachers have that should allow them to see students as whole individuals, even if they are broken, and this ability comes from a place of having relationship with students. The benefit of this relationship allows teachers to see what is not always visible, or even available…this type of relationship brings a sense of strong understanding to teachers, and it is something that speaks volumes to students (Metcalf & Game, 2006).

The survey and interview data obtained through this study highlighted the perceptions and ideas by which teachers established positive relationships with their students and how students described the relationship with their teacher. Data indicated that a large amount of consideration was placed on Communication, High Expectation and Physical Touch as necessary components to facilitating positive relationships with teachers and students. Teachers indicated that these were criteria on which the premise of the relationship-building process existed, while students confirmed that those teachers with whom they had the most memorable experiences created an environment of regular communication, ongoing high expectation and physical touch. Teacher participants communicated that the need for positive teacher-student relationships were
overwhelming and those students with whom they were successful in establishing these
relationships, exhibited a high level of social and academic achievement, primarily in the subject
of mathematics education. Students confirmed that when imagining a successful relationship
with their teacher, communication was a high priority. Many of the students attributed their
success to a teacher’s ability to motivate and communicate high expectations. All research
participants agreed that the establishment of teacher-student relationships is necessary.

**Summary of Results**

The research findings in this study have allowed for a clear understanding of what the
literature had previously provided—students are more inclined to put forth effort towards
achievement when there is a perception of genuine care and concern on the part of a teacher
(Ferguson, 2003). Moreover, the ability for teachers to connect with their students on a cultural
level, dictates a strong desire for students to learn better and more consistently (Rouland et al.,
2014). When Black male students are able to develop and cultivate positive relationships with
teachers, they are then able to become open to the idea that achieving is not such a bad idea.

Through intense and focused conversations, the study provided great insight into how
teachers and students described positive teacher-student relationships and the processes used to
cultivate the encouragement of student achievement. The research questions that guided this
study were:
1. How do teachers facilitate positive relationships with their Black elementary male students?

2. How do the perceptions that teachers have regarding these relationships, encourage Black male student achievement in mathematics?
   a. How does the relationship itself, encourage Black male student achievement in mathematics?

3. How do Black male students describe the relationship with their teacher?

The interview questions were formulated and based on the premise of each research question and findings were presented accordingly. The research study extended Stronge’s (2002), Tucker and Stronge’s (2005) as well as Viadero and Johnston’s (2000) findings that teachers facilitate relationships with students in a way that make lasting impressions on student achievement. Teacher participants reported many times that the interaction shared with students prepared them for a future success in school. Many teachers shared experiences they had with students who, because of the relationships formed, produced positive academic behavior several years later. The study revealed new observations that in many cases, positive teacher-student relationships help to establish positive social-behavior functionality among Black male students, which in turn contributed to a future increase in positive academic behavior, particularly in mathematics.

Additionally, the study revealed that Black male students often display emotional behavior problems which contributed to unsuccessful academic achievement. In particular, many of the Black males represented within the study had experienced a series of emotional and
physical inconsistencies within the home environment. Research participants communicated that many of their male students displayed a large amount of misguided anger, much of which stemmed from being in an environment where there is little guarantee for safety or academic support and influence. Participants also added that emotionally, Black male students are unable to channel their anger effectively and this type of emotional behavior transposed into an unsuccessful academic experience. Within this study and when viewed from a larger perspective, it can be considered that the academic inconsistencies of Black male students do not just exist from an academic deficiency in whole, but can in part be linked to the emotional behavior problems that originate from a devalued home life. In this regard, the effect of a positive teacher-student relationship can help eliminate negative behaviors that may block students from being academically successful.

The qualitative case study methodology design used in this research study allowed for data to be collected through a variety of sources. In doing this, participants were able to communicate and share their opinions and experiences through responsive techniques which confirmed, substantiated and upheld the integrity of the information provided, regarding teacher-student relationships and how teachers and students perceived these relationships to encourage Black male student success in mathematics.

**Discussion of the Results**

The results of the study corroborated some of what had been suggested and reported in previous research on the theme of teacher-student relationships and how they influence Black males academically. Data revealed that there were many components to an effective teacher-
student relationship, each of which are necessary when imagining the dynamic of how teachers can encourage their Black male students to achieve in math. More so than not, the overriding component making a teacher-student relationship effective is communication between both individuals. When a teacher provides ongoing communication with her Black male student, she is able to build both trust and rapport. Through the development of these characteristics, Black male students are more likely to develop a consistent pattern in their academic effort. Because many of the Black males lacked positive influence from within their home environments, this communicative approach always seemed helpful. Teachers like Miss Lemon, who stated “I want my students to know that they can come to me for anything,” understood that in providing this valuable benefit, her students would feel safe learning from her.

Black male students relied heavily on the personal influence their teacher provided for them, especially teachers who shared similar cultural backgrounds and experiences. For several of the students, there was a certain level of trust displayed towards their teacher which allowed the students to acquiesce to the relationship-building process. In observing Black male students, a teacher-student relationship that brought a stern expectation of behavioral and academic requirements was extremely successful among these students. This observance supported the notion that students, in general, respond well to structured relationships with clearly defined expectations, especially when related to the academic experience.

Furthermore, the results of the study also placed emphasis on observations teacher participants made in realizing that Black male students have a difficult time initiating effective communication skills. Several of the teachers admitted that building relationships were often
challenging because many of the Black male students hadn’t learned how to communicate. Miss Banana said, “it’s like taking a fish out of a pond when asking our children questions, they seriously have no idea how to communicate for themselves.” For this reason, teachers believed that the inept ability of Black male students to perform well, academically in mathematics and other subjects, stemmed from a much deeper contributing factor; they did not believe it exclusively came from the inability to learn, or even laziness. Instead, as Miss Banana so precisely explained,

Many of my students don’t come from structured home settings, they come from settings where they aren’t taught appropriate behavior or communication skill and there certainly isn’t any re-emphasis on the academic skills taught within the classroom, so a big chunk of the relationship-building process is me communicating every single thing I want them to learn as well as the way in which I need for them to understand…I’m teaching life skills.

Similarly, student participants felt that communication was an important attribute in the teacher-student relationship dynamic. Analysis of the data revealed that many of the Black male students viewed communication as a segue to building trusting relationships between students and their teacher. As one student described his relationship with his teacher, he appreciated the relationship because his teacher motivated him to do well, “She’s always telling me good job and I trust her a lot…I can talk to her about my problems.” Building a relationship of trust through communication was evident in being a useful component in the establishment and cultivation of teacher-student relationships. An important observation noted by both teacher and student
participants was that many of the healthy teacher-student relationships formed, naturally transposed into increased academic achievement in math on the part of the student.

Although, the research revealed a credible and exhaustive amount of data substantiating various parts of the study, the results did not fully support the research question regarding teacher perceptions and how those perceptions encouraged the mathematics achievement of Black male students. As a result, it may have been more beneficial to incorporate an observation tool for this particular research question. Examining the effects of teacher-student relationships may at times encourage the opportunity to observe teachers and students in their classroom environment. It is here where both individuals are able to divulge their true interactions and a true perception of how students respond to teachers can be assessed. In this case, classroom observations could have provided a deeper insight into how the perceptions teachers had regarding their Black male students actually influenced the interaction and how the interaction encouraged student achievement. Furthermore, because student participants were of a much younger age and therefore had a difficult time answering questions with elaboration, observed interaction would have deeper understanding allowing for a more detailed interpretation.

**Discussion of the Results in Relation to the Literature**

There has been an extensive amount of data provided that both substantiates and validates the need for positive teacher-student relationships. There has also been a deep exploration into if and how the facilitation of these relationships actually encourages the academic improvement of math education among Black males. Existing literature confirms that there is an increasing disparity among Black male students in how they learn and adapt to mathematics (Eddy &
Easton-Brooks, 2011). What has not been provided, in full detail, is the means by which this disparity can be improved and whether or not it can be improved through the teacher-student relationship dynamic.

The Facilitation of Positive Relationships With African American Male Students

Trust, Care, Communication, Respect and Cultural Awareness emerged as the themes that played an integral role among teachers in facilitating relationships with their African American male students. This confirmed Decker et al.’s. (2007) and Rey et al.’s. (2007) research in that the development of trust between teachers and students, ultimately resulting in a healthy relationship between the two, actually contributes to how Black students approach academic, emotional and behavioral concerns. When teachers focus on creating trusting relationships with their students, they create relational environments that allow the students to feel comfortable and actively engage in the learning process. When Black males experience teachers like Miss Peach, who is comfortable talking with her students and building a comforting environment, they are more inclined to respond to an active learning environment and produce accordingly.

Additionally, great emphasis was placed on the ability and need to know the interests of students and relate them to a commonality among the teacher and student. Brazziel (1964) opined that teachers who take genuine interests in the lives of their students and begin to understand the world from which they come, are able to provide a level of empathy that guides the art of teaching within the classroom. These students end up connecting with the teacher, and experience trusting relationships as well.
A further examination of the teacher-student relationship process unveiled care and communication acting as the foundation to facilitating positive teacher-student relationships. Teachers like Miss Peach confirmed that she often finds herself giving more to the Black males she teaches. She further added that although all of her students are in need, she consistently sees the need to be more prevalent among her Black male students. Understanding this piece substantiates the premise behind Noddings (1984, 1992) study which confirms that an effective educational system must have an ethic of concern embedded. Each of the nine teacher participants agreed that the core of their facilitation process included a strong care and communication dynamic.

This research study extended Boykin and Bailey’s (2000) findings that learning environments should cater to the cultural relativity of the home environment. As this is done, Black male students are more inclined to perform better academically. Within the current study however, the cultural extension was exhibited through communication and a strong desire to connect based from the student’s personal experiences. Many of the teacher participants facilitated relationships by striving to understand the environments from which the students came and adapting the learning process accordingly. When asked if they felt there was a need to cultivate a cultural connection with their Black male students, several of the teachers agreed and confirmed that in doing so, it gave their students confidence. Warzon and Ginsburg-Block (2008) suggested that when elementary students believe there is a difference between the culture displayed at home and school, they tend to perform significantly lower and lack motivation.
Perceptions and Relationships That Encourage Black Male Student Achievement in Mathematics

When reflecting on the relationship with a specific Black male student, eight of the teacher participants revealed that they had no preconceived perception regarding expected behaviors or academic ability. According to the participants, the overall precedent was that teachers attempted to approach each student as an individual holding the capability to achieve. The participants understood the relevance of perception and one teacher in particular stated that although she was sometimes presented with information that could affect the way in which she perceived a student to be, she put great effort into ensuring she did not pre-judge because she realized that it could affect the way in which the student performed academically.

High Expectations and Praise and Communication were the two prevalent themes emerging from this research question. All of the teacher participants communicated that they have high expectations for their Black male students. They stated that holding their students to these high levels of expectation enormously contributes to their high achievement in math. Teachers like Miss Lemon said that she has great relationships with her Black male students because she holds high levels of expectation and all of her students know and expect it. She further stated that because her students know of her high expectation demand, they come prepared to meet and sometimes even exceed the bar she sets. The implementation of high expectations by each one of the teacher participants and the result of students performing at a greater academic level conversely substantiates previous literature in where Scott and Moss-Bouldin (2014) suggested that an imposition of negative thoughts like student deficiency and
behavioral incompetence, communicate a mindset of low expectations among Black male students which eventually transposes into a continuous display of negative outcomes.

More than anything, the study revealed that Black male students require a high amount of praise and positive communication. Many of the teacher participants acknowledged that when examining the perceptions they had about their Black male students, there was always a constant need for praise. Miss Grape noticed that when working with a certain Black male student one-on-one, there was a certain way she had to approach him, how she praised him was instrumental to both his social and academic behavior. Her observation allowed her to recognize the struggles he was having in math, as she continued to work with him, she began to praise him for the small accomplishments he made. She noticed that in doing this, his confidence started to improve and his effort to try became more intentional. She also realized that through the relationship she had built with him, she was able to encourage the overall improvement he had made in math.

Seven of the nine teacher participants acknowledged having high expectations and communicating positive praise to be a necessary component when establishing relationships with Black male students. Miss Banana used positive communication to redirect a student who had developed a perception about teachers from previous interaction. She admitted that because of the student’s attitude in class, she had developed a negative perception, however after spending more time with the student and observing his behavior, she realized that she needed to reward him for the small wins in order to gain his trust. She stated that by implementing this, she was able to change his perception as well as her own, which resulted in him improving his mathematic academic behavior. This research finding supports Hamre and Pianta (2001) study
that suggested effective educators build positive relationships that cultivate student potential and motivate students to achieve academically.

**How Black Male Students Describe Their Relationships With Teachers**

Student participants provided insightful dialogue when describing how the positive teacher-student relationships they had experienced affected them. Initially, student participants linked their understanding of a teacher-student relationship to remaining strictly within the confines of the school setting, however as the interviews continued and students began elaborating more on the components that were important to them, it became evident that they had a truer understanding of how far beyond classroom boundaries, a successful and effective relationship really is. Fifteen of the twenty student participants attributed a teacher-student relationship to student compliance and respect. Nearing the end of the interviews, there seemed to be a small gap in detailing an exhaustive understanding in how all of the student participants truly felt about the effectiveness of the teacher-student relationship. There was an intentional focus on selecting Black elementary male student participants in grades 3-5, in order to establish an array of perspectives regarding teacher-student relationships. The problem that arose from doing this, however, was the minute details provided by a few of the participants. Overall, many of the participants provide a considerable amount of commentary when discussing the dynamic of the teacher-student relationship and how it encouraged them academically.

In addition, there is a demographic dynamic that played an impressionable role in how the teacher-student relationship not only encouraged these individuals, but also encouraged the teacher as well. The study revealed that 17 of the 20 students interviewed lived in a single-
parent household, many with no male influence at all. It was interesting to know that without male influence, students enjoyed the female presence of a teacher, regularly. One student stated that he enjoyed spending time with his female teacher because she “listens to me and shows that she cares about what happens to me.” This behavior was evident throughout several of the interviews. Moreover, student participants continually felt the need to reiterate how having a teacher who cared about them and motivated them to do better was an advantage in having the desire to perform well, or at least try. This confirmed Boaler’s (1998) study that opined, students are motivated when there is a perception that the teacher would provide academic support during academic activities.

**Limitations**

Positive teacher-student relationships generate a large amount of relational understanding between teachers and students. The dynamic of their structure creates the motivation and confidence that a student may need to achieve at optimum levels. Although useful in nature, the most effective teacher-student relationships can be hindered when teachers and students do not have a comprehensive understanding of how to cultivate the relationship properly.

There were two limitations that affected the results of the study and if approached differently may have resulted in more elaboration or perhaps, a more detailed perspective regarding the attitude of Black male students, their perceptions relating to the relationships they held with teachers, or how the relationship directly encouraged their achievement in mathematics.
To begin with, the participants were selected using a judgement sampling technique. This technique allowed for selection based from the assumption that certain individuals would make better subjects than others. Student participants were selected based on grade level and a variety of academic levels, while teachers were selected based on demographics such as years of experience and ethnicity. Although the results of the study were comprehensive, if the study were replicated and to add more depth to the results of the study, more consideration should be given to the possibility of a different sampling type, perhaps random sampling, as well as a different set of demographics relating to teachers and students. For example, having a male teacher from either ethnic group could have provided some insight into the differences of how female teachers perceive their student relationships to be versus male teachers. It might have been interesting to add in various elements of diversity among the teacher participants. With regard to students, the inclusion of Black male students living in a two-parent household may have brought insight into how these students relate to their teachers.

A second limitation was undoubtedly time constraints. Due to circumstances beyond the control of the researcher, much of the study had to be completed on site and during the school day, and at the discretion of the participants. Because of this, the duration of the interviews had to be kept within a pre-established timeframe. Therefore, if the study were to be replicated, consideration should be given to including a third data collection tool such as classroom observations that would allow for a broader block of time in which to gather data, establish more detail and add more depth to the study.
Implications of the Results for Practice, Policy, and Theory

The construction and cultivation of positive teacher-student relationships involve a series of intentional actions on the part of the teacher; add to that the element of building relationships with Black male students and it becomes a design that involves special considerations like high expectations, care and concern and respect. As the study confirmed, teachers who consistently develop high expectations, exhibit a large amount of care and concern along with respect, and who are culturally aware of their student’s needs, will be successful at encouraging them to do well academically, especially in the area of mathematics. Eddy and Easton-Brooks (2011) suggested that in order for teachers to be effective with minority students, there should be a strong connection between culture and knowledge—mainly through the incorporation of real world experiences. Miss Lemon, a research participant, suggested that one of the reasons Black male students display so much resistance is because they have trust issues— not knowing if the person is genuine about wanting to help them. Within the academic setting, Black male students require a great amount of social and academic attention and they do well with one-on-one interaction as well. Teachers who understand this dynamic seem to have more success with building positive relationships with their Black male students.

An identifying factor within the study was the need to relate academic experiences with home experiences, from a cultural standpoint. Because of the dynamic of many of the home situations regarding students, it became obvious for teachers to establish a premise of connection as related to the experiences of the Black male students they teach. Boykin et al. (2006) acknowledged that American schools tend to focus more on the widely accepted approach of
controlling one’s self separate and apart, which puts the home-life and school setting at odds. As a result, it is important for teachers to realize that this approach is both ineffective and unsettling for Black male students, especially when encouraging their academic improvement.

Both student and teacher participants agreed that a communication of high expectation between teacher and student was a necessary component to establishing a successful relationship. As one student stated, when his teacher lets him know what she’s expecting and how he needs to do it, it makes him feel like he wants to try harder to not let her down. Additionally, Ford and Moore (2013) opined, that a student who performs low has shown nothing that truly correlates with what his true academic abilities are capable of, however, teachers who communicate low expectations to their students will likely exhibit a negative relationship with those students and have students who perform accordingly (Yeldell, 2012). Student participants were rather vocal in communicating their disregard for teachers who did not motivate or failed to show genuine concern for their personal or academic well-being. This puts into perspective the perception that many Black male students have when choosing to interact with their teachers; therefore teachers must ensure that within their scope of influence lies the ability to build relationships with their Black male students that both motivate and encourage them to succeed academically.

Previously mentioned research has indicated that a good percentage of Black male students have hopes of graduating from high school. Garibaldi’s (1992) study confirmed that 95% of the students polled in his study, had expectations of graduating, however when teachers were polled regarding their Black male students going to college, 6 out of 10 of them responded negatively. The idea of this study highlights the notion that Black male students have strong
desires to improve academically, however if those desires fail to be cultivated through relationship, these students regrettably lose interest along with the internal motivation needed to complete the task. There is dire need for teachers and educators alike to build positive relationships; hold high expectations and display genuine care and concern for their Black male students.

There were certain behaviors identified by teachers that appeared to make building positive teacher-student relationships with Black males more difficult. Almost unanimously, teacher participants agreed that the inability to communicate and the misappropriated anger among Black males were prevalent. However, teachers also agreed that helping students through their personal issues was a key component in gaining their trust, and ultimately encouraged consistent academic improvement in math and other subjects.

**Recommendations for Further Research**

There are extensions to this research that may require further exploration. This is based on the following reasons.

1. This research study was conducted in a less affluent economic area where many of the students were without in-house male role models. As per much of the data provided by teacher participants, the lack of a male role model further substantiated the need for effective positive teacher-student relationships. Therefore, conducting a similar research study that included Black male students in more affluent neighborhoods and who have the benefit of a two-parent household may provide a broader span of research results and
bring a better perspective of factors that contribute to the need for positive teacher-student relationships.

2. The study was conducted at an elementary school with elementary teachers and students. Considering the effect of teacher-student relationships and whether or not these relationships encourage mathematic success, it may be beneficial to conduct a similar study with high school teachers and students to observe whether the identified themes are similar in both settings as related to Black male students.

3. Considering that the home and school setting bring a connection to a student’s ability to achieve academically, future research that links the teacher, parent and student connection together, would be beneficial in identifying ways in which the home and school setting can be interchangeable in encouraging effective relationships with the teacher.

4. The literature presented in this work provides insight into the fact that Black male students are academically inept in the area of mathematics. Although there have been an overarching focus on the potential causes of this deficiency, further research identifying ways in how to bring useful and effective resolutions would be beneficial to the overall topic concerning this demographic.

5. The focus of this study answered questions related to the encouragement of successful Black male student achievement through effective positive student-teacher relationships. Conducting a similar study that focused on whether and how positive teacher-student relationships affect academic achievement and the ways in which this is done would
provide a deeper understanding into how to provide resolutions and ways that are effective or ineffective.

Conclusion

The purpose of this study was to examine teacher and student perceptions of the relationships teachers have with their Black male students and explore how these relationships encourage the academic achievement of Black male students in mathematics education. Pianta et al., (1995, 1997) conducted a series of studies that identified the need for positive teacher-student relationships as well as the causes and effects these relationships bring; these series of studies transposed into the framework used to support the foundation of this research study.

Throughout the review of literature, there was a large amount of emphasis placed on the teacher and Black male student relationship as well as the effects of the positive and negative dynamics of such relationships. Teacher surveys and in-depth teacher and student interviews provided insight into how teachers facilitated the relationships with their Black male students and gave detailed accounts into the perceptions held regarding the effect of these relationships and how they felt these relationships encouraged the mathematics achievement among Black male students. Further data provided an insightful account into how Black male students perceived and described the relationships held with their teachers. Much of what the data showed aligned itself with what the presented review of literature provided.

Effective teachers agreed that genuine positive teacher-student relationships were both useful and necessary in encouraging Black male students to be successful in academic achievement, especially in the area of mathematics. The perceptions of these individuals further
substantiated the need for relationships that encourage cultural connections and external interaction, as well as high expectation and mutual respect. Although there is a need for further research in identifying ways through which the issue of low math achievement among Black males may be resolved, and whether teacher-student relationships definitively affect the academic achievement results of these individuals, the present research study has yielded some important insights. Firstly, it provided a significant amount of information that underscores the need for paying more attention to the teacher-student relationship amongst Black students. Secondly, it highlighted the importance of how different facets of the relationship shape academic achievement in mathematics. Lastly, these insights are critical in formulating relevant interventional educational policies for Black students in the context of mathematics learning and achievement.
References


http://dx.doi.org/10.1080/00223980.1982.9915373


http://dx.doi.org/10.1207/s15327671espr1102_3


https://doi.org/10.1086/443997


http://dx.doi.org/10.1037/0022-0663.95.1.148


http://dx.doi.org/10.1037/0022-0663.90.4.606


162


http://dx.doi.org/10.1207/s15430421tip4402_11


Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? 


169

https://doi.org/10.1017/S0954579400006519


http://dx.doi.org/10.1207/s15326985ep2804_4


Rajagopol, K. (n.d.) Create success! Retrieved from

http://www.ascd.org/publications/books/111022/chapters/Culturally-Responsive-Instruction.aspx


Steinberg, M. (1993). Teacher-student relationships and children's adjustment to kindergarten
Stigler, J. W., & Hiebert, J. (1999). The teaching gap: Best ideas from the world’s teachers for
of Georgia, Athens, GA.

Stinson, D.W. (2010). Negotiating the “White male myth”: African American male students and
31.


and Curriculum Development.


http://dx.doi.org/10.1080/00405849509543676

Tate, W.F. (1997). Race, ethnicity, SES, gender, and language proficiency trends in mathematics


Yeldell, K.M. (2012). Dispositions and practices that promote teacher-student relationships with African-American male elementary students (Published doctoral dissertation). The College of William and Mary in Virginia, Williamsburg, VA.


Appendix A: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

**Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

**Explanations:**

*What does “fraudulent” mean?*

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

*What is “unauthorized” assistance?*

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.
Statement of Original Work

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University-
Portland Academic Integrity Policy during the development and writing of this
dissertation.
2. Where information and/or materials from outside sources has been used in the production
of this dissertation, all information and/or materials from outside sources has been
properly referenced and all permissions required for use of the information and/or
materials have been obtained, in accordance with research standards outlined in the

Makeba C. Butler

Digital Signature

Makeba C. Butler

Name (Typed)

July 15, 2017

Date
# Appendix B - Student-Teacher Relationship Scale – Short Form

**Robert C. Pianta**

Child: ________________________________________ Teacher: ______________________________________

Grade:________

Please reflect on the degree to which each of the following statements currently applies to your relationship with this child. Using the scale below, circle the appropriate number for each item.

<table>
<thead>
<tr>
<th>Definitely does not apply</th>
<th>Not really</th>
<th>Neutral, not sure</th>
<th>Applies somewhat</th>
<th>Definitely applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I share an affectionate, warm relationship with this child.  
   | 1 | 2 | 3 | 4 | 5 |

2. This child and I always seem to be struggling with each other.  
   | 1 | 2 | 3 | 4 | 5 |

3. If upset, this child will seek comfort from me.  
   | 1 | 2 | 3 | 4 | 5 |

4. This child values his/her relationship with me.  
   | 1 | 2 | 3 | 4 | 5 |

5. When I praise this child, he/she beams with pride.  
   | 1 | 2 | 3 | 4 | 5 |

6. This child spontaneously shares information about himself/herself.  
   | 1 | 2 | 3 | 4 | 5 |

7. This child easily becomes angry with me.  
   | 1 | 2 | 3 | 4 | 5 |

8. It is easy to be in tune with what this child is feeling.  
   | 1 | 2 | 3 | 4 | 5 |

9. This child remains angry or is resistant after being disciplined.  
   | 1 | 2 | 3 | 4 | 5 |

10. Dealing with this child drains my energy  
    | 1 | 2 | 3 | 4 | 5 |

11. When this child is in a bad mood, I know we’re in for a long and difficult day.  
    | 1 | 2 | 3 | 4 | 5 |

12. This child’s feelings toward me can be unpredictable or can change suddenly.  
    | 1 | 2 | 3 | 4 | 5 |

13. This child is sneaky or manipulative with me.  
    | 1 | 2 | 3 | 4 | 5 |

14. This child openly shares his/her feelings and experiences with me.  
    | 1 | 2 | 3 | 4 | 5 |

© 1992 Pianta, University of Virginia.
Appendix C- Permission to use the STRS- Short Form

Makeba C. Butler

Good day, Dr. Pianta,

My name is Makeba Butler and I am a doctoral candidate studying at Concordia University- Portland. I am currently working on my dissertation research study, *An Examination of Positive Teacher-Student Relationships and how they encourage the Mathematics Achievement of Black Males*, and would like permission to use the student-teacher relationship form as a survey tool. If you do approve the use of this tool in my study, I would simply need a brief letter of approval so that I may include it as an appendix in my dissertation. Your immediate attention to this request would be greatly appreciated.

Thank you in advance,

Makeba C. Butler

Pianta, Robert C. (rcp4p)

You have my permission to use the short form of the Student-Teacher Relationship Scale for the purposes of research as outlined in your note below.

---------------------------------------------------------
Robert C. Pianta, Ph.D.
Novartis US Foundation Professor of Education
Dean, Curry School of Education
Founding Director, Center for Advanced Study of Teaching and Learning
PO Box 400260
University of Virginia
Teacher Participant Consent Form

Dear Colleague,

My name is Makeba C. Butler, Doctoral Candidate with Concordia University- Portland. I am doing a research study entitled, *An Examination of Positive Teacher-Student Relationships and how these Relationships Encourage the Mathematics Achievement of Black Males*. The purpose of this study is to examine teacher and student perceptions of the relationships teachers have with their African American male students and explore how these relationships encourage the academic achievement experiences of African American male students in mathematics education.

Your participation in this study will be greatly appreciated. As a participant, you will be asked to take part in an initial survey and one face-to-face interview. The interview will take place in person at a mutually agreeable time, here on the school campus; each interview will last no more than 30 minutes. The total time commitment will be approximately 1 hour spread over several weeks.

I appreciate your consideration and will confirm your participation no later than 30 Nov 2016.

________________________ Yes, I do consent to participate in this study.

________________________ No, I do not consent to participate in this study.

Respectfully,

Makeba C. Butler, M.Ed.
Doctoral Candidate
Concordia University- Portland
Appendix E- Student Participant Consent Form

Student Participant Consent Form

Dear Parent,

My name is Makeba C. Butler, Doctoral Candidate with Concordia University- Portland. I am doing a research study entitled, *An Examination of Positive Teacher-Student Relationships and how these Relationships Encourage the Mathematics Achievement of Black Males*. The purpose of this study is to examine teacher and student perceptions of the relationships teachers have with their African American male students and explore how these relationships encourage the academic achievement experiences of African American male students in mathematics education.

Permission for your child’s participation in this study will be greatly appreciated. As a participant, your child will be asked to take part in one face-to-face interview and. The interviews will take place in person at a mutually agreeable time, here on the school campus; and will last no more than 30 minutes. The total time commitment will be approximately 1 hour spread over several weeks.

I appreciate your consideration and will confirm your child’s participation no later than 30 Nov 2016.

______________ Yes, I give permission for my child to participate in this research study

______________ No, I do not give permission for my child to participate in this research study

Respectfully,

Makeba C. Butler, M.Ed.
Doctoral Candidate
Concordia University- Portland
Appendix F- Interview Protocol- Teacher

1. How would you define a positive teacher-student relationship?

2. How would you describe a positive teacher-student relationship in your class?

3. Is there a particular African American male student with whom you have developed a positive relationship and that relationship has helped the student improve his math academic performance?
   (Please refrain from naming the student)

4. Describe the positive-student relationship that you have with this student? What are the characteristics of this relationship that have contributed to his academic success in math?

5. Think back to the beginning of the school year and describe for me the process and perhaps the events that occurred in developing this relationship with the student.

6. What challenges did you occur in developing a positive relationship with the student?

7. What is your perception of how this teacher-student relationship contributed to the success of this student?

8. Are their specific behaviors held by African American males that make the relationship - building process more difficult, as compared to females? Compared to males of other ethnic background?

9. How are your relationships with the African-American male elementary students in your class unique compared to your relationships with other students?

10. Have you ever been unsuccessful in forming positive relationships with African-American male elementary students? Why do you think this happened?
Appendix G - Interview Protocol - Student

1. How would you define a positive teacher-student relationship?
2. How would you describe a positive teacher-student relationship with your teacher?
3. Is there a particular teacher with whom you have developed a positive relationship and that relationship has helped you improve your math academic performance? (Please refrain from naming the teacher)
4. Describe the positive-student relationship that you have/had with this teacher? What are the characteristics of this relationship that have contributed to your academic success in math?
5. Think back to the beginning of the school year and describe for me the process and perhaps the events that occurred in developing this relationship with that teacher.
6. What challenges did you incur in developing a positive relationship with the teacher?
7. What is your perception of how this teacher-student relationship contributed to your success?
8. Are their certain things that make it difficult to have a positive teacher-student relationship?
9. How is your relationship with your teacher this year compared to your teacher last year?
10. Have you ever had a negative relationship with a teacher? If so, what happened?
CONSENT FORM

Research Study Title: An Examination of Positive Teacher-Student Relationships and how these Relationships Encourage the Mathematics Achievement of Black Male.
Principal Investigator: Makeba C. Butler
Research Institution: Concordia University- Portland
Faculty Advisor: Dr. Mark Jimenez

Purpose and what you will be doing:
This is a study to examine teacher and student perceptions of the relationships teachers have with their African American male students. The study will explore how these relationships encourage the academic achievement experiences of African American elementary male students in mathematics education. We expect a teacher-student combination of approximately 20 study participants. No one will be paid to be in the study. We will begin enrollment on __11/1/2016___ and end enrollment on __12/31/2016__. To be in the study, you will be expected to: participate in one survey and one interview, for a total of 1 hour over the course of several weeks. During the interview, you will be asked questions regarding your experiences concerning established teacher-student relationships with African-American elementary male students and how you believe these relationships encourage African American male students.

Risks:
There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept on a password-protected computer accessible only by the principal investigator. When I or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyze the data. We will not identify you in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed at the conclusion of the study.
Benefits:
Information you provide will help to establish a deeper understanding of the effectiveness of teacher-student relationships. You could benefit from this by establishing a premise of understanding as you communicate how relationships are built and maintained among your students and how these relationships allow African American male students to want to learn math and become more successful, academically.

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety. To ensure confidentiality, a pseudonym, chosen by the researcher will be used to protect your identity. All audio recordings and written records will be stored on a password protected computer which will be accessible only by the participating researcher. Three years after the conclusion of the study, all pseudonyms and other identifying information will be destroyed.

Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking them. You do understand that you do not have to answer every question asked of you, and you are free to withdraw your consent and discontinue participation in this study at any time by informing the researcher.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Makeba C. Butler at [redacted]. If you would like to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch.
Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. My signature below signifies that I have received a copy of this consent form that is mine to keep, and I consent to participating in this case study.

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investigator Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investigator Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Investigator: Makeba C. Butler  email: c/o: Professor Mark Jimenez Concordia University – Portland 2811 NE Holman Street Portland, Oregon 97221