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Teacher and Student Variables Affecting Special Education Evaluation and Referral

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Walden University
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Abstract

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MHS, Lincoln University, 2009

BS, Lincoln University, 1989

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

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Abstract

Past research has revealed that African American/Black boys are referred for special education evaluation at disproportionately higher rates than boys of other racial/ethnic groups. This correlational study used survey methodology to examine whether student and teacher demographic variables predicted how likely a teacher would refer boy students for special education evaluation. The following questions guided this research:1) To what degree does student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion predict how likely a teacher would refer boys' to special education after controlling for teacher's years of experience in general and special education? 2) What are the differences in teacher ratings regarding the severity of classroom behaviors based on the students' race/ethnicity? Cultural theory and social exclusion theory were used to guide this research. Data were collected through the researcher developed Teacher Rating Form from 110 teachers. Results from a multiple linear regression revealed that years of teaching experience, race of teacher, race the student, and teacher attitude toward inclusion were statistically significant predictors of teacher referral to special education. However, the effect size was small. Results from the ANOVA procedure revealed no statistically significant differences in teacher ratings for severity of described classroom behaviors based on the students' race/ethnicity. Findings form this study could be used to promote social change by increasing teacher awareness of how certain teacher demographics affect teacher referral of boys to special education. Findings can be used to advocate for training and seminars that could promote cultural understanding among teachers that may lead to and reduce the number of referrals.

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Dedication

I like to give special acknowledgment to Dr. Sandra Harris, chair of my dissertation committee, for her calm steadfastness, unwavering support, encouragement, forthrightness, and understanding during the many quarters I spent on my proposal. I also acknowledge Dr. Veronica Carey, dissertation committee member, who is also an alumni of my graduate school Lincoln University. She gave her commitment early in my dissertation coursework, for which I am so fortunate, and she did not let me down over the many quarters; thank you for your encouragement. I hope soon to work with her and Dr. Harris on some higher level research to perfect my craft. I feel with both professors I was able to complete the dissertation. Also, Dr. Fredrick Wiener, who dedicated countless hours helping me to realize the basics of statistical analysis, and he was never bashful about telling me about my weakness and strengths. Moreover, I thank J.T. (you know who you are), Denise Kennedy for their generous assistance, and the school district, and all the faculty, administrators, and teachers. A special thanks to the vice principal at the research site for allowing me to carry out my study and for all the teachers and their participation.

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Chapter 1: Introduction to the Study

Introduction

According to the Centers for Disease Control and Prevention (2013), over the past two decades, school age students have been increasingly diagnosed with behavioral disorders. A study conducted by the Association of Educational Psychologists (2011) revealed that between 1990 and 2010, 650,000 students between 4 years and 17 years of age in the United States were diagnosed with behavioral disorders, and many of those students received special education support. Educators and school systems have grown accustomed to special education evaluation and referral as an approach to dealing with disruptive behavior, and this practice has contributed to the increased number of students being referred to the school psychologist for special education evaluation (Beckford, 2012). Many students, as young as 4 years of age, are labeled and subsequently socially excluded from mainstream education by being referred for special education evaluation and placement (Fallon, 2012).

Results from a recent study also revealed that boy students were referred at slightly higher rates than female students, and African American boy students were referred at higher rates than any other students (Eiland, 2009). Recent research has shown that African American students are disproportionately referred for special education evaluation when compared to students from other ethnic groups (Vincent, Tobin, Hawken, & Frank, 2012; Zhang, Katsiyannis, Ju, & Roberts, 2014).

In this study, I investigated the problem of male, particularly African American male, students being disproportionately referred for special education evaluation. A

positive social implication of this study was that it provided information about the student and teacher characteristics that are related to special education referrals for boy students of African descent. The intent of the study was to promote awareness and subsequently attempt to reduce special education referrals related to certain demographic characteristics of students and teachers.

In Chapter 1, I presented the background; the purpose, nature, and significance of the study are introduced. I also articulated the problem statement, research questions, hypotheses, the scope, limitations, and delimitations of the study. Additionally, I presented the conceptual framework and rationale for choosing the particular theoretical foundation for this study.

Background of the Study

Alexander (2010) defined *disproportionality* for this purpose as a situation whereby a particular racial/ethnic group of students is represented in an environment at a percentage that is higher or lower than their representation within a total population. Recent studies have shown that African American students are referred for special education evaluation at a higher rate compared with students of other ethnic groups (Vincent, Sprague, et al., 2012; Zhang et al., 2014). According to Vincent, Sprague, et al. (2012), African American students had an increased probability of being referred for supplemental support in elementary school, and they were subsequently less likely to be given supplemental support when in middle school.

Several studies have investigated different variables that are related to teacher referral of students to special education evaluation. Tejeda-Delgado's (2009) quantitative

study focused on the relationships between teacher effectiveness, teacher tolerance, and teacher gender and teacher referrals to special education evaluation. Although the author used a large sample of 167 school teachers from an urban elementary school district in the State of Texas, no substantial relationships were indicated between teacher effectiveness, teacher tolerance, and teacher gender and the number of student referrals made for special education evaluation (Tejeda-Delgado, 2009). Moreover, there were no differences in teacher tolerance and teacher efficacy as a function of gender (Tejeda-Delgado, 2009). However, Tejeda-Delgado did not investigate whether the variables were related to the referral of African American boy students, compared to other ethnic groups, for special education evaluations.

Eiland (2009) performed a study to assess the connection between teacher experience and teacher referral decisions. The findings showed that teachers with more teaching experience were more likely to refer boy students for special education services. Results from the study also revealed that boy students were referred at slightly higher rates than female students and African American boy students were referred at higher rates than any other students.

Martin (2014) examined whether implicit racial bias among teachers was related to African American students being disproportionately referred for special education. The target population consisted of a demographic mix of 307 Iowa City Community School District kindergarten through sixth grade teachers solicited through an e-mail survey (Martin, 2014). The data collection consisted of a factorial survey design. The participants assessed five vignettes that included five questions, each typifying the special

education referral process in addition to an implicit and explicit racial bias measure and demographics (Martin, 2014). Results from the logistic regression showed that teachers who had high levels of explicit racism were more likely to refer a student for a special education assessment (Martin, 2014). Martin's study was significant to my study because it examined two factors related to possible referral of the student to special education. The author looked at implicit and explicit teacher racial bias. In my study, although I was not looking directly at implicit or explicit racial bias, I did investigate whether student/teacher demographics such as student race and severity of student behaviors predicted the probably of teacher referrals to special education.

In another study, Elhoweris, Efthymiou, and Haq (2015) used a stratified cluster sampling technique to investigate differences in teacher referral decisions according to teacher gender and teacher self-efficacy. Participants rated how likely they would refer students to special education by responding to statements that described different types of behavior problems. Participants rated the likelihood of referral using a 4-point Likert scale from (1 = *Would not refer*; 2 = *Unlikely to refer*; 3 = *Likely to refer*; and 4 = *Would definitely refer*). The data analysis was conducted using an analysis of variance (ANOVA) procedure. A careful assessment of the mean for the female and male teachers revealed that female teachers were more likely to refer students to special education services than the male teachers.

Much of the past literature has examined which individual factors lead to the disproportionate referral of students belonging to minority groups, particularly African American boys, and young men, for special education evaluation. Some researchers

looked at teacher ability to determine what constitutes a referral to special education; other researchers investigated teacher perspectives about the inclusion of students referred to special education. Swain, Nordness & Leader-Janssen (2012). Other studies have examined teacher gender and self-efficacy as factors related to the disproportionate number of boy students referred for special education evaluation. Elhoweris, Efthymiou & Haq (2015). However, I did not locate any studies that examined how variables such as student race/ethnicity, teacher race/ethnicity, teacher gender, and teacher attitude toward inclusion related to how likely a teacher would be to refer to special education after controlling for teachers' years of experience in general and special education. I also did not locate any studies that examined differences in teacher ratings regarding the severity of classroom behaviors based on the students' race/ethnicity.

Statement of the Problem

Boy students, particularly African American boy students, are over represented in special education due to teacher referrals for special education evaluation due to disruptive student behaviors (Vincent, Sprague, et al., 2012; Zhang et al., 2014). Ünal and Ünal (2012) contended that teachers customarily refer students for special education evaluation as a method for handling behaviors they consider disruptive to the learning process. Codrington and Fairchild (2012) posited that special education evaluation placements often come with lower teacher expectations, segregation of students from the general learning population, and has a negative impact on students' self-concepts. Furthermore, the outcomes of special education evaluation and placement tend to reinforce the negative perceptions of special education (Codrington & Fairchild, 2012).

Many students in the United States are labeled and subsequently socially excluded from the mainstream learning process as a result of subjective behavioral assessments provided by their teachers (American Psychological Association: Presidential Task Force on Educational Disparities, 2012; Codrington & Fairchild, 2012; Fallon, 2012).

Social exclusion is a prevalent social condition that exposes groups of people to social hindrances caused by individual bias and prejudice (Fallon, 2012). Most commonly, social exclusion relegates and discounts groups of people from social opportunities (World Health Organization [WHO], 2015). What is known is that social exclusion is an observable fact that is frequently observed in the educational system (Kastanakis & Voyer 2014). Kearney's (2011) research highlighted the negative effects of exclusive settings for students with special needs. Studies have shown that children, when placed in special education, often do not complete high school, do not pursue secondary level education, and they tend to have higher rates of incarceration (Association of Educational Psychologists, n.d.; Kearney, 2011). There is a body of literature that has pointed to the disproportionate representation of students of color receiving special education services (Ellmer, 2010). However, there has been limited research focused on identifying how variables such as student and teacher race/ethnicity, teacher gender, and teacher attitude toward inclusion are related to a teachers' decision to refer a student for special education.

Purpose of the Study

The purpose of this study was to investigate the predictive relationships between the independent variables (i.e., race/ethnicity of the student, teacher gender, teacher

race/ethnicity, and teacher attitudes toward inclusion) and the probability that a teacher would refer a boy student for special education. Teaching experience in general and special education were entered as covariates. Data were collected from teachers who taught in the Philadelphia, Pennsylvania, public school system. The study was limited to high school teachers.

Research Questions and Hypotheses

The intent of this quantitative study was to gather knowledge regarding the predictive relationships between the variables related to teacher referral of students for special education evaluation. The two research questions that guided this study and the associated hypotheses were as follows:

RQ1: What is the predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, teacher attitude toward inclusion and likelihood of teacher referral to special education after controlling for teacher experience in general and special education?

$H_0$1: There is no statistically significant predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5-point scale) and how likely a teacher would refer to special education (measured on a 5-point scale) after controlling for teacher experience in general and special education in years.

H_a1: There is a statistically significant predictive relationship among student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5-point scale) and how likely a teacher would refer to special

education (measured on a 5-point scale) after controlling for teacher experience in general and special education measured in years.

RQ2: What are the differences in teacher ratings regarding the severity of described classroom behaviors based on the students' race/ethnicity?

$H_0$2: Null Hypothesis There is no statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

H_a2: There are statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

The independent variables were race/ethnicity of the student, race/ethnicity of teacher, gender of the teacher, and teacher attitudes toward inclusion. The dependent variables were the likelihood of a teacher referral for special education and teacher ratings of the severity of a student behavior. The years of teaching experience and years of experience teaching special education students were entered as covariates. The variables related to race/ethnicity and teacher gender were nominal or categorical variables. Years of teaching experience with general and special education students were ratio variables, as teaching experience can range from 1 year to any number of years. Teacher attitude toward inclusion was an interval level variable. The teacher referral variable was an interval level variable, which would measure how likely a teacher would refer a given student for special education evaluation based on descriptions of classroom behavior. For Research Question 1, hierarchical multiple regression procedures were

conducted to determine whether the independent variables predicted the probability that a teacher would refer a student for a special education evaluation based on descriptions of classroom behavior. For Research Question 2, the ANOVA procedure was used to determine whether there were differences in teacher ratings of the severity of classroom behavior based on the race/ethnicity of the students. The severity of classroom behavior was measured using an interval level scale.

Conceptual Framework

The concept of the cultural theory was first introduced by Douglas (1978) as a concept paper and later revised by Douglas and Wildavsky (1982) to explain how people form perceptions of risk. The premises of cultural theory now more broadly suggest that individuals form perceptions of their world experiences that are consistent with the broad systems of attitudes and beliefs that reflect their cultural way of life (Kahan, 2012). The worldviews held by members of various groups frequently lead to cultural biases, which cause the group members to judge others based on the adopted cultural biases. Therefore, the major premise of the cultural theory is relevant for explaining cultural beliefs that influence teacher perceptions of student behavior in the classroom.

The premise of social exclusion also contributes to the conceptual framework for this study because it explains the persistent social challenge that occurs when certain groups of people are subjected to artificially impose and enforced barriers in a given society (Kastanakis & Voyer 2014). Social exclusion, according to the WHO (2015), is an endemic human social problem that is based on power and control. Social exclusion typically manifests biases and prejudices that result in discrimination based on gender,

sex, or disability status. Social exclusion also results in the marginalization and exclusion of groups of people from social opportunities (WHO, 2015). Such exclusions are a byproduct of culturally biased testing and structural racism that perpetuates the belief that certain groups of people are innately inferior to other groups (Codrington & Fairchild, 2012). Past research has revealed that the phenomenon of social exclusion is linked to the significant number of boy children being referred for special education evaluation and placement (Kearney, 2011). Social exclusion encourages forms of social stratification based on unequal access to power, influence, education, economic status, and prestige. According to Codrington and Fairchild (2012), teachers are inextricably connected to the social exclusion problem because they are typically the first to make the initial special education referrals. Therefore, social exclusion theory is relevant for this study because it addresses the outcomes for students who are inappropriately referred for special education evaluation and placement.

Nature of the Study

The quantitative, correlational research design was appropriate for this study because the intent of the research was to gather empirical knowledge regarding the predictive relationships between a set of variables. Surveys were used to collect data from high school teachers in the Philadelphia, Pennsylvania area. The study was correlational because the intent of the research was to investigate the predictive nature of the independent variables as these are linked to a specific outcome (the dependent variable; Leary, 2011). The independent variables were race/ethnicity of the child, teacher gender, teacher race/ethnicity, and teacher attitudes toward inclusion. The dependent variable was

the probability that a teacher would refer boy students, particularly African American boy students, for special education. The covariates were teacher experience with teaching in general and special education.

Definition of Terms

The definitions section consists of important terms used in this study:

African American: African American has become a bicultural term in its nature in relation to American culture because those who identify as African American are driven to adjust and have assimilated into mainstream culture due to social, intellectual, and economic status (Hairston & Smith, 1983).

Attitudes: An individual's outlook that prompts how he or she will positively or negatively respond to all aspect of his or her life (Morin, Rivard, Crocker, Boursier, & Caron, 2013).

Exclusion: A state characterized by unequal access to resources, power, and rights that leads to a broad range of inequalities (WHO, 2015).

General education: The combination of integrated learning experiences that are constructed across different subjects to provide the skills and knowledge necessary for all students to serve in society (Tomlinson, 2015).

Inclusion: The exclusive placement of students deemed needing accommodations due to special characteristics and placed with students in the general educational setting with specific supports to allow students to function adequately with the same level of opportunity/learning experience as their peers (Waldron, McLeskey, & Redd, 2008).

Social emotional disturbance: The Individuals with Disabilities Education Act (2004) defined emotional disturbance as a condition where a student exhibits one or more of the specific behavioral characteristics over a prolonged period of time and to a discernable degree that negatively affects a student's educational functioning:

- A failure to understand that cannot be explained by intellectual, sensory, or physiological factors.
- Incapacity to establish or sustain acceptable social relationships with peers and teachers.
- Unacceptable forms of behavior or feelings under typical circumstances.
- An unusual pervasive mood of unhappiness or depression.
- The propensity to create physical symptoms or fears related to personal or school problems.

Teacher attitudes toward inclusion: Attitude is a psychological predisposition expressed with particular measure of favor or disfavor toward an individual or group (Eagly & Chaiken, 1993). Teacher attitude toward inclusion refers to those subjective thoughts, feelings, emotions, and perceptions about student demographics that influence the activity of including students as opposed to referring them to a special education environment (Cassady, 2011).

Social exclusion: The practice of establishing a social hierarchy that is centered on disproportionate access to power, influence, economic status, prestige, and control. Income, education, occupation status, gender, race/ethnicity, and other factors are used as chief indicators of these distinct social positions (WHO, 2015).

Special education: Instruction designed to meet the physical, social-emotional, and intellectual needs of students with a special need (Tomlinson, (2015).

Teachers: Persons of different races, ethnicities, genders, various ages, and years of experience whose profession is the practice of instructing and educating students (Vajoczki, Savage, Martin, Borin, & Kustra, 2011).

Assumptions

There were multiple assumptions related to this study. First, I assumed that teachers would read and complete the questionnaire. I further assumed that teachers would respond honestly and objectively to each scenario. Secondly, I assumed that special education and regular education teachers would respond authentically and without predilection regarding their attitudes toward inclusion as addressed by the survey questions. Thirdly, I assumed that all teachers would answer the questions based only on a description of the student's behavior using the Teacher Rating Form (TRF) described in Chapter 3. In addition, I assumed that the participants' responses would not be influenced by implicit or explicit bias due to the wording of the survey items and design of the survey. These assumptions were necessary because the respondents' answers, if answered objectively, provide some information regarding the phenomenon of teacher referral of boy students for special education evaluation and the independent variables related to the study.

Scope and Delimitations

The following delimitations identify the boundaries of this study. The scope of the study addressed teacher referral of boy students for special education evaluation. This

study focused on one high school within a large urban school district. The website for the school district reported that the teacher population of the target school exceeded 100 individuals. The specific focus of the problem was chosen because of the increased numbers of boy students, particularly African American boy students, in special education and the increased numbers referred for special education evaluation. The aim of the study was to explore whether there was a predictive relationship between specific student and teacher variables related to a teacher's decision to refer African American boy students for special education evaluation.

By not employing random selection in this study and by utilizing a convenience sample of participants, I may have increased the threat of selection bias and diminished the generalizability of the results to other samples of teachers (Mertens, 2013). External validity is concerned about the researcher's ability to draw conclusions related to a study that can be generalized to other categories of people, settings, and times (Salkind, 2010). In this study, high school teachers from the study school district were surveyed. The outcomes from this study, therefore, may not be generalizable to other teachers in other municipalities and countries. Furthermore, the results may not be generalizable to teachers in other private, religious-based, or charter high schools.

Limitations

This study had several limitations. First, there was the possibility that the sample may not represent the total population of teachers in the school district. Second, teachers may have stereotypes or predilections toward a particular race/ethnicity that make their choices more subjective. The study included teachers with general and special education

teaching experiences. To minimize the limitations of this study, the participants were given the survey in person in the environment where they worked with students. According to Pedhazur and Schmelkin (2013), participants tend to respond more truthfully when the survey is taken in an environment that is associated with the subject matter, thus increasing the validity of the results.

Other limitations of this study pertained to the methodology that was used. Correlational studies will not establish or show decisively that two variables are causally related (Creswell, 2013). The principal limitation to be concerned about is the accuracy of the descriptions of the behaviors of the fictitious student in the survey (Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2003).

Another threat pertained to the instrumentation that was used in this study. I created my own survey/instrument to assist in the data collection. The instrument did not have pre-established reliability and validity indices. However, I asked two experts in the field of behavioral/conduct disorders to examine the instruments for face validity and content validity. They determined whether the descriptive behaviors represented normal to problem behavior and were suitable for the study. Details regarding the survey and development of the survey are presented in Chapter 3.

Significance of the Study

The primary purpose of this study was to continue addressing the critical issue of boy students, specifically African American boy students, being continually referred for special education evaluation at a disproportionate rate compared to other ethnic/racial groups (Codrington & Fairchild, 2012). Consequently, African American boy students

continue to be marginalized in the educational system through systematic social exclusion. Furthermore, a major goal of this study was to gather and provide data that may be used to support the need for education and training programs that encourage the teachers to examine their attitudes and personal biases when it comes to teaching African American boy students and the teachers' decision to refer them for special education evaluation. The positive social change implications encouraged by this study are to raise the awareness of teachers. Also, other professional practitioners in the educational system can learn about how variables such as student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion are related to the teacher referral of boy students for special education evaluation. Results from the study could be used to advocate for cultural sensitivity awareness and training seminars that inform educators of the results. Such training could hypothetically reduce the number of boy students, particularly African American, being referred for special education evaluation.

Summary

The purpose of this study was to investigate whether variables such as race/ethnicity, teacher gender, teacher attitude toward inclusion, and years of teaching experience in general and special education are related to the teacher referral of boy students, particularly African American boy students, for special education evaluation. Codrington and Fairchild (2012) presented statistics that showed that African American students embodied just 16% of all students in the United States; however, 21% of African American students consist of the total population in special education, and impoverished African American children were 2.3 more probable to be classified by their teacher as

having behavior problems than their White cohorts. Various studies have been conducted to determine the association between student referral for special education, particularly African American boy students, and the long-term implications.

The chapter also provided the conceptual framework for the study rooted in the premises of cultural theory and social exclusion theory. Both provided the understanding for why it is possible for teachers to practice bias in their judgment when working with various races and ethnic groups and how implicit bias and stereotyping could undergird their decision to refer African American boy students more readily for special education evaluation. A brief overview discussed several assumptions, related to teacher objectivity and self-efficacy being objective, honest, and impartial when responding to the survey questions. The scope and limitations were provided to identify the boundaries of this study and how those identified limitations influenced the validity of the research. In addition, the scope of the research was designed to address what specific predictive variables impact the research.

Finally, the chapter concluded with a brief discussion on the significance of the current study and its social implication. Chapter 1 concluded with a discussion of the implications for positive social change, which is to raise teacher awareness of demographic variables related to boy referrals for special education evaluation. Results from the study could be used to demonstrate the need and advocate for cultural sensitivity and teacher awareness training. In Chapter 2, I present research that examined the independent variables (i.e., race/ethnicity of the child, teacher gender, teacher race/ethnicity, and years of teaching experience in general and special education, and

teacher attitudes toward inclusion) and the dependent variables (teacher referral of boy students to special education evaluation). Chapter 2 also highlights social exclusion theory, cultural theory, and research on teachers' attitudes toward inclusion.

The following chapter addresses the disproportionate representation of students of color in special education, student characteristics, teacher-related variables, and other factors related to referrals of boy students to special education. Chapter 3 provides a description of the research methodology and design that were employed in this study. Additionally, Chapter 3 details the sampling method, selection method, tools, and targeted participants. The data collection methods and data analysis procedures are also delineated. In Chapter 3, the research ethical guidelines and participant protections are also clarified.

Chapter 2: Literature Review

Background

According to the Centers for Disease Control and Prevention (2013), over the past two decades, school age children have been increasingly diagnosed with behavioral disorders. Results from a study conducted by the Association of Educational Psychologists, n.d.; Kearney, (2011) reported that between the years 1990 and 2010, 650,000 children between 4 and 17 years of age in the United States were diagnosed with behavioral disorders and prescribed psychotropic medication. In addition, boy students were placed in special education at rates higher than female students. Past research has shown that African American boy students were referred for special education evaluation and placement at disproportionate rates than other groups, even when their behavior did not warrant it (Alexander, 2010).

Several studies examined the bivariate relationships between variables such as gender of teacher, years of teaching experience, teacher attitudes toward inclusion, and teacher referral to special education. However, there was limited research that investigated the degree to which factors such as race/ethnicity of student, teacher gender, teacher race/ethnicity, and years of teaching experience in general and special education, and teacher attitudes toward inclusion combine to affect how likely a teacher would be to refer an African American boy student for special education evaluation. The purpose of this study was to determine the predictive relationships between variables such as race/ethnicity of child, teacher gender, teacher race/ethnicity, teacher attitudes toward inclusion, and how likely a teacher would be to refer boy students, particularly African

American boy students, for special education evaluation after controlling for years of teaching experience in general and special education.

This chapter presents literature regarding the scope and causal factors that may be associated with student referrals for special education evaluation based upon variables such as race/ethnicity of the student, teacher gender, teacher race/ethnicity, and teachers' years of teaching experience in general and special education and teacher attitudes toward inclusion. In addition, Chapter 3 I address the research design for this study.

Literature Search Strategy

The majority of the literature included in this chapter was published within the past 5 years. Relevant articles were taken from the Walden University research library database. The Walden University Library is equipped with significant and multiple databases (i.e., Thoreau, EBSCO, and other scholarly databases for relevant topics; Laureate Education, 2010). The literature search was conducted using peer-reviewed journals, books, and national research organizations such as the Centers for Disease Control and Prevention. Journals in education, counseling, and social psychology were also explored in the areas of interest and subject matter. The key terms used in the search were as follows: *special education referrals centered on race and gender of the student; disproportionate referral of boy students such as African American boys to special education; teacher gender and referral of African American boy students to special education; teacher race/ethnicity and referral of African American boy students to special education; teacher feelings about inclusion and referral of African American boys students to special education; teacher years of experience and referral of African*

American boy students to special education. The subjects were then narrowed to specific, relevant topics within the subject areas to pinpoint the proposed investigation (Laureate Education, 2010). Only articles detailing original, empirical studies (i.e., single-case methodology, experimental and quasi-experimental designs) focusing on teacher-student variables that lead to the referral of boy students to special education was selected. This resulted in an examination a total of 435 articles. This chapter presents literature regarding how the variables of race/ethnicity of the student, teacher gender, teacher race/ethnicity, teachers' years of experience in general/special education, and teacher attitudes toward inclusion affect teacher referral of boy students, particularly African American students, to special education.

Conceptual Framework

Principles from two theories provided conceptual framework for this study. Those two theories are social exclusion and cultural theory.

Social Exclusion

The concept of social exclusion provided the theoretical foundation for this research. The concept of social exclusion originated in France around the 1970s and has since been adopted and recognized throughout Europe and around the world (Kastanakis & Voyer, 2014). There is a broad range of reasons why individuals or groups might be excluded in a given society. Social exclusion is a pervasive social problem that subjects groups of people to imposed barriers that exclude groups of individuals from social opportunities (Wormer, 2005). The phenomenon of social exclusion is related to the overrepresentation of boy children, particularly African American boys, referred for

special education evaluation and placement (Beckford, 2012). To some teachers, a child whose behavior deviates from socially or behaviorally accepted mainstream norms in any perceived way may become subject to implicit subtle forms of social exclusion in the educational environment.

Additionally, teachers may label students and refer them for evaluation based on their perceptions of "normal behavior" without considering how a student's culture, ethnicity, language, development, or gender may influence the child's behavior (Beckford, 2012). In addition, Beckford (2012) asserted that labeling and referring boy children for special education may lead to future problems. According to Beckford, many boy children are placed in special education and excluded from the "normal/mainstream" learning process. Consequently, those students have a high probability of not finishing high school, they are least likely to attend college, and they tend to have higher rates of incarceration (Beckford, 2012). In addition, early labeling due to school psychological evaluation and diagnosis of emotional or learning disorders may contribute to the development of psychosocial and emotional issues later in life (Beckford, 2012). Social exclusion often affects individuals, groups, or communities by preventing them from full participation in the economic, social, and political life of the society in which they live (Leary, 2001). Teachers' subjective labeling of children is subject to a biased perspective of "normal behavior" that fails to consider a child's behavior from a cultural perspective and is a form of social exclusion (Pedersen, 2007). Consequently, social exclusion theory serves as a good foundational theory for this study as does cultural theory discussed below.

Cultural Theory

According to cultural theory, individuals often view others through their own cultural lenses and make judgments based on their cognitive and cultural conditioning (Kastanakis & Voyer 2014). Teachers often do not understand enough about cultural differences associated with ethnic minority group cultural norms regarding acceptable behavior and therefore respond to the students' behavior through their own culturally conditioned experiences (Beckford, 2012). Consequently, teachers may label students based on their perceptions of "normal behavior" without considering how a student's culture, ethnicity, development, environment, and gender may have shaped their behavior that leads to referral for special education evaluation. The labeling that is frequently associated with special education leads to social exclusion (Beckford, 2012). Social exclusion is often caused by cultural misunderstanding, stereotyping, misinterpretation of the behavior of others, and personal bias (Kastanakis & Voyer, 2014). Social exclusion leads to a number of students, especially boys and young men, being referred to special education.

Overrepresentation of Boys and Minorities in Special Education

The *Brown v. Board of Education* (1954) ruling focused on creating greater racial equity in education (Ogletree, 2004). Overrepresentation of minorities in special education, as postulated by Raines, Dever, Kamphaus, and Roach (2012), is connected to limited school placements and is distressing given that current and past studies have shown that students classified as special needs and who receive special education services experience a number of negative outcomes such a social isolation, lower self-esteem,

mediocre education, low expectation, and are twice as likely to not finish high school. The authors also pointed out that students in special education are frequently exposed to unexceptional learning programs of study and held to lower academic standards than their peers (Raines, Dever, et al., 2012).

Raines, Dever, et al. (2012) contended that the issue of disproportionality among minorities and boy students in special education is a function of the method used to refer students for evaluation. The researchers posited that teacher interpretation of student behavior is used to decide whether students are referred to the school psychologist for a learning and emotional or behavioral disorder. Additionally, Raines, Dever, et al. (2012) indicated that the current system used for special education referral contributes to special placement, is peculiar, and embodies inaccuracy. Their research revealed that limited teacher resources, ineffective behavior management strategies, and the partisan climate within school administration regarding special education referrals all have influenced the referral practices. They also discovered that disruptive classroom behavior and poor student academic engagement shaped teacher perceptions around disability and special education referrals (Raines, Dever, et al., 2012). A subsequent study contended that misdiagnosis of children of various racial, ethnic, and demographic groups is a causal factor for confusing disability with diversity (Moreno & Gaytán, 2013). Furthermore, the misrepresentation of minority students in many disability categories exists because teachers may be deficient in their understanding of the differences between disability and diversity.

Vincent et al. (2012) conducted a study that showed the connection between teacher referrals for special education and the degree of student disruptive behavior. Results from the study showed that students with increased disruptive behaviors, despite the triggers or nature of the disruptive behaviors, were most often referred to special education. The research also showed that teacher referrals were often cross-linked with unreliable data sources such as office discipline referrals (ODRs) and functional behavior assessments for the purposes of documenting the need to refer students to special education services. Vincent, Tobin, et al. (2012) suggested that the established approaches for determining student need for special education referral have been found to be challenging. The authors decided that ODRs were impacted by institutional culture, student behaviors, and teacher effectiveness. Their analysis suggested that ODRs are a consideration for teachers as a punitive approach, not a conclusive rationale for establishing the need for student behavioral assessment (Vincent, Tobin, et al., 2012).

Vincent, Sprague, et al. (2012) further performed a quantitative study on exclusionary school practices that negatively affected minority students. The authors employed extant data to answer only the research questions. An exploratory data analysis was the method employed to point out patterns and relationships that can shape future research efforts. The state department of education gave the authors access to extant data posted on their state website that contained data from 2009 to 2010 on student disciplinary exclusion. The analysis of the extant data results indicated that Hispanic students were notably overrepresented in all exclusionary discipline practices. Also, African American students were reported to have lost approximately double the amount

of school days when compared to White students due to exclusionary disciplinary practices. Statistically significant results from a chi-square test revealed that non-White students were overrepresented in most exclusionary practices. Most of the exclusionary discipline actions were taken against Hispanic students, followed by African American students. Findings from the Vincent, Sprague et al. (2012) study were related to the current study because it looked at exclusion as a variable that was related to race/ethnicity and student disability status. It also showed that exclusion occurred at disproportionally higher rates for minority students.

Zhang et al. (2014) conducted a quantitative study to examine long-term patterns of minority representation in special education by analyzing 5 years of data (2004 to 2008) accumulated under the Individuals with Disabilities Education Act. The authors compared representations of individuals in special education by racial groups, by disability categories, and by ethnic/racial group composition. The researchers found that there was a significant reduction in the number of African American students who were classified as having intellectual disabilities (ID). There was also a moderate reduction in the number of Hispanic/Latino students classified as having an ID (Zhang et al., 2014). Conversely, during this same time, the study found that the percentage of Latino students labeled as having a learning disability (LD) actually increased, and the representation of racial/ethnic minority students in special education programs remained unchanged (Zhang et al., 2014). Findings from Zhang et al.'s research applied to the current research because they pointed out that the high number of students in racial minority groups in special education has been a historical and a widespread problem. The over identification

and disproportionate representation by racial and ethnic minority students with so-called disabilities are problematic, and my intention was to examine which combination of teacher variables may be related to this phenomenon.

Raines & Dever et al. (2012) concluded that the odds are high for students labeled by school psychologist teachers and counselors as having emotional or behavioral disorders. Students having special education classifications struggle academically and socially and often do not complete high school. Additionally, Raines and Dever et al., indicated that the statistics for minority students, particularly boy students of African descent, are higher because they are often labeled disproportionately as having emotional or behavioral disorders at a much higher rate than would be expected in proportion to the population, increasing the negative effects on the student. Raines and Dever et al. posited that educators, school districts, and educational institutions continue to fall short in meeting federal and state laws in providing a free, equal, and appropriate and fair education to confront the issue of disproportionate number of boy students, particularly African American boy students, in special education programs. School districts and teachers continue to use ineffectual referral practices that identify an over representative number of boy students, specifically African American, for special education and support services and placement (Raines & Dever et al., 2012).

The Association of Black Psychologists commissioned Codrington and Fairchild (2012) to review the literature on the over represented number of African American children placed in special education. The author's findings revealed that disproportionality is a pervasive, systemic, institutional, and a structural problem that

affect teacher referrals for special education. The researchers contended that teachers often are enculturated and adapt to long-standing subtle institutional and structural racism, which often influences teacher attitudes that lead to racial imbalances. Furthermore, Codrington and Fairchild asserted that teachers' biased attitudes and deficit thinking around certain behavioral dimensions are a major cause for disproportionality. Additionally, Codrington and Fairchild noted that African American students were frequently misdiagnosed and referred to special education because general education teachers were most often ill-equipped to work with the behavioral styles of African American children (Codrington & Fairchild, 2012). Consequently, Codrington and Fairchild contended that insufficient training, cultural inconsideration, prejudiced thinking, and mediocre practices influence teacher decisions for to make special education recommendation. In addition, Codrington and Fairchild reported surprising levels of resistance when getting teachers to talk about racial issues and the misinterpretation of cultural differences when it comes to the behavior of African American students.

The Codrington and Fairchild (2012) research is relevant to my study because it investigated literature that looked at the relationship between teacher attitudes, teacher perceptions, and the over-representation of African American students in special education. My study will investigate teacher attitudes and feelings about inclusion and other demographic components that may contribute to disproportionate referral of African American boy students for special education referral and evaluation.

Ely (2014) conducted a qualitative study, which investigated the disproportionate representation of African American students in special education in the United States. The authors' particular interests were the referral procedures and whether those procedures were consistently applied across the board for all students. The rationale for the qualitative case study was to explore teachers, school counselors, and school administrator's perceptions around the special education referral process. Findings from the Ely study uncovered how unaware all the participants were about African American students being referred disproportionately for special education services. The author also discovered that the participants reported that they abide by the established process within the institutional practice to influence their referral decisions.

In addition, Ely (2014) reported that all the participants identified their specific responsibilities in the special education referral process. The respondents also denoted that when students are correctly placed, they could gain from special education services. The results showed that all the teachers felt that students tended to have unrealistic life aspirations and that unrealistic goals held by students created issues with helping students to reach realistic objectives. Although the respondents felt there were more boys than female students in special education all of the teachers reported no overrepresentation or underrepresentation of minorities in special education classes. Finally, all of the teachers shared that it is a necessity for students who need special education services to have them because they can benefit from them in terms of positive educational outcomes. In addition, unrealistic life goals and a misrepresentation of special education were the themes that also surfaced from the data related to teacher responses. As for the

administrators, their responses aligned with the teachers related to overrepresentation. The administrators reported and some supported their claim based on their years of experience that there was no overrepresentation of any student in special education. Consequently, administrators saw their role as support for the teachers, and school counselor. Therefore, administrators noted that their responsibility is to converse with parents when necessary and to assist with handling disciplinary issues. Moreover, the administrators reported rarely do they refer students for special education services. Like general education teachers, school counselors found that students tended to have unrealistic life aspirations and expectations. Counselors unlike general education teachers, counselor's shared that it was their responsibility to counsel, to refer students for correct placement and educational supports also to assist students with setting and attaining their objectives. All the respondents, in the final analysis, reported that they thought students benefit from special education programs, if student is placed suitably and if the student needs it. The Ely (2014) study was significant to my study because I also looked at boy students in Grades 9 through 12 and their behaviors as a factor for being referred to special education programs at a Philadelphia high school.

Bradshaw, Mitchell, O'Brennan, and Leaf (2010) conducted a quantitative study to examine whether race and gender were related to a student's risk for receiving an ODR, which often leads to special education referral. Data came from the records of 6,988 children enrolled at 21 elementary (K–5) schools that engaged in a trial of School-Wide Positive Behavioral Interventions and Supports (SWPBIS). The authors obtained ODR data from two sources: the classroom teachers and internet data from a system used

to manage the data on student discipline referrals. Data were analyzed employing a two-level modeling procedure with student-level receipt of an ODR (i.e., referral or no referral) as the dichotomous dependent variable (Bradshaw et al., 2010). Findings from the Bradshaw et al. study revealed that African American students were considerably at greater odds for being reported for ODR by a teacher. Bradshaw et al. suggested from the outcomes that boy students overall were less likely to adhere to the model of good student behavior and, thus is at greater odds to be referred for and ODR or special education. The authors also revealed that even when academic deficiencies were present, female students were less likely to get an ODR or special education referral because of typically compliant behavior (Bradshaw et al., 2010). The Bradshaw et al. research is relevant to my study because it identified typical behaviors that were often associated with teacher referral of students to special education evaluation. The authors also provided insight into teacher stereotype when the behaviors were associated with boys as opposed to female students. My study looks at race and ethnicity of the student as a factor leading to special education referral of boy students.

There is a significant research that has investigated variables associated with the overrepresentation of boy students, and particularly African American boy students being referred for special education. The findings have been somewhat mixed. Green (2012) performed an experimental mixed-method, study to investigate the frequency by which African American and White students were classified as having an emotional disturbance (ED). The author examined how the evaluation process affected the disproportionate representation of African American boys by analyzing for bias in the evaluation

component of the referral process. The study was conducted using a sample of 13 school psychologists acting as consultants who volunteered to participate in the research at an urban school district in Upstate New York. The psychologists provided feedback on whether adequate information was contained in the student profiles to make a determination for ED classification. Green gathered data on students with disabilities from the State Office of Accountability. The quantitative analysis results suggested that the African American boys were no more likely to be categorized with an ED as White boys, and there was no difference in the frequency of referral for the two groups (Green, 2012).

Moreover, Green (2012) contended there was no substantial difference in the statistics around the relationship between race of the student and the classification of ED. The qualitative results yielded the theme (intervention) it was referenced by psychologist as the rationale for classifying a student for ED meaning African American and White students who were not benefiting from school-based interventions. Furthermore, Green found there was significant difference in the frequency of African American boys being classified as ED when compared to White boys. Although Green's study did revealed that African American students were 1.5 times more likely to be classified as ED and argued that race is a factor that exist, but is not openly expressed. This Green study is significant to my study because it looked at gender and race of the student as variables related to special education referral. It also based its investigation on various criteria that included specified behaviors in relation to special education diagnosis and referral classification for special education and placement.

Losen, Hodson, Ee, and Martinez (2014) conducted a quantitative study to explore the relationship disability classification, suspension from school, and the elevated percentages of suspensions for African American students with disabilities classifications. Losen et al. drew data from the U.S. Department of Education's Elementary and Secondary School Survey (E&S Survey). The author's Losen et al. analyzed records related to all grade levels with a focus on the relationship between suspension and disability identification for African American students and disproportionate numbers of suspensions in proportion to White students. Students with special education/disabilities classifications are disproportionately and more likely to be suspended than student not classified as special education or having a disability. The authors contended that at the secondary level race, disability, and gender were related (Losen et al., 2014). The data showed that 24% of the suspended students were African American, and 31% of the suspended African American school students were classified as having disabilities or receiving special education services (Losen et al., 2014).

This Losen et al. (2014) study is significant to my study because it looked at the disproportionate rates of suspensions of African American and White boy students classified as special education/disability. Where the authors study is relevant to my study is by highlighting the reality that African American boy students are disproportionately placed in special education and diagnosed with having learning or mental health/disability classifications. Smith (2015) investigated the relationship between gender, perceptions of education, and the disproportionate referral of boys to special education. The research was a case study with schools located in a rural town in

northeastern Connecticut. The sample consisted of data from records of 480 pre-kindergarten through 8th graders. The results indicated that the boy students reported positive attitudes and opinions about education and its role in their future ambitions (Smith, 2015). However, boys received more referrals to special education and school suspensions than girls did due to behavioral issues. The Smith study is relevant to my research because it looked at gender and teacher attitudes about special education as possible factors that impact disproportionate referral to special education. Although the Smith study also included factors outside of gender of the student that influenced teacher referrals to special education, my study also identifies boy's particularly African American boys as being referred disproportionately for special education based on teacher perception of student behavior and race/ethnicity.

Sullivan and Bal (2013) quantitative study examined the predictive strength of sociodemographic variables and school performance variables linked to referrals to special education. The authors used archival data from a sample of 17,837 students and elementary, middle, and high school-level data from one culturally diverse metropolitan school district in the Midwest of the United States. Sullivan and Bal used multilevel logistic regression to make an approximation of the effects of child and school aspects on special education risk. Results showed that African American students have an increased probability compared to White students for being identified as Other Health Impairment (OHI) or Speech Language Impairment (SLI), but they were underrepresented among students with low-incidence disabilities (Sullivan & Bal, 2013). Moreover, minority students across all sociodemographic categories were at greater risk of being identified

for special education (Sullivan & Bal, 2013). The data revealed that African American students were 2.8 times more probable of being identified for special education and labeled as SD or LED and 2.5 times the probability of being identified as CI than were White students (Sullivan & Bal, 2013).

The Sullivan and Ball (2013) study is germane to my study because it highlighted the importance of moving beyond research on race alone and confirmed that overrepresentation is not unique to the subjective disability categories. My study will also examine race and other factors related to African American boys being referred y for special education and placement.

Teacher Perceptions and Referrals for Special Education

Gal, Schreur, and Engel-Yeger (2010) postulated that teachers practicing in general education are expected to deal with the varied cultural needs of students. However, many teachers lack the experience or preparedness to sufficiently meet the diverse challenges of students with special needs. Federal mandates established by Title VI of the Civil Rights Act of 1964 bars institutional practices that discriminate on the basis of race, ethnicity, gender or national origin, educational institutions must educate all students regardless of disabilities in the least restrictive environment (Gal et al., 2010). However, teachers continue to have mixed feelings about their own preparedness to educate students with disabilities in the general education setting. Additionally, culture, gender, ethnicity, and experiential factors related to teacher preparedness to address the diverse challenges of student's special education have been identified as factors that affect how teachers respond to students with special needs (Gal et al., 2010).

Grice (2013) conducted a qualitative study to examine elementary, general education, teacher's attitudes regarding African American students in special education. Individual interviews were conducted at individual schools for approximately 1 hour per participant. Results from the Grice study revealed that teachers had low expectations of African American students. The teachers generally expressed the belief that African American students are not suited for gifted programs, and that they are referred to special education in order to get the additional help that they need (Grice, 2013). The application of Grice study is significant to my study because it reveals how teacher bias regarding the abilities of African American students is systemic and exists.

McGrady and Reynolds (2013) conducted a qualitative study to investigate the question of whether teachers' perceptions of the behavior of African American students and White students differ in predominantly Black school. Additionally, McGrady and Reynolds hypothesized those teachers' views about student behaviors may change in a predominately White populated school. The authors explored the question and examined the teachers' perceptions of the disruptive type behaviors of African American and White eighth graders. The data for the study came from Educational Longitudinal Study (ELS) conducted by the National Center for Education Statistics, ELS is a nationwide representative study of a sample 15,362 second year high school students developed to measure important transitions of students as they move forward from high school to the workforce, college, or other avenues (McGrady & Reynolds, 2013). The study data set is comprised of, teacher, student, and parent surveys describing student's behavior, cognitive skill, peers, and involvement in extracurricular activities and parents' and

teachers' backgrounds. Interviews were done with two teachers per student respondent (McGrady & Reynolds, 2013).

The results showed that White teachers' responses related to students' academic ability and behaviors in the classroom appeared amenable to racial stereotypes that depicted African American and Hispanic youth as possessing minimal academic potential and Asian students as possessing model behavior (McGrady & Reynolds, 2013). The nonwhite teachers' perceptions of students appeared to be much less amenable to the racial stereotypes (McGrady & Reynolds, 2013). Results from the study further showed that the differences between African American and White teachers' perceptions of African American students' ability were larger in schools where more than 40% of students were of African American (McGrady & Reynolds, 2013). Findings from the McGrady and Reynolds (2013) study are relevant to my study because the results indicated that teacher's negative perceptions about African American students based on stereotypes may show a correlation to the likelihood of African American students being referred for special education evaluation and placement partly due to his race.

Teacher Gender

The predominance of female teachers in elementary education may contribute to the increased numbers of boy children that are referred to special education (Stephens, 2010). African American male teachers encompass 0.4% of the elementary special education teachers in the United States and 2.2% of secondary grade level special education teachers (Tyler, Yzquierdo, Lopez-Reyna, & Flippin, 2002; Stephens, 2010). If the current decline in African American male teachers persists, Stephens (2010)

postulated that 12% of the teacher and 40% of public school students were of diverse demographics. Unfortunately, the demographic mixture of special education teachers did not correlate with student general population (Tyler et al.; Stephens, 2010).

Alter, Walker, and Landers (2013) conducted a qualitative survey with a large sample of teachers to determine what challenging behaviors teachers perceive as most prevalent and problematic in the classroom. The researchers also evaluated the impact of four different teacher demographic variables (teacher gender, teacher race, teacher years of experience, and the grade level taught) on their responses. The results indicated significant differences on 14 of the 18 outcome variables. Significant results related to physical aggression were reported by elementary school teachers as notable problem, and more prevalent than junior and high school teachers. In addition, data from the sample was analyzed by race/ethnic and gender. The authors performed a sample *t* test to assess racial/ethnic and gender differences in teacher reports challenging student behavior. Results revealed that African American teachers reported verbal disruptions as less predominant when matched with other racial groups of teachers. However, African American and White teachers reported no difference relative to physical disturbances as more problematic. Additionally, off-task behaviors were reported by teachers of African American teachers as being less problematic than teachers of the other ethnic group but did not differ from White teachers (Alter et al., 2013).

As a result, female teachers conveyed that student verbal disturbances were a significant problem more than male teachers (Alter et al., 2013). Female teacher's outcomes also reflected verbal disruptions to be more prevalent than male teachers.

Furthermore, female teachers reported students being off-task as more problematic than male teachers. Off-task behavior was seen as the most frequently occurring and problematic challenging behavior and may be recognized as gateway to more taxing behaviors. The significance of the Alter et al. (2013) study to my study is it attempted to look at the effects of several variables one in particular to my study included teacher gender. Teacher gender was a significant independent variable looked at in relation to teacher perception of disruptive student behavior. My study also includes several teacher demographics that were included in the Alter et al. work. My study also provides a behavior rating scale for teachers to determine if they would refer a boy student for special education evaluation and placement based on descriptions of behavior.

In another quantitative study, Elhoweris et al. (2015) investigated the factors that lead teachers in United Arab Emirates (UAE) to refer certain students to special education. The authors analyzed the data to determine whether there were differences in teacher referral decisions according to teacher gender and self-efficacy. Eighteen elementary schools participated in the study. A sample included 18 schools, 11 of them were female and seven were male schools from the seven Emirates. Teachers volunteered for the study and the sample of teachers who participated in the study amounted to 338 elementary school teachers that consisted of 213 female teachers and 125 male teachers (Elhoweris et al. 2015). Furthermore, the authors developed two instruments to answer the research questions. The first survey instrument entailed items associated with the likelihood of referring students for special education services. The respondents used a 4-point Likert scale to rate their items (*Would not refer; Unlikely to refer; Likely to refer;*

Would definitely refer) the second survey instrument was established to measure teacher self-efficacy (Elhoweris et al., 2015).

Subsequently the data revealed five referral reasons, perceived by both special education and regular education teachers as least important: Frequently speaks out of turn during instruction; Easily distracted; Disturbs and disrupts others; Does not participate in class discussion; and Constantly refuses to sit in designated desk (Elhoweris et al., 2015). The top five most significant referral reasons perceived by special and general education teachers were as follows: repeatedly displays verbal aggression toward others; poor academic achievement in a specific area; inability to follow direction; difficulty remembering things seen and/or heard; and struggles with fine motor tasks. To answer the research question; Does teacher efficacy affect special education referral decisions? The authors performed a one-way ANOVA to determine if teacher efficacy affects special education referral decisions (Elhoweris et al., 2015). Subsequently the analysis revealed that teachers perceived student disruptive behavior, inattention, activity, personal and socio-emotional issues as contributing factors for special education referral not teacher efficacy (Elhoweris et al., 2015). The question: Does gender of the teacher affect special education referral decision was analyzed using an analysis of variance and reported on a Likert-scale and the results were significant. A careful assessment of the mean for the female and male teachers denoted that the female teachers were more apt to refer the child to special education services than the male teachers (Elhoweris et al., 2015). The authors study is relevant to my study because it looks at which gender of the teacher were more likely to refer a student for special education based on student

behavior as a variable. In addition, it showed that female teachers were more liable to refer a student for special education based on specific descriptive behaviors. My study also employs a teacher rating scale equivalent or similar to this authors study instrument that looked at typical behaviors that lead to special education referral and placement.

Teacher Variables Relate to Referrals to Special Education

Several studies have also investigated the relationship between teacher attitude toward inclusion and student referrals for services (Pancsofar & Petroff, 2013). One piece of qualitative research conducted by Alexander (2010) investigated the perceptions of White teachers related to student referral to special education and placement of African American boy students in special education. The rationale for the study was to distinguish what White general education teachers' perceptions are regarding the listed criteria: (a) African American students' ability, behavior, and school readiness; (b) instruction, referral, and potential placement of African American students in special education, and (c) gaps that exist in the preparation of general education teachers regarding the instruction of African American students (Alexander, 2010). Alexander (2010) used the constant comparative technique to analyze the data, which produced six themes. The first theme revealed an overall, type of deficit thinking that implied that African American students were limited because of their genetic makeup. Second, the teachers appeared to lack cultural awareness with regard to African American students.

Third, the teachers appeared to have limited understanding of efficacious and effective teaching for African American students. Fourth, the teachers seemed unable to distinguish between various types of disabilities. Fifth, teachers were seemingly unclear

about the special education referral process. Sixth, teachers appeared to possess a limited knowledge regarding special education services. The qualitative themes from Alexanders' research supported the need for cultural responsiveness that currently is a deficit for many teachers creating miscalculation in the special education referral process and contributing to the over-representation of African American students in special education (Alexander, 2010).

Findings from the Alexander (2010) study suggested that the teachers experienced a lack of understanding in regards to struggling African American students. The study shed light on the notion that White teachers did not believe they had the understanding of instructional methods needed to effectively teach African American students. The authors' study showed that the teachers tended to accept the notion that African American students belong elsewhere, like special education (Alexander, 2010). There is relevance in the Alexander (2010) study to my study and my theoretical foundation-social exclusion. The author shed light on the educational system and the potential bias teachers bring to the institutional practice.

Bradshaw et al. (2010) engaged in a quantitative study to investigate whether teacher race/ethnicity was associated with ODR. The authors analyzed the data using a two-level modeling procedure with student-level receipt of an ODR (i.e., referral or no referral) as the dichotomous dependent variable. Data from the study revealed that having an African American teacher revealed a 28% increase in the probability of a student getting a major ODR compared to having a White teacher (Bradshaw et al., 2010).

In contrast, students in classrooms with White teachers had above twice the odds (AOR 2.22) of receiving a minor ODR and classified at risk behavior that often results in special education referral (Bradshaw et al., 2010). The final analyses indicated that students in classrooms having African American teachers were more subject to receiving a major ODR and less open to receive a minor ODR than their African American peers in classrooms with White teachers. Bradshaw et al. (2010) analyses purported boy students in classrooms with African American teachers had an increased probability of getting major ODRs compared to students of another ethnicity. The Bradshaw et al. study is very significant parallels to my study because it identified independent variables of student ethnicity, student race and correlated them with the race of the teacher whether to refer a student for Disciplinary Referral. The relevance of Bradshaw et al. research to this authors study is that it provided evidence that supports the assertion that race plays a significant part in the student-teacher relationship and a teachers' decision to refer a student for ODR based on behaviors that often lead to special education.

Teacher Efficacy, Teacher Attitudes, and Referrals to Special Education

Chu (2011) conducted a qualitative study to examine the relationship between teacher efficacy and student referral to special education. Chu used a cross-cultural competencies framework to identify and measure teacher efficacy (the ability to effect change beyond student difficulties) based on the teacher's thoughts, feelings, motivation, observations, and interaction with the student. Subsequently, Chu identified several competency characteristics along three dimensions: (a) the teacher's awareness of their personal beliefs and attitudes, knowledge and skills for successful practice; (b) the

teacher's understanding of beliefs/attitudes and knowledge of his or her worldview of the student; and (c) the teacher's ability to provide ethical and culturally significant teaching through appropriate intervention strategies and techniques. Chu also assessed teacher competencies for deficit thinking, (those tendencies for racial biases) toward to CLD students, which manifest into negative perceptions and lower student expectations. Chu measured teacher efficacy by articulating teacher, knowledge, skills, attitudes, beliefs, and expectations that teachers demonstrated toward CLD students at risk or with disabilities. Consequently, data from the Chu study revealed that teachers used a deficit thinking model (having low expectations for students) while they worked with CLD students and their families. Subsequently, the study showed that teachers who think they cannot influence any change in students' ability to learn are more liable to refer students who are at risk (i.e., behavior problems or having learning difficulties) for getting special education services. With the process of deficit thinking, the findings suggested that such thinking might further negatively influence teacher referral decisions with diverse populations (Chu, 2011). Overall, the authors' study concluded with a variety of outliers, what qualitatively stood out was how teacher deficit views thrive because some behaviors of CLD students are acceptable within their own cultural standards and are in contrast with the school culture. These behaviors then are perceived as intellectual deficits and physiological limitations by teachers from mainstream culture (Chu, 2011). The Chu research is applicable to my proposed study because it examined teacher attitudes and perceptions regarding the CLD. The author found that teacher perceptions and attitudes of student behavior combined with race/ethnicity of the student influence teacher

decisions that lead to teacher referral of a student for special education evaluation and placement.

Anderson, Watt, Noble, and Shanley (2012) performed a quantitative study on teacher attitudes toward teaching students with attention deficit hyperactivity disorder (ADHD) and teacher decision to refer a student for special education evaluation. Surveys were used to examine the relationships between teachers' general teaching experience, their understanding of ADHD, and their feelings toward teaching students with ADHD. The participants were grouped according to experience (pre-service teachers without teaching experience, pre-service teachers with teaching experience, and in-service teachers). The multivariate analysis of variance (MANOVA) procedure was used to analyze the data and the results showed that as teachers broadened their experience in the classroom, their understanding of ADHD improved and teachers held less favorable view about students with ADHD and a more favorable perception toward teaching children with ADHD. The data from the study revealed that in-service teachers conveyed less positive emotions about working with ADHD diagnosed children than did pre-service teachers without experience. Additionally, in-service teachers had more positive behaviors than pre-service teachers with experience. Results of the Anderson, et al. (2012) study are important to my study because it examined students who are diagnosed with special needs, teacher perceptions, attitudes toward those students and their referral to special education. The study also highlights how the lack of teacher understanding on part of the student disability can bring about negative perceptions about inclusion. The

negative perceptions of special needs students can create negative outcomes for the student teacher relationship.

Teacher Attitudes toward Inclusion

Most teacher bias toward inclusion is one variable that may affect their attitude toward referring a student for special education services. An operational definition surrounding teacher bias is defined as any thought, belief, or behavior that adversely influences how a teacher perceives and ultimately interacts with a student (Bolden, 2009). If teachers have negative perceptions toward inclusion, then they are more open to referring a child with problem behavior for special education evaluation (Alexander, 2010).

Crowson and Brandes (2013) conducted a quantitative study for the purpose of investigating differences in pre-service teacher's motivations to respond without prejudice to students with disabilities. The authors employed an Opposition to Inclusion Scale Survey to measure individual motivation to respond to a student without prejudice and anti-inclusive attitudes. The study involved 88 pre-service teachers (10 male, 77 female, 1 failed to report). A bivariate correlation analysis indicated that disability-specific opposition correlated positively and significantly with the general opposition and unwillingness to teach respectively. General opposition correlated positively and significantly with the unwillingness to teach. The results of the authors' study are relevant to my research because it provided evidence that some teachers may be unwilling to teach students whom they perceive to have disabilities. This unwillingness may be related to teacher attitude when referring students with perceived behavioral

problems to special education referral. Moreover, Crowson and Brandes (2013) findings may be particularly relevant to African American boys whose behavior is frequently perceived as being problematic in the classroom.

Haq and Mundia (2012) further identified several factors, which affect teachers' perceptions toward inclusion and students with special needs. The researchers collected quantitative data using a self–constructed, 3-part self-report instrument. Data was collected from student teachers in an undergraduate preservice student-teacher program where they were taking an educational psychology course taught. The researchers reported that the students conveyed positive attitudes toward inclusion, but they displayed negative feelings with regard to specific disabilities such as sensory impairments (deaf, nonverbal, and unable to see), cognitive disorders, multiple disabilities, and difficult behaviors. Students having such disabilities have high levels of support needs and are not as socially visible in Brunei society and ordinary schools. Among the disability classifications groups, those with behavior disorders such as attention deficit hyperactivity disorder are highly distinguishable in the community and in schools. The Haq and Mundia (2012) findings are relevant to my research because it looked at possible student teacher variables that influence teacher attitudes and teacher attitude toward inclusion. The study also supports my problem statement that special education referrals are inherently challenging and often influenced by the subjective teaching practices that may have long-term affects the lives of the children.

Swain, Nordness, and Leader-Janssen (2012) used a mixed method study to identify any changes in the participant's beliefs and attitudes about inclusion following an

introductory special education course, followed by a 20-hour qualitative practicum experience. The authors gathered data with an altered form of the Attitude Toward Inclusion Instrument (ATII). The Attitude Toward Inclusion Instrument incorporated a 4-point Likert scale to record subject responses ranging from 1 (strongly disagree) to 4 (strongly agree). The Swain et al. (2012) quantitative data was analyzed using a repeated measures t-test from the pre-to-post survey that revealed a statistically significant variation in the completed data from the participants. The pre-to-post surveys data was analyzed looking at individual items for any statistically significant differences from the 14 of the 20 items. The data from the authors' revealed that the participants displaying increased positive attitudes toward inclusion were more inclined to adjust their teaching and curriculum to include individual needs of students and adjust their attitudes to include a more positive perception about inclusion (Swain et al., 2012). Results showed that special education courses coupled with practical teaching experience with students having disabilities significantly impacted the participants' attitudes toward inclusion (Swain et al., 2012).

Findings from the Swain et al. (2012) study are significant to my study in that they looked at teacher views about inclusion. Results from the study suggested that training, direct exposure with special needs students, and courses work can significantly influence pre-services teachers' attitudes towards inclusion. The authors pointed out that positive and negative attitudes related to special education do exist among general and special education teachers. Swain et al. (2012) postulated that perhaps teacher attitudes

can influence their decision to refer a student to special education based on perception and attitudes about inclusion.

A qualitative study by Glazzard (2011) investigated the outlook of teachers and teaching assistants in relation to barriers to effective inclusion in a primary school. The author's method included a focus group to collect qualitative data from teachers and teacher assistants from a school in north England. The respondents answered nine open-ended questions that gave perspectives on teacher practices, attitudes, and attitudes toward inclusion (Glazzard, 2011). Analysis of the results was suggested that teacher inclusion practices ranged from highly inclusive to highly exclusive (Glazzard, 2011). Teaching styles emerged as key recurrent themes that reflected barriers to inclusion. The findings from the Glazzard (2011) study suggested that some teachers worked honestly to create effective inclusion environment for the student with special needs. Moreover, some teachers displayed negative feelings towards special needs students resulting in negative attitudes and negative influences on the school's commitment to inclusion. Reduced budgets, resources, and training were significant barriers to inclusion (Glazzard, 2011). The Glazzard (2011) findings are relevant to my study because they provide an understanding that teachers bring negative attitudes into their teaching of challenging students, and those attitudes, may influence their decision whether to refer a child for special education evaluation and placement.

The Dallas, Sprong, and Upton (2014) study examined teacher perceptions toward students with disabilities by looking at teaching experience, faculty attitudes and actions related to academic accommodations, Universal Design Instruction (UDI) and inclusive

learning environment. The global findings from the study revealed that on average, the respondents in the study reported favorable attitudes toward Universal Design Instruction (UDI) and Accommodations. However, the data showed some variances around the total years of teaching experience, academic discipline, and prior disability-related training (Dallas et al., 2014). Interestingly, the Dallas et al. (2014) study data reported 42% of the respondents were skeptical about their understanding of UDI and an additional 16% shared that they had never thought about the concept. On average, participants had promising attitudes toward academic accommodations. Incidentally, a significant number of respondents showed easiness regarding academic accommodations (Dallas et al., 2014). As a result, 88% of respondents reported they taught students with disabilities within a 5-year period, while 87% understood their responsibilities to enable accommodations (Dallas et al., 2014). Moreover, 85% of the respondents denoted being certain of their ability to accommodate students with special needs. On average, all participants responded favorably around their attitudes toward Inclusive Lecture Strategies (ILS) and Accommodations. The study revealed significant results with regard to the amount of teaching experience related to providing accommodations; respondents with 13 or more years of teaching experience reported significantly higher ratings than participants with 0-6 years of teaching related to providing accommodations (Dallas et al., 2014). The author's study supports my research around my theoretical foundation of social exclusion. My study will look at variables like teaching experience as well as feelings about inclusion in relation to teacher referral of boy students for special education evaluation based on their perception of specific behaviors.

Chapter Summary

The purpose of this study was to investigate whether student race/ethnicity, teacher gender, teacher race/ethnicity, attitudes about inclusion, years of teaching experience, and years of experience teaching special education are related to teacher referral of boys for special education evaluation and placement. This chapter presented literature from many studies that examined the relationship between teacher gender and decision to refer boy students for special education evaluation and placement (McGrady & Reynolds, 2013). Additional studies investigated student teacher relationship and teacher perception, self- efficacy in the teaching of special needs children to test for feelings about inclusive teaching. Other studies investigated the disproportionate rate of referral of boys for special education (Pancsofar & Petroff, 2013). In addition, there are several works on the disproportionate referrals of children of Hispanic and African American students compared to White students to special education based on student behavior, and teacher gender. Past research has shown that African American students represented just 16% of elementary and secondary school students in the United States (Codrington & Fairchild, 2012). Twenty-one percent of African American students are enrolled in special education (Codrington & Fairchild, 2012). Various studies have been conducted to determine the association between student referral for special education, particularly African American boy students and the long-term implications (Codrington & Fairchild, 2012).

The existing gap in the research was investigating the relationship between student and teacher demographics leading to the disproportionate number of African

American boy students being referred for special education. The gap is examining 4 independent variables based on student and teacher race/ethnicity, teacher gender, teacher, and teacher attitudes toward inclusion with years of teaching experience in general and special education as a covariate. The dependent variable is the likelihood a teacher would refer an African American boy student for special education evaluation. Below in chapter 3 a discussion of the six components of the dissertation is highlighted. The first component will describe the research design and strategy employed in the study. The second component will address the type of setting and the participant sample. The third component will explain the instrumentation process utilized in this study. The fourth component will elucidate the collection of data and the analysis of the data. The fifth component of the ethical considerations and the guidelines to protect the participant's confidentiality and privacy will be addressed. Chapter 3 will end with a summary of the main points of the chapter and then introduce Chapter 4.

Chapter 3: Research Method

Introduction

The purpose of this quantitative, correlational study was to examine whether variables such as student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitudes toward inclusion predict how likely teachers would be to refer boy students, particularly African American boy students, for special education evaluation after controlling for teachers' years of experience in general and special education. The study also examined differences in teacher ratings of classroom behavior based on the race/ethnicity of boy students. This study related to the broader phenomenon of the disproportionate number of boy students, particularly African American boy students, being referred for special education evaluation. In this chapter, I discuss the six components of the methodology for this dissertation. The first section includes a description of the research design and strategy employed in the study. The second section summarizes the type of setting in which the research was conducted and the targeted participants. The third section incudes explanation of the instrumentation used in this study. The fourth section highlights the data collection and the data analysis process. In the fifth section, the ethical considerations and the guidelines that were followed to protect the participant's confidentiality and privacy are discussed. Chapter 3 ends with a summary of the main points of the chapter.

Research Design and Rational

Variables in Study

The independent variables in this study were boy students' race/ethnicity, teacher race/ethnicity, teacher gender, and teacher attitudes toward inclusion. The two dependent variables were (a) how likely the teachers would be to refer boy students, specifically African American boy students, for special education evaluation based on descriptions of classroom behaviors; and (b) teacher ratings of severity of boy students' disruptive classroom behavior based on the student's race/ethnicity. The covariates for the study were years of teaching experience and years of general and special education teaching experience.

Research Design

This study was predicated upon a quantitative, correlational, survey research design. According to Mertens (2013), a quantitative study is based on the scientific method. In a quantitative study, a researcher collects numerical data and uses statistical tests to quantify outcomes for answers to specific research questions (Mertens, 2013). In addition, the quantitative, correlational research design method is used to determine whether relationships exist between variables that test theories and hypotheses (Creswell, 2009; Mertens, 2013, Trochim, 2013).

The quantitative research design as postulated by Mertens (2013) was appropriate for my research because a quantitative research design allows for specific statistical algorithms to be tested for possible correlations between variables of interest associated with student and teacher variables in this study. A quantitative research design was used

for this study because it is objective and more reliable than a qualitative method (Cokley & Awad, 2013). Quantitative research uses a statistical method to evaluate the data (Garson, (2012). Subsequently, qualitative research involves a subjective approach to gathering data (Garson, 2012). The methods used for collecting data for qualitative studies are through interviews and observations under less controlled conditions (Creswell, 2013). Qualitative data analysis requires the opinions, feelings, and subjective interpretations of the researcher (Mertens, 2013; Trochim, 2013). Consequently, the qualitative approach was not appropriate for this study because this study assessed the relationships between the independent and dependent variables (Creswell, 2013).

The purpose of correlational research is to determine relationships between variables as well as test theories and hypotheses (Creswell, 2009; Mertens, 2013; Trochim, 2013). Advantages of the correlational research methodology are (a) it allows the researcher to explore research questions that could not be examined with qualitative methodology and (b) correlational research narrows the scope of phenomena so that researcher can focus on the specific variable to be measured (Creswell, 2013). Some disadvantages of correlational research designs are that researchers are not able to manipulate variables to control cause and effect. Consequently, quantitative correlational studies cannot be used to determine whether two variables are causally related (Cokley & Awad, 2013). A major component of a quantitative correlational research design is that it provides the researcher with an organized means for collecting measurable data using a variety of instruments (Trochim, 2013), which makes such a design appropriate for this study.

Surveys are an effective method of collecting data, particularly when examining a broad range of current social issues in human services (Trochim, 2013). Surveys can give researchers quantifiable data from which they can scientifically analyze data related to issues and problems that pose a challenge for certain populations of individuals in a given society (Trochim, 2013). The disadvantages of surveys include the fact that the data measures subjective opinions that require careful and disciplined interpretation and analysis (Trochim, 2013). Social science research that employs surveys is an important approach for collecting data from small and large samples of a population (Trochim, 2013). Data and findings gathered from the sample have the potential to be generalized to the larger population of teachers (Barnes, Demont-Heinrich, & Graziano et al., 2012). Therefore, a quantitative correlational research design was used for this study because such a design would provide the most objective method for determining the predictive relationships between the independent variables (student race/ethnicity, teacher race/ethnicity, teacher gender, and teacher attitudes toward inclusion), the dependent variables (likelihood that teachers will refer a student to special education evaluation), and the covariates (teaching experience). For this study, the survey design was used for collecting descriptive data regarding each teacher's race/ethnicity, their teaching experience, teacher attitudes toward inclusion, and teacher referral of African American boy students for special education evaluation.

Methodology

Population

This study was conducted in the northeastern region of the United States in the state of Pennsylvania. Participants were recruited from a large urban school district. The school district was among the largest in the nation by enrollment, and the school district served an ethnically and racially diverse student teacher population, according to the district's website. The school district consisted of 56 accredited high schools. According to a prominent study conducted by the Shanker Institute (2012), there was a dominant presence of female teachers within the Philadelphia county school district. The Shanker Institute investigated teacher and student population by race and ethnicity in Philadelphia public schools. Results from the study revealed that 3 of 4 students were of African or Hispanic descent compared, with just 1 in 4 teachers of African or Hispanic descent (Shanker Institute, 2012). The data revealed that 59% of the students were of African American and 18% of students were identified as Hispanic (Shanker Institute, 2012). Their data further revealed that 69% of the Philadelphia school district teaching force was White, 25% was African American, and 3% was Hispanic (Shanker Institute, 2012). The study by the Shanker Institute further showed that the Philadelphia school district was dominated by women. African American and Hispanic male teachers constituted a small proportion of the total teaching workforce in Philadelphia. African American female teachers represent a sizable proportion of the minority teaching force (Shanker Institute, 2012).

Study Sample

The sample for this study included secondary school teachers from one high school in Philadelphia, Pennsylvania. Although there was no documentation available to account for specific teacher demographics regarding gender or race/ethnicity for the targeted school, there was, however, demographic data on teacher composition in the overall Philadelphia county school district. The teacher population of that target school exceeded 100 teachers and the student population exceeded 1,000. At the time of data collection, the student population by race and ethnicity of the targeted Philadelphia school was comprised of 30.3% African American students, 23.2% Latino students, 18.5% Caucasian students, and 28.1% students from other ethnic backgrounds.

Sample Procedure

In this study, I recruited secondary grade school teachers through a nonprobability convenience sampling process. Convenience sampling is a strategy of recruiting participants from a sample of people who are easy to access (Creswell, 2013). Convenience sampling was employed for this study because the sample of participants (teachers) was easily accessible. This type of sampling technique does not depend on a random process but is easy to obtain (Leary, 2011). The strengths of convenience sampling are the availability and expedience by which the data can be gathered (Lohr, 2010). The limitations are the possibility that the sample may not be representative of the population, and that fact might limit the generalizability of findings from the study (Lohr, 2010). The targeted population for this study consisted of school teachers in the study school district. The accessible population consisted of 150 high school teachers. A power

analysis was done using G*Power online program to identify a credible sample size needed for obtaining an optimum effect for the study. The following guidelines, as specified by Buchner, Faul, and Erdfelder (n.d.), were used to approximate the minimum sample size required for a multiple linear regression analysis: medium effect size (f^2) of .20, power set at .80, and an alpha level of .05 employing G-power analysis (see Appendix B). Results showed the minimum sample size for achieving adequate power to detect any statistically significant differences for this study using these parameters was $N = 65$ (Kelly & Maxwell, 2003). The minimum sample size required for a one-way ANOVA using the following parameter: medium effect size (eta^2) of .35, power set at .80, and an alpha level of .05 indicated a minimum sample size of $n = 84$ (see computer output in Appendix B). The appropriate outcome or sample size for achieving adequate power to detect any statistically significant differences for this study using these parameters was $N = 64$ (Kelly & Maxwell, 2003). The accessible population included 150 teachers, which consisted of teachers from one secondary grade school in the Philadelphia county school district. I anticipated obtaining an adequate sample from this group.

Procedure for Recruitment

I sent a letter of cooperation to the research and evaluation department of the school district for the high school under study (see Appendix C) seeking their cooperation in allowing me to conduct the study. In addition, a request was made for permission from Walden University to conduct this research using the survey (TRF) for the study (see Appendix A). A letter of introduction with a letter of informed consent

were submitted to the school administrator requesting permission to conduct the research after being granted permission from all required parties. When requesting permission to conduct this study, I requested a time to introduce the study and provide materials at the designated public high school during a scheduled teacher in-service. A packet was given to the participants that included the consent form, the TRF survey, which included the scenarios that describe student behavior, and demographic information. I explained to the participants that they were not required to give any personal identifying information. During the allotted time, the survey packet was given to the participants and they were asked to return all the forms sealed in the same packet/envelope when they completed the survey. I asked the participants after they completed their survey if they had any questions or concerns with regard to completing the entire survey packet. All the participants were provided with general contact information for contacting me if they had any questions after their participation. I thanked the participants for their time and then had the research assistant provide each participant with a $5 gift card. Finally, after the data collection and the analysis were completed, a summary of the findings was provided to the study district and high school for their perusal.

Data Collection

Quantitative data collection methods, unlike qualitative data collection processes, are believed by many scholars to produce more impartial and defined information using regimented data collection methods that can be replicated and analyzed using sophisticated statistical techniques (Hesse-Biber, 2010). The quantitative data collection process for this study involved the hand delivery of surveys to a sample of 150 high

school teachers. It was important for the study to have an appropriate sample size for achieving adequate power to be statistically significant. Participants should have been able to complete the entire instrument in approximately 10 to 15 minutes or less because the data collection did not require subjects to answer open-ended questions or partake in personal interviews, observations, or exploratory focus groups (Hesse-Biber, 2010). Some advantages of using the survey are that it is easy to administer, useful for collecting descriptive data, covers a range of data, and can be analyzed using a variety of existing software (Hesse-Biber, 2010).

Instrumentation

The TRF was used to collected data for this research (Appendix A). The TRF contains nine scenarios that describe disruptive classroom behavior for nine fictitious students. All the students were described as being in the ninth grade. The nine descriptions were for boy students of three different racial/ethnic groups (White, Hispanic, and African American) who were described as doing poorly in school academically. The participants were asked to read each behavioral scenario and then rate how inclined they would be to refer each boy student for special education evaluation. All responses were recorded using a Likert scale from 1 (*not at all likely*) to 5 (*very likely*). The teachers were also asked to rate the behaviors described in each of the nine scenarios as a mild, moderate, or severe levels of inappropriate conduct.

Then the participants were asked to provide demographic information about them. The demographic data consisted of teacher gender, teacher race/ethnicity, years of

teaching experience, years of teaching special education, and teacher attitudes about inclusion. This information was used to describe the sample of participants.

Validity and Reliability of TRF

When developing an instrument to collect data, researchers must present evidence of the validity and reliability of the instrument (Dros, 2011; Trochim, 2006). The validity of a tool refers to how authentically the instrument gauges what it is proposed to quantify (Dros, 2011; Trochim, 2006). Reliability of an assessment tool means that data collected by the instrument can accurately or consistently be measured and duplicated (Dros, 2011; Trochim, 2006).

The TRF instrument that was used in this study will contain descriptions of classroom behavior of nine fictitious students. The behavioral descriptions are based on behavioral descriptions included in the Achenbach System of Empirically Based Assessments (ASEBA). The Achenbach Behavior Checklist is an evidence-based method of evaluating behavior that is predicated upon years of extensive research and applied science behavioral disorders (Achenbach, 2013). The Achenbach assesses abilities, strengths, adaptive functioning, behavioral, emotional, and social challenges of individuals from age 1½ to over 18 years of age. The Achenbach is also identified as the Child Behavior Check List (CBCL), which is administered by teachers and parents and in particular situations by the interviewer. The reliability of the CBCL was assessed using, inter-interviewer reliability, which is an estimate obtained from scores on similar items from different interviewers. The intra-class coefficient correlation (ICC) revealed .93 for the 20 competence entries and .96 for the 118 specific problem entries (both $p < .001$),

thus indicating significant inter-interviewer reliability scores (Achenbach, 2013). Reliability of the CBCL was also tested using the test-retest method, which identifies the level of concurrence between ratings on two items for the same student behavior at two different points in time (Achenbach, 2013). Data were reported for students that were collected at intervals of 8 to16 days. The test-retest reliability samples included non-referred students and students with mental health diagnosis and in special education. The reliability estimates were significant for the majority of the scales with test-retest correlation coefficients ranging from .80 to .90 (Achenbach, 2013).

The validity of the Child Behavior Check List (CBCL) has been assessed in a couple of ways based on the purpose of the CBCL which is designed to provide professional help for school age children that may have behavioral problems (social, emotional and adaptive deficiencies) (Achenbach, 2013). The CBCL, Youth Self Report (YSR), and the Teacher Report Form were scored significantly higher ($p < .001$) for content validity for all of it selection items, however, adaptive functioning competence items were significantly lower for non-referred students across the CBCL, YSR, and Teacher Report Form (Achenbach, 2013). The results of the particular ability, adaptive scales and for specific items were significant for all three instruments ranging from 79% for the YSR, the Teacher Report Form, and the CBCL range was 85%.

Research by Nakamura, Ebesutani, Bernstein, and Chorpita (2008) revealed significant associations between the CBCL and other established measures of maladaptive child behaviors. The researchers assessed the convergent and divergent validity of the CBCL using a clinical sample of 673 children and adolescents at a mental

health clinic in Hawaii. The researchers examined the convergent validity of the CBCL by comparing scores obtained by the instrument to the parent ratings of child/adolescent behaviors on other measures such as the Affect and Arousal Scale for Children (AFAES), RCADS = Revised Children's Anxiety and Depression Scales (CDADS), and Revised Children's Manifest Anxiety Scale (RCMAS).The results produced statistically significant correlations that ranged from $r = .15$ to $r = .59$. The divergent validity of the CBCL was assessed by comparing scores on the instrument to scores obtained from the Parent Oppositional and Delinquent Dimensional Ratings. Findings produced statistically significant correlations that ranged from $r = .23$ to $r = .67$. Overall, the results supported the construct validity of the CBCL.

The instrument for this study is termed Teacher Rating Form (TRF) and contains modified descriptions of selected behaviors from the CBCL that are frequently recognized as disruptive classroom behaviors by teachers (Achenbach, 2013). A principal concern for this research is whether the TRF contains accurate descriptions of the disruptive classroom behavior for the fictitious students in the scenarios (Rubio et al., 2003). Details regarding the steps that were taken to assess the validity and reliability of the TRF are presented below.

Assessing the Validity of the TRF

There are various methods for determining validity but for this study, face validity and content validity are appropriate means for determining the validity of the Teacher Rating Form (TRF). A panel of two experts was asked to judge the face and content validity of the TRF (see Appendix D & E). The term face validity implies that an

instrument appears to evaluate what is designed to evaluate (Holden, 2010). The experts, who are licensed school psychologists, were given the scenarios to read. They were asked to indicate whether each situation accurately reflects disruptive classroom behavior. The experts also rated whether each scenario describes behavior that is mild, moderate, or severe. The experts were asked to provide comments or suggestions for modifying the wording to improve the face validity of the scenarios where necessary.

Content validity suggests to the degree that an instrument has an applicable sample of items for the hypothesis it is intended measured (Polit & Beck, 2007). To assess the content validity, a more systematic examination or inventory of the aspects of the construct most be evaluated to determine whether the instrument has captured what it is designed to measure (Dros, 2011). For this study, content validity affects whether the items on the TRF satisfactorily represent the area of interest (Waltz, Strickland, & Lenz, 2005). The panel of experts was also asked to indicate whether each of the nine scenarios reflected the types of disruptive behaviors noted in the Achenbach Behavior Checklist.

Reliability

Reliability pertains to the degree to which a survey accurately assesses a theoretical construct (Dros, 2011). One form of reliability relates to interrater or interobserver reliability. The interrater form of reliability is predicated upon the level of concurrence between two independent experts who rate whether items on a survey accurately reflect some domain, phenomena, or construct of interest (Wynd, Schmidt, & Schaefer, 2003). As a measure of interrater reliability, the experts are given the same instrument/survey, and they note their responses individually without knowing what the

other observer has recorded (Wynd et al., 2003). Interobserver/interrater reliability was employed to assess the reliability of the TRF. Two experts were given the TRF/survey and asked to read the behavioral descriptions for each of the nine fictitious students. The experts were requested to indicate whether each description of the behavior was mild, moderate, or severe. The experts were also asked whether each of the behavioral scenarios warranted referral (yes or no) for special education evaluation. The reliability index was computed using the following formula: [number of times the observers agree in their ratings of the nine items divided by the total number of observations] X 100 (Polit, Beck, & Owen, 2007). If the two expert ratings did not agree on 75% of the scenarios, the TRF would need to be edited or revised to meet the interrater reliability (Polit et al., 2007). I had a discussion with the experts regarding making specific changes to increase the interobserver reliability of the TRF to 75% (Polit et al., 2007).

Operationalization of Variables

The data collected for this study included a mixture of categorical and interval level variable data. The independent variables related to student and teacher race/ethnicity and teacher gender were categorical variables. Students were described as fitting one of the following three racial/ethnic categories: African American, Hispanic, or White/Caucasian as well as teachers who also provided gender demographic. The dependent variable of how likely a teacher would refer a boy student for special education evaluation based on descriptions of student behaviors were measured as an interval level variable. The dependent variable of severity of classroom behavior was

measured using an interval level scale. The behaviors were rated as *1 = mild, 2 = moderate, and 3 = severe.*

The teacher gender variable was a categorical variable. Teachers had the preference of choosing from the following classifications: male, female, transgender and Prefer not to Answer. Years of teaching experience was a ratio level variable as teaching experience could range from zero to some years. The teachers will write the number of years they have taught in general and special education in designated section on the demographic survey. Teacher attitude toward inclusion was an interval level variable and was measured by asking the participants about their attitudes about the inclusion of challenging students in the mainstream learning environment. The subjects will respond to the statement based on educational policy on "Inclusion" as related to special education; (i.e. traditionally, when students have been labeled as Special Education, they are provided with services outside the regular classroom). Inclusion is the policy of providing these students with services while they stay in the regular classroom. What is your attitude towards this policy? Circle your choice (*1=Strongly Disagree, 2= Somewhat Disagree, 3= Uncertain, 4=Somewhat Agree or 5=Strongly Agree*).

Data Analysis Plan

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Data were inputted through the SPSS 20.0 software program by the researcher Then the data output were analyzed for mean substitutions (i.e., replacing any missing values with the item mean) and were used to replace missing data (Tabachnik & Fidell, 2013). Descriptive statistics were calculated for some variables, for example, frequencies and

percentages were calculated for categorically coded variables. Descriptive statistics such as means, standard deviations, and range of scores were processed for continuously coded variables (i.e., ratio or interval such as teacher years of experience) (Tabachnik & Fidell, 2013).

Research Questions and Hypotheses

There are two primary research questions that guided this study. The independent variables in this study were race/ethnicity of the student, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion. The dependent variables were how likely a teacher would refer boy students to special education and differences in teacher referral of based on the race/ethnicity of the boy students. The covariates were teacher's years of teaching experience in general and special education classroom. The research questions and associated hypotheses are presented below:

RQ1: What is the predictive relationship among the race/ethnicity of the student, teacher gender, teacher race/ethnicity and teacher attitude toward inclusion and likelihood of teacher referral to special education after controlling for teacher experience in general and special education?

$H_0$1: There is no statistically significant predictive relationship among race/ethnicity of the student, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education measured in years.

H_a1: There is a statistically significant predictive relationship among race/ethnicity of the student, teacher gender, teacher race/ethnicity, and teacher attitude

toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education measured in years.

Multiple linear regression (MLR) was employed to analyze the data for the first research question. Multiple regressions will allow for the assessment of the predictive relationships of the categorical and continuously-coded predictor variables on a continuously-coded criterion variable (Tranmer & Elliott, 2008). Also, to determine the significance of the results, the alpha level must be set at $p < .05$ (Vogt, 2007).

RQ2: What are the differences in teacher ratings regarding the severity of described classroom behavior of boy students based on the race/ethnicity of the student?

$H_0$2: There are no statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the students.

H_a2: There are statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the students.

A one-way ANOVA was used for Research Question 2 to determine whether there are differences in teacher ratings for the severity of classroom behavior based on the race/ethnicity of the students. The reason for doing an ANOVA is to examine variances between group scores on some measured variable (Tabachnik & Fidell, 2013). Teacher ratings of the severity of classroom behaviors will constitute the group scores.

Prescreening Data

Before analyzing the data with SPSS, the surveys were prescreened for missing data to test the assumptions of regression (Garson, 2012). Pre-data screening is necessary to minimize statistical errors when performing a quantitative analysis. Having data that is free of errors requires prescreening of the data (Garson, 2012). The prescreening data process for this study will consist of using descriptive statistics and other statistical tests as appropriate to screen the data (Garson, 2012). Details regarding the prescreening process are presented below.

Cultural Theory

Missing data shows critical issues for research around generalizability; it leaves flaws in the data outcomes and decreases the strength of the statistical method (Hertel, 1976). One way to manage missing data is through visual assessment of the data and if more than 10% of the data was missed by a participant then that information was excluded from the analysis of the data (Hertel, 1976). Lin, Foster, and Ungar (2011) contended one should check data entries for missing data by administering a frequency count for every variable. I will conduct a frequency count to determine the presence of missing data for each variable in the study. The one thing that can be done out of multiple approaches to deal with missing data is the implementation of multiple imputations as a viable method (Tabachnik & Fidell, 2013). In multiple imputations, the software generates credible values constructed on the correlations for the missing data and then averages the replicated datasets by including random errors in the predictions (Tabachnik & Fidell, 2013).

Testing Assumptions for Regression

Additionally, multiple linear regression assumptions will test the assumptions about the independent and dependent variable and the assumption that there is an independence of observations. Before performing a statistical analysis, there are several assumptions that were tested using a regression analysis. A regression analysis test includes (a) independence of scores (b) normality of scores (c) linearity between the independent and dependent variables (d) lack of multicollinearity between predictor variables and (e) homogeneity of variance or equivalent criterion residuals scores across the predictor variables (Muijs, 2010).

Independence of Scores

The assumption of independence of scores was addressed by assessing the statistical relationships between variables that are often modeled by equating one or more variables to the function of another (Statistics Solutions, 2016). Additionally, the assumption of independence is used for *t*-tests, an ANOVA tests, and in many other statistical tests (Statistics How To, 2016). It is important for this study to develop results from its samples that reflect what this study would find in its population. Statistical models often involve making a fundamental assumption about the form and functional variable relationships, as in linear regression (Statistics How To, 2016). The observations between groups should be independent, which means the clusters are made up of different people. You do not want subjects appearing twice in two separate groups as it could skew your results. The observations within each cluster must be independent. If two or more

data points in one group are connected in some way, this could also skew the data (Statistics How To, 2016).

The assumption of independence means that statistical data is not in any way connected particularly, in ways that have not accounted for the statistical model (Statistics How To, 2016). For this study, the independence of scores was addressed by recognizing that the factorial ANOVA requires the dependent variable in the analysis to be a balance of metric measurement e.g. (ratio or interval data) and the independent variables to be nominal or better. Secondly, the factorial analysis of variance assumes that the dependent variable comes close to a multivariate normal distribution (Statistics How To, 2016). The assumption should be verified graphically by using a histogram with a normal distribution curve, or a Q-Q plot. In addition, the assumption can be tested with a goodness of fit test against normal distribution employing a Chi-Square or Kolmogorov-Smirnov test, for interval or ratio scaled data (Statistics How To, 2016).

Ghasemi and Zahediasl (2012) contend that the assumption of normality is of particular importance when forming references for intervals variables. Normality and other assumptions are a serious matter, for when the assumptions do not sustain it is unviable to derive accurate and reliable conclusions about reality. Many of the statistical formulas including *t*-tests, analysis of variance, correlation, regression, specifically parametric tests, are centered on the assumption that the data keep to a normal distribution or a Gaussian distribution. The normality assumption can be tested through a variety of procedures (Ghasemi & Zahediasl, 2012). Normality in this study was assessed using the Shapiro-Wilk test (Garson, 2012). Linearity is the rate of change between

scores on two variables that remains stable for the entire range of scores for the variables (Ghasemi & Zahediasl, 2012). There are two methods for assessing linearity they are statistical and geographical and statistical standards (Ghasemi & Zahediasl, 2012). Testing for nonlinearity is necessary because correlation, regression, and other properties of the general linear model (GLM) assume linearity if an assortment of methods is available (Garson, 2012). The statistical method used to test for linearity of the data is the Analysis of Variance (ANOVA) test. The ANOVA table allows for the working out of the linear and nonlinear components of a variety of paired variables (Garson, 2012). If the significance of the F value is greater than the critical value of .05, then the assumption of linearity were held. If the value is less the .05, then appropriate actions were taken to address the lack of linearity between variables (Garson, 2012).

The homoscedasticity assumption was tested using White's test (Ghasemi & Zahediasl, 2012). The White's test does not require prior knowledge of the form of the homoscedasticity (Garson, 2012). The assumption is that the relationship is the same for all of the dependent variables. The White test is a statistical test that determines whether the residual variance of a variable in a regression model will remain stable (Garson, 2012).

Multicollinearity in Regression is a circumstance that happens when predictor variables in the model are greatly correlated with others (Montgomery, Peck, &Vining, 2012). Acute multicollinearity is problematic because it can raise the variance of the regression coefficients, and make them unpredictable. In multiple regressions, multicollinearity can be a problem if the rationale for the study is to estimate the

contributions of individual predictors. When multicollinearity exists, (*p* values) can be misleading and the regression coefficients were expansive and vary obviously with the addition or exclusion of just one case/participant (Montgomery et al., 2012). If this is the concern, removing any highly correlated terms from the model will significantly impact the estimated coefficients of the other highly correlated terms. Such issues can result in the wrong conclusions about relationships between independent and dependent variables. Multicollinearity was tested by assessing the bivariate correlations among the variables. As a rule inter-correlation above .80 signals a possible problem with multicollinearity (Montgomery, et al., 2012). The above .80 inter-correlation signals when *R*-squared and significant *F* test of the model occur in combination with one nonsignificant *t* test of coefficients (Garson, 2012).

Homogeneity of Variance

As postulated by Mukhopadhyay (2014) the assumption of homogeneity of variance is that the difference of each population is equal. While testing for homogeneity of variance, numerous statistical tests are useful; they are Levene's and Barlett's, Cochran's, or Hartley's Fmax tests. However, a further recognized estimation for homogeneity of variance is Levene's test. The Levene's statistical test was applied to gauge the homogeneity of variance for related variables (Mukhopadhyay, 2014).

Threats to Validity

Threats to validity can be both external and internal. In quantitative studies particularly, the extent to which threats to internal validity impact the analysis are controlled by the type of design and the level of regulation the researcher has on data

collection, sampling, and data analyses (Pedhazur & Schmelkin, 2013). Threats to internal validity involve history or maturation, statistical regression, instrumentation, and mortality (Mertens, 2013).

Internal Validity

Threats to internal validity are typically related to experimental studies such as pretest and post-test designs or longitudinal studies (Mertens, 2013). For example, the history effect occurs when a historical event between the first and second data collection happens. This effect should not be a concern in this study as it was cross-sectional and the data is only collected once. The threat of history is not a concern because there is no pretest and post-test data to assess (Mertens, 2013). Statistical regression validity is a threat that occurs when participants produce significantly high scores or low on a pretest and earn significantly different scores when taking a posttest (Cook & Campbell, 1979; Pedhazur & Schmelkin, 2013). However, there is no such threat or concern to this study because there is no pretest and posttest. There is a threat to instrumentation in this study due to the creation of my survey/instrument to assist in the data collection (Mertens, 2013). A panel of two experts was consulted to assess the validity of the TRF. Adjustments to the instrument were made at the recommendation of the experts. The threat of mortality will not be an issue in this study because the study is not longitudinal in design and the data will only be collected at one point, and it can be duplicated (Mertens, 2013). There are, particular potential, threats to the internal validity of studies utilizing a survey research designs (Mertens, 2013). Selection bias is a potential threat that results from who participates in the study. Often selection bias happens when the

survey sample is not a fair representation of the population. Subsequently, selection bias in this study can stem from a non-representative sample (Mertens, 2013). Demographic information were collected and used to determine the degree to which the sample reflects the demographics of teachers in the targeted area. Nonresponse bias according to Pedhazur and Schmelkin, (2013), is when the results of the respondents differ in meaningful ways from non-respondents. The teachers who volunteer to participate in this study may provide different responses than those who do not participate in the study (Pedhazur & Schmelkin, 2013). For example, some teachers may respond to this survey and complete the survey because they have attitudes (positive or negative) about inclusion strengthening the study results around how likely a teacher would refer a boy student particularly an African American student for special education or not. The effects from respondent's positive or negative feelings about inclusion will provide data regarding teacher's support or non-support of inclusion based on responses to the behavior section of the survey. Choosing not to use random selection may boost the threat of selection bias to the study and weaken the generalizability of the outcomes to other samples of teachers (Mertens, 2013). Additional internal validity threats to quantitative studies using survey research designs are reverse causation and covariates (Pedhazur & Schmelkin, 2013). Reverse causation indicates the inability to identify which came first, the independent or dependent variable; that is, to say the dependent variable can be the independent variable and vice versa (Pedhazur & Schmelkin, 2013). However, as the independent variables in this study will refer to demographic characteristics of the participants, there is no issue of reverse causation in this study.

External Validity

External validity is the ability for the researcher to draw conclusions correlated to a study that can be generalized to other groupings of people, settings, and times (Salkind, 2010). In this study, high school teachers were surveyed in the Philadelphia County School District. The outcomes from this study, therefore, may not be generalizable to other teachers in other municipalities and countries. Furthermore, the results may not be generalizable to teachers in private, religious-based, or charter high schools. Another threat to this study deals with statistical conclusion validity. The risk can be associated with errors and the use of inadequate sampling methods, inappropriate statistical tests, and unreliable measurement procedures (Statistical conclusion validity, 2015). Subsequently, an incorrect conclusion about the tested relationship between teacher decision to refer an African American boy student to special education based on the dependent variables can essentially show no connection when in fact there is or show a relationship when in reality there is not (Statistical conclusion validity, 2015). To minimize this threat, the researcher will test the assumptions associated with multiple regressions and take appropriate steps to address any violations that may occur. The researcher also addressed validity and reliability within the TRF with the assistance of two or more expert panel of psychologists who have experience working with a range of student behavioral issues.

Ethical Procedures

I requested permission from the Institutional Review Board (IRB) of Walden University to implement this study. The IRB then issued an approval number [18-17-

0289856] for this study once it was approved. I requested a letter of cooperation from the research and evaluation department of the Philadelphia County school district to conduct the study at the chosen high school (Appendix C) seeking their cooperation in allowing me to do my study. In addition, permission from Walden University to use the survey TRF for the study was requested (Appendix A). After receiving permission from the Walden University IRB to conduct the study, the following steps were implemented. First, I submitted a letter of introduction along with a copy of the informed consent to the school administrator for review. After I was granted permission from the school administrator, the next step was to distribute the TRF survey at the designated public high school during a scheduled teacher in-service. During that allotted time the surveys were filled out and collected. The participants were provided with my contact information to use if they have any questions after they have taken the survey. Finally, the participants were given a $5 gift card for WAWA for their participation. After the data collection and data analysis, a summary of the findings will be provided to the school district and high school requesting a formal presentation through a thank you letter for their participation in the study. Also, the district will receive a typed summary of the results of the survey.

Ethical Considerations

It was important to follow all ethical standards related to human subjects when conducting the following study. The participants were instructed by the researcher to read over the informed consent; informing them that their participation in the survey is kept confidential and that they are not obligated to participate and can withdraw at any time from taking part in the study. Furthermore, the survey will not require the participants to

reveal any personally identifying information. The survey packets will include a consent agreement, which describes the research, and the TRF/survey. When the participants complete the survey the researcher will instruct the participants to place their completed survey and consent forms into the envelope that came with the packet and seal it. The respondents returned the packets as they left the auditorium; then they received a $5 gift card and each participant were thanked for their voluntarily participation in the study. The survey did not request personal identifying information from the participants. The results were reported at the aggregate level, not on an individual level. The data is safeguarded, on a password protected storage-drive, not on a computer hard drive (White Canyon Software, Inc., 2016). The storage-drive is protected for up to 7 years, in a locked storage cabinet, with a combination lock, in the researchers' home to keep from losing it. Furthermore, the data will be erased from the storage drive, by deleting the file using a program called (WipeDrive). This government-grade, wiping technology overwrites any data several times using government approved cleaning technology, safeguarding that all data is unrecoverable, even when using the most sophisticated tools are utilized in an attempt to recover it (White Canyon Software, Inc., 2016).

Summary

In summary, this research was based on a quantitative, correlational research design to investigate a possible correlation between individual student/teacher variables that predict how likely a teacher would refer boy students for special education evaluation. The independent variables in this study were race/ethnicity of student, teacher race/ethnicity, teacher gender, and teacher attitude toward inclusion with years of

teaching experience, with general and special education students as covariates. The dependent variables are how likely teachers are to refer a boy student for a special education evaluation. The two research questions in the study were: How well do the four variables such as race/ethnicity of student, teacher ethnicity, teacher gender, teacher attitude toward inclusion and how likely teachers would refer a boy student for a special education evaluation? And RQ2: What are the differences in teacher ratings regarding the severity of described classroom behavior based on the race/ethnicity of the student? This study will employ the use of a survey, which is a useful data collection research tool, particularly when examining a broad range of current social issues in human services (Trochim, 2013). The data were analyzed using the Statistical Package for Social Sciences (SPSS). Chapter 4 will provide the statistical outcomes from the impact of the study, changes in instrumentation, data analysis strategies, are explained below.

Chapter 4: Results

Introduction

The purpose of this study was to investigate the predictive relationships between the independent variables (i.e., race/ethnicity of the student, teacher gender, teacher race/ethnicity, and teacher attitudes toward inclusion) and the probability that a teacher would refer a boy student for special education. Teaching experience in general and special education were entered as covariates. Data were collected from teachers who taught in the Philadelphia, Pennsylvania, public school system. The study was limited to high school teachers. The two research questions that guided this study and the associated hypotheses that guided this study were as follows:

RQ1: What are the predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education?

$H_0$1: There is no statistically significant predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5-point scale) and how likely a teacher would refer to special education (measured on a 5-point scale) after controlling for teacher experience in general and special education in years.

H_a1: There is a statistically significant predictive relationship among student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5-point scale) and how likely a teacher would refer to special

education (measured on a 5-point scale) after controlling for teacher experience in general and special education measured in years.

RQ2: What are the differences in teacher ratings regarding the severity of described classroom behaviors based on the students' race/ethnicity?

$H_0$2: There is no statistically significant difference in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

H_a2: There are statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

Chapter 4 is a preview of the pilot study, data collection, demographic data, and descriptive statistics from the TRF and a summary of the TRF data. Several methodologies are presented and their data analysis to test for variable significance. The TRF instrument is assessed for evidence of validity and reliability. There is an assessment of the quantitative data collection processes for this study and a summary of demographic descriptive statistics data, descriptive statistics for TRF data for average of likelihood of referral and severity of behavior ratings by ethnicity of student. Multicollinearity test results are presented to identify if significant predictors exist from the measured variables. Assumptions for regression and multiple linear regression about the independent and dependent variable are delineated. Normality assumption scores on the dependent variable were assessed from graphical outputs. Lack of multicollinearity is assessed using the collinearity diagnostics produced in the regression output procedures.

Homogeneity of variance assumption was tested. ANOVA results for the overall regression model are presented along with the regression model results and the ANOVA summary of severity of behavior by race of student is reported.

Pilot Study

The Teacher Rating Form (TRF) instrument used to collect data for this study was assessed for evidence of validity and reliability. Assessing the validity of the TRF through *face validity* and *content validity* were appropriate means for determining the validity of the TRF. A panel of two experts was asked to judge the *face* and *content validity* of the TRF. The term *face validity* implies that an instrument appears to evaluate what is designed to evaluate (Holden, 2010). The experts, licensed school psychologists, were given the scenarios to read. They indicated whether each situation accurately reflected disruptive classroom behavior. The experts also rated whether each behavioral scenario described behavior that was mild, moderate, or severe. The experts then provided comments or suggestions for modifying the wording to improve the *face validity* of the scenarios where necessary.

The *content validity* suggests the degree to which an instrument has an applicable sample of items for the hypothesis it measured (Polit & Beck, 2004). To assess the *content validity* a more systematic examination or inventory of the aspects of the construct were evaluated to determine whether the instrument captured what it was designed to measure (Dros, 2011). For this study, *content validity* affects whether the items on the TRF satisfactorily represented the area of interest (Waltz et al., 2005). The

panel of experts indicated whether each of the nine scenarios reflected the types of disruptive behaviors noted in the Achenbach Behavior Checklist.

The reliability of the TRF was assessed using *interrater reliability*, which is an estimate obtained from scores on similar items from different raters. Two experts were asked to participate through phone call and face-to-face; they were given a consent and pilot TRF. The African American expert was a school psychologist who reported having 2 years of teaching experience and no teaching experience in special education. The White expert had 22 years of teaching experience and no years of special education experience. The two experts indicated whether each behavioral scenario reflected a level of severity for disruptive classroom behavior as either, mild, moderate, or severe. The *interrater reliability index* was computed using the following formula: [number of times the observers agreed in their ratings of the severity of each behavioral scenario divided by the total number of scenarios] *X* 100 (Polit et al., 2007).

The results from the reliability analysis revealed that the experts agreed with eight of the nine behavioral scenarios. The *interrater reliability index* [(8/9) *x*100] showed that the two experts agreed on 89% of the scenarios when asked if they would refer for special education evaluation and placement (yes or no). This value exceeded the 75% agreement criteria. Therefore, there was no need to alter the wording of any items to improve the *interrater reliability*. In the final analysis, both the African American and White psychologist agreed 89% of the time on the severity of behaviors, therefore providing significant validity and reliability. Where the African American and White psychologist disagreed was on Student C's severity of conduct. The African American psychologist

would refer Student C for special education and recorded the severity of his behavior as moderate.

Data Collection

The quantitative data collection processes for this study involved the hand delivery of surveys to the sample of 150 high school teachers. One hundred and ten participants submitted surveys in a drop-box, and the entire instrument took approximately 10 to 15 minutes or less to complete. Many teachers opted to complete the surveys prior to leaving the scheduled in-service training. The data collection went as planned. I arrived at the research site an hour early and set up the surveys near the auditorium door as advised by the principal so that participants could return the surveys to the box as they departed the auditorium. I was given a few minutes at the direction of the school principal to introduce myself. It took about 4 minutes for me to introduce myself and the study. After all the teachers had entered the auditorium, I informed them know that the surveys were at the entrance of the auditorium and they were available for them to pick up. I waited at the door to answer questions and give out gift cards for those participants who dropped a survey in the drop-box. I waited a total of 2 hours, 1 hour during the in-service and additional 1 hour after the in-service, to collect surveys that had been returned to the box. Out of the 150 teachers, 110 surveys were placed in the box and 110 gift cards were issued. There were no adverse events of a serious consequence, and there were no disruptions to the in-service; the administrator informed the teachers ahead of time that I would be conducting a survey and soliciting their participation. The

participants appeared to not have any undue stress and several gave positive responses about the survey.

Study Results

Demographic Data

Table 1 presents a summary of results for the demographic data. A few participants did not answer the demographic question or skipped the demographic page entirely. This resulted in 14.4% of the sample not having any demographic data to report. Under the variable ethnicity, the majority (81.4%) of participants indicated they were non-Hispanic. The data revealed that most participants (55.9%) selected the option for White/Caucasian for the variable of race. African Americans comprised 17.8% of the sample. Regarding gender, most participants indicated they were boy (54.6%).

Table 1

Summary of Descriptive Statistics

Variable	Frequency	Percent of Sample	Cumulative Percent
Ethnicity			
No response	17	14.4	14.4
Non-Hispanic	96	81.4	95.8
Hispanic/Latino	5	4.2	100.0
Total	118	100.0	
Race			
No response	24	20.3	20.3
African American	21	17.8	38.1
White/Caucasian	66	55.9	94.1
Other	7	5.9	100.0
Total	118	100.0	
Gender			
No Response	19	16.6	16.6
Male	42	54.6	50.0
Female	55	46.0	100.0
Total	118	100.0	

Table 2 shows a summary of the *descriptive statistics* regarding teaching experience. The data revealed that the years of teaching experience among the participants ranged from less than 1 year to 31 years, and the average number of years teaching for the sample was 14. The data further revealed that 92% of the sample had both training and teaching experience in special education. The years of training in special education ranged from 0 through 31 years with the average being 2.62 years. The outcome for years of teaching in special education ranged from 0 through 31 years with an average of 3.12 years.

Table 2

Summary Descriptive Statistics for Teaching Experience

Variable	N	Minimum	Maximum	Mean	Std. Deviation
years of teaching experience	102	1	35	14.00	8.381
years training in special education	98	0	31	2.62	6.514
years teaching in special education	99	0	31	3.12	7.260
Valid N (listwise)	97				

Descriptive Statistics for TRF Data

The descriptive statistics for data collected by the TRF are presented in Table 3. Results revealed that the highest ratings for likelihood of referral exceeded 4.0 for Students A, C, and H. The racial descriptions for those students were Hispanic, African American, and White/Caucasian respectively. The lowest ratings for likelihood of referral

were for Students B, E, and F. The racial descriptions for those students were White/Caucasian, Hispanic, and African American, respectively. The data further revealed that the highest ratings for severity of behavior exceeded 2.0 for Students A, C, and F. The racial descriptions for those students were Hispanic, African American, and White/Caucasian respectively. Additional analysis found that lowest average ratings for likelihood of referral were for Students I, B, and F. The racial descriptions for those students were Hispanic, White/Caucasian, and African American, respectively. There were no instances where students of either single race received the highest or lowest scores.

Table 3

Summary of Descriptive Statistics for TRF

Student	N	Minimum	Maximum	Mean	Std. Dev.
AH likelihood of referral	110.00	1.00	5.00	4.18	1.13
AH severity of behavior	109.00	2.00	5.00	2.79	0.47
BW likelihood of referral	110.00	1.00	5.00	3.31	1.18
BW severity of behavior	109.00	1.00	3.00	1.72	0.69
CAA likelihood of referral	109.00	1.00	5.00	4.07	1.22
CAA severity of behavior	110.00	1.00	3.00	2.69	0.50
DW likelihood of referral	110.00	1.00	5.00	3.24	1.21
DW severity of behavior	110.00	1.00	3.00	1.89	0.63
EH likelihood of referral	110.00	1.00	5.00	2.92	1.15
EH severity of behavior	110.00	1.00	3.00	1.81	0.61
FAA likelihood of referral	110.00	1.00	5.00	2.67	1.29
FAA severity of behavior	110.00	1.00	3.00	1.72	0.62
GAA likelihood of referral	110.00	1.00	5.00	3.38	1.25
GAA severity of behavior	110.00	1.00	3.00	1.85	0.62
HW likelihood of referral	110.00	1.00	5.00	4.25	1.10
HW severity of behavior	110.00	1.00	3.00	2.64	0.55
IH likelihood of referral	110.00	1.00	5.00	2.66	1.17
IH severity of behavior	110.00	1.00	3.00	1.67	0.61
Valid N (listwise)	108.00				

Average ratings for likelihood of referral and severity of behavior for the student scenarios based on race were calculated by adding the ratings based on ethnicity described in the scenarios and then divided by 3. A summary of the results is presented in Table 4. The data reveals that highest average for likelihood of referral was for the scenarios that depicted White boy students, followed by African American and then Hispanic boys. The highest average for referral ratings of severity of behavior was White boy students, followed by African American, and then Hispanic boys. The average ratings were used as the dependent variables in the regression analysis.

Table 4

Summary of Descriptive Statistics for Average of Likelihood of Referral and Severity of Behavior Ratings by Ethnicity of Student

	N	Minimum	Maximum	Mean	Std. Deviation
Hispanic likelihood of referral	330	1.00	5.00	3.25	0.91
Hispanic severity of behavior	327	1.33	3.00	2.09	0.38
White likelihood of referral	330	1.67	5.00	3.60	0.86
White severity of behavior	327	1.00	3.00	1.76	0.48
African American likelihood of referral	327	1.00	5.00	3.38	0.96
African American severity of behavior	330	1.33	3.00	2.08	0.42

Missing Data

When evaluating statistical assumption for this study, I looked for missing data. One-way missing data was managed through visual assessment of the data, and if more than 10% of the data was missed by a participant, then that information was excluded from the analysis of the data. I check the data entries for missing data by administering a frequency count for every variable using a Microsoft Excel spreadsheet. Subsequently 11 participants did not provide demographic data.

Assumptions of Regression

To test the assumptions for regression and multiple linear regression assumptions about the independent and dependent variable and the assumption that there is an independence of observations I performed statistical analysis. There are several hypotheses that were tested using a regression analysis. A regression analysis test that includes (a) independence of scores, (b) normality of scores, (c) linearity between the independent and dependent variables, (d) lack of multicollinearity between predictor variables, and (e) homogeneity of variance or equivalent criterion residuals scores across the predictor variables.

Normality Assumption

Normality of scores on the dependent variable were assessed from graphical displays of the histogram and normal P-P plot. The histogram in Figure 1 shows slight departure from normal with a slight positive skew. The P-P plot in Figure 2 also shows the same pattern. The scores do not cluster closely to a straight line, but the departures across the span of scores is slight. I acccepted this slight departure as acceptable. Other

reseachers have also suggested that the regression procedure is robust to slight departures from normal (**supporting citaton**).

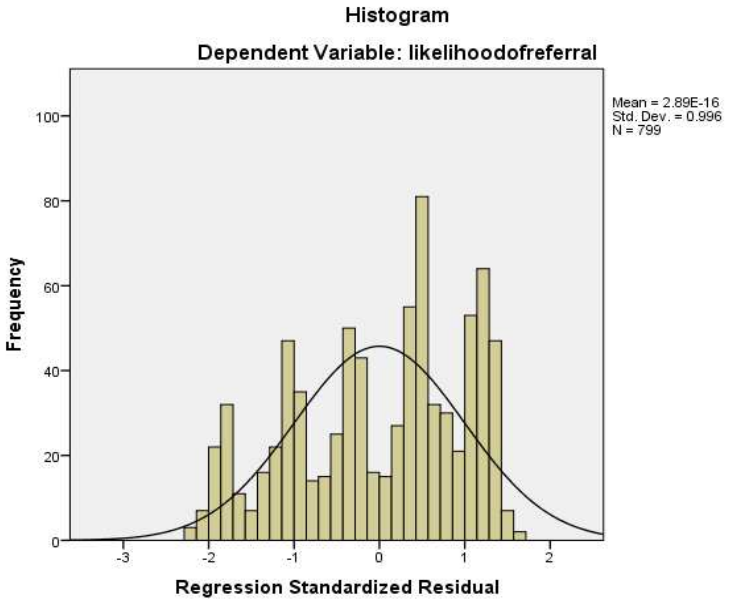

Figure 1. Histogram.

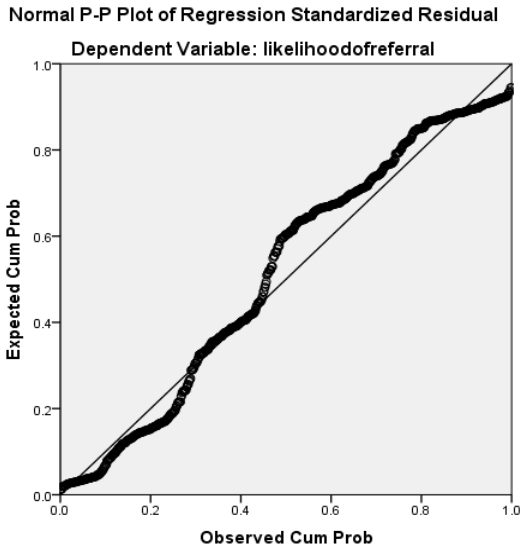

Figure 2. Regression plot.

Lack of Multicollinearity

The data was assessed for multi-collinearity using the collinearity diagnostics produced in the regression output two procedures. I checked for the presence of multi-collinearity by examining the variance inflation factors (VIF) and tolerance values as presented in Table 5. The tolerance values addressed how one independent variable affects the other independent variables. The general rule of thumb is that tolerance values greater than 10 indicate high levels of multi-collinearity (Stephens, 2009). A review of the data in Table 5 reveals that all VIF values were less than 10. With regard to tolerance the general rule of thumb is the values greater than .20 indicates lack of multicollinearity among the variables (Stephens, 2009). The tolerance values in Table 5 all exceed .20. Based on the obtained VIF and tolerance values presented in Table 5 the assumption regarding the lack of multicollinearity was met for the data collected in this study.

Table 5

Collinearity Diagnostics

Collinearity Statistics	
Tolerance	VIF
.950	1.052
.947	1.056
1.000	1.000
.782	1.279
.624	1.602
.523	1.914
.922	1.085

Homogeneity of Variance

Homogeneity of variance assumption was tested.

RQ1: What are the predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education?

$H_0$1: There is no statistically significant predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5 point scale) and how likely a teacher would refer to special education (measured on a 5-point scale) after controlling for teacher experience in general and special education in years.

H_a1: There is a statistically significant predictive relationship among student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion (measured on a 5 point scale) and how likely a teacher would refer to special education (measured on a 5-point scale) after controlling for teacher experience in general and special education measured in years.

Hierarchical multiple linear regression (HMLR) was performed to test the null hypothesis. The years of teacher experience in general and years of special education experiences were entered first in the modal as covariates. During Step 2 student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion were entered as the independent variables of interest. Table 6 presents a summary of the ANOVA table for the regression equation. The results revealed that both models of the HMLR were statistically significant, which meant that at least one variable in each equation significantly predicted teacher likelihood of referral for special education evaluation.

Table 6

ANOVA Results for Overall Regression Model

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.055	2	6.527	3.787	.023[b]
	Residual	1432.336	831	1.724		
	Total	1445.391	833			
2	Regression	48.263	6	8.044	4.761	.000[c]
	Residual	1397.128	827	1.689		
	Total	1445.391	833			

a. Dependent Variable: likelihood of referral b. Predictors: (Constant), years teaching in special education, years of teaching experience c. Predictors: (Constant), years teaching in special education, years of teaching experience, student race, teacher gender1, teacher race, teacher attitude toward inclusion

Results from the regression model summary are presented in Table 7. The data revealed that in the first model, years teaching in special education and years of teaching experience were statistically significant predictors ($F = 3.379$ $p = .023$) of teacher likelihood of referral. However, the R^2 showed that the two variables accounted for about 1% of variance in the dependent variable. Adding the remaining independent variables in the regression model resulted in a statistically significant change in the F value ($\Delta F = 5.2$, $p = .000$). Including race of student, gender of teacher, race of teacher, teacher attitude toward conclusion accounted for approximately an additional 1.4% of variance in the how likely a teacher would refer for special education.

Table 7

Regression Model Summary

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
					R^2 Change	*F* Change	df1	df2	Sig. *F* Change
1	.095[a]	.009	.007	1.313	.009	3.787	2	831	.023
2	.183[b]	.033	.026	1.300	.024	5.210	4	827	.000

a. Predictors: (Constant), years teaching in special education, years of teaching experience b. Predictors: (Constant), years teaching in special education, years of teaching experience, race of student, gender of teacher, race of teacher, teacher attitude toward inclusion

To determine which variables were significant predictors in the equation, I examined the regression model results in Table 8. Data in the table indicates that after controlling for years teaching experience and years of teaching experience in special education the following four variables were significant predictors of teacher likelihood to refer to special education: years teaching experience ($t = 2.694$, $p = .007$), race of teacher ($t = 2.94$, $p = .003$), race of student ($t = -2.168$, $p = .03$), and teacher attitude toward inclusion ($t = -2.486$, $p = .013$). I therefore rejected the null hypothesis and accepted the alternate hypothesis that there were statistically significant predictive relationships between student race/ethnicity, teacher gender, teacher race/ethnicity, teacher attitude toward inclusion and how likely a teacher would referral to special education after controlling for teacher experience in general and special education.

Table 8

Regression Model Results Title of Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.222	.088		36.472	.000	3.049	3.396
	years teaching experience	.016	.006	.104	2.694	.007	.004	.028
	years teaching special education	-.012	.007	-.065	-1.692	.091	-.025	.002
2	(Constant)	3.463	.278		12.451	.000	2.917	4.009
	years teaching experience	.017	.006	.109	2.763	.006	.005	.029
	years teaching special education	-.011	.007	-.064	-1.590	.112	-.026	.003
	race of teacher	.166	.056	.104	2.954	.003	.056	.276
	gender of teacher	.022	.093	.008	.236	.814	-.160	.204
	race of student	-.120	.055	-.074	-2.168	.030	-.228	-.011
	teacher attitude toward inclusion	-.102	.041	-.088	-2.487	.013	-.183	-.022

RQ2: What are the differences in teacher ratings regarding the severity of described classroom behaviors based on the students' race/ethnicity?

$H_0$2: There is no statistically significant difference in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

H_a2: There are statistically significant differences in teacher ratings of the severity of described classroom behavior of boy students based on the race/ethnicity of the student.

The one-way ANOVA was used to test the null hypothesis for Research Question 2. A summary of results from the ANOVA table are presented in Table 9. The results revealed there were no statistically significant differences in teacher ratings of severity of behavior based on the race of the student. I therefore accepted the null hypothesis for Research Question 2.

Table 9

ANOVA Summary of Severity of Behavior by Race of Student

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	*.003*	*2*	*.001*	*.002*	*.998*
Within Groups	*539.677*	*984*	*.548*		
Total	*539.680*	*986*			

Summary

In Chapter 4 several methodologies were analyzed to test for variable significance. These are summarized as follows:

I found that multicollinearity test was not a significant predictor of the measured variables. At least one variable in each equation significantly predicted teacher likelihood of referral for special education evaluation. There were statistically significant predictive relationships between student race/ethnicity, teacher gender, teacher race/ethnicity,

teacher attitude toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education.

There were no statistically significant differences in teacher ratings of severity of behavior based on the race of the student. I therefore accepted the null hypothesis for RQ1: What are the predictive relationship between student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion and how likely a teacher would refer to special education after controlling for teacher experience in general and special education? There is statistically significant predictive relationship after controlling for years teaching experience and that the following five variables were significant predictors of teacher likelihood to refer to special education: years teaching experience, race of teacher, race of student, gender of the teacher and teacher attitude toward inclusion. Therefore, the null hypothesis was rejected and the alternate hypothesis is accepted. As for Research Question 2: What are the differences in teacher ratings regarding the severity of described classroom behaviors based on the students' race/ethnicity: therefore the null hypothesis was accepted as the data did not show differences in teacher ratings of severity of behavior based on the race of the student.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The study investigated the predictive relationships between the independent variables of race/ethnicity of the student, teacher gender, teacher race/ethnicity, teacher attitudes toward inclusion, and the dependent variable, which was the probability that a teacher would refer an African American boy student for special education. Results from peer-reviewed literature have consistently revealed discrepancies in the percentage of African American boy students referred to special education compared to the proportion of African American boys in the general population (Sullivan & Bal, 2013; Zhang et al., 2014).

This chapter presents an interpretation of findings for each research question from this study relative to existing literature as presented in Chapter 2. In Chapter 5, I examine all variables related to how likely a teacher would be to refer an African American boy student for special education and the statistical outcomes of the variable relationships and if there is a connection or no connection to previous literature. In addition, Chapter 5 summarizes the statistical outcomes to the premises of the study. It includes a discussion on the findings related to race/ethnicity of teacher and student, gender of teacher, teacher attitude toward inclusion, teacher experience in general and special education, and severity of behavior based on race of the student. Finally, cultural and social exclusion theory is analyzed for the connection to previous studies while also highlighting the studies limitations, offering recommendations, implications for social change, and conclusion.

Variables Related to Teacher Referral to Special Education

This study was guided by two research questions. The first question addressed the predictive relationships between the independent variables of student race/ethnicity, teacher gender, teacher race/ethnicity, teacher attitude toward inclusion, and the dependent variable of probability of teacher referral to special education after controlling for teacher experience in general and special education. The following section presents an interpretation of findings relative to each variable.

Race of Student

Findings from my study revealed that the race of student was a significant predictor for the how likely a teacher would be to refer boy students for special education evaluation. The results were consistent with findings from several previous studies. Sullivan and Bal (2013) noted that race of student was related to the risk of being referred for special education. The researchers found that minority students across all sociodemographic categories were at greater risk of being identified for special education. African American students were 2.8 times more likely to be referred for special education than White students. Findings from my study further supported the relationship between race/ethnicity of student and how likely a teacher would be to refer to special education.

Findings from several studies revealed that African American students were at considerably greater odds for being reported for an ODR by a teacher (Bradshaw et al., 2010; Codrington & Fairchild, 2012; Zhang et al., 2014) or special education evaluation. Results from the Bradshaw et al. (2010) study further suggested that ODRs were related

to subsequent referrals to special education referral because of typically noncompliant behavior by boy students. Codrington and Fairchild (2012) noted that African American students were frequently misdiagnosed and referred to special education because of general classroom behaviors. Zhang et al. (2014) analyzed 5 years of data that spanned 2004 to 2008. They found that the high number of students in racial minority groups in special education was historical and a widespread problem. Results from this study showed that race of student were a significant predictor of teacher referral for special education evaluation. White boy students had the highest average scores for teacher ratings of referral for special education, followed by African American, and Hispanic boy students. Thus, results from my study were not consistent with previous researchers who reported that African American boy students were more likely to be referred for special education compared to White and Hispanic boy students.

Moreover, results from this study contradicted findings from Green (2012) regarding the race of student and how likely a teacher would be to refer to special education. Results from Green's quantitative analysis results suggested that there was no difference in the frequency with which Black and White boy students were referred for special education evaluation. The data from my study showed that after controlling for years teaching experience and years of teaching experience in special education, race of student was a significant predictor of how likely a teacher would to refer to special education. The data further showed the White boy students received the highest average rating for likelihood of referral to special education.

Gender of Teacher

Findings from several studies showed that gender was associated with teacher referrals to special education. Bradshaw et al. (2010) examined whether gender of teacher was related to a student's risk for receiving an ODR, which often leads to special education referral. Findings from the study revealed that female teachers were more likely to refer boy students for ODR's because of problematic classroom behavior. According to Alter et al. (2013), female teachers in their study were also more likely to refer students for special education evaluation because of off-task behaviors. Elhoweris et al. (2015) further found that the female teachers were more apt to refer a male child to special education services than the male teachers. Results from my study contradicted findings from other researchers (Alter et al., 2013; Elhoweris et al., 2015) in that the results showed that gender of teacher was not a significant predictor of how likely a teacher would be to refer for special education evaluation.

Race/Ethnicity of Teacher

Bradshaw et al. (2010) engaged in a quantitative investigation to determine whether teacher race/ethnicity was connected with ODR. The final analyses indicated that students in classrooms having African American teachers were more likely to receive a major ODR than their African American peers in classrooms with White teachers. The results from my study showed that there were statistically significant predictive relationships between teacher race/ethnicity and how likely a teacher would be to refer to special education after controlling for teacher experience in general and special education.

In another study, Alexander (2010) investigated the perceptions of White teachers related to student referral to special education and placement of African American boy students in special education. Findings from the study revealed that the race/ethnicity of the teacher was related to the teacher's decision to refer African American boy students to special education evaluation. Findings from my study were consistent with results from the Alexander study because results from my study showed that there were statistically significant predictive relationships between teacher race/ethnicity and likelihood of teacher referral to special education after controlling for teacher experience in general and special education. However, my study did not show which group of teachers were likely to refer based on race.

Teacher Attitude Toward Inclusion

Codrington and Fairchild (2012) asserted that teachers' biased attitudes and deficit thinking around certain behavioral dimensions are a major cause for disproportionality. Codrington and Fairchild (2012) noted that African American students were frequently misdiagnosed and referred to special education because general education teachers were most often inexperienced working with the behavioral styles of African American children.

Results from Grice's (2013) study revealed that teachers had low expectations of African American students. The teachers in the study generally expressed the belief that African American students are referred to special education in order to get the additional help that they need. These results revealed how teacher bias regarding the abilities of African American students exists systemically and that such bias could affect their

decisions to refer students for special education evaluation. Results from my study showed race of the student was a significant predictor of how likely a teacher would be to refer a student for evaluation. However, the magnitude of the relationship was weak because the strength of association only accounted for 4% of the variance.

Chu's (2011) study revealed that teachers used a deficit thinking model (having low expectations for students) while they worked with Culturally Linguistically Diverse CLD students and their families. The author found that teacher perceptions and attitudes of student behavior combined with race/ethnicity of the student to influence teacher decisions to refer students for special education evaluation and placement. However, findings from my study did support results from the Chu (2011) study because the results revealed that teacher attitude toward inclusion was a statistically significant predictor along with the race of the student and teacher attitudes toward how likely a teacher would be to refer students for special education evaluation.

Another study conducted by Anderson et al. (2012) revealed that in-service teachers conveyed less positive responses about working with children with special needs than did preservice teachers. Results from my study revealed that a 1% variance existed in the dependent variables, suggesting that teacher attitude toward inclusion showed a small, but statistically significant relationship to ratings of how likely a teacher would be to refer a boy student for special education based on student behavior. Swain et al. (2012) also looked at teacher views about inclusion and how their views affected the decision to refer students to special education evaluation. Results from the study suggested that training, direct exposure with special needs students, and coursework significantly

influenced preservice teachers' attitudes towards inclusion. Results connected with my study because, when controlling for the variables teacher years of experience and teacher years of experience in special education, which were a constant, my data showed, although by a small percentage, that those variables were significant predictors of a teacher's likelihood to refer a boy student based on student behaviors and teacher attitude toward inclusion.

Dallas et al. (2014) examined teacher perceptions toward students with disabilities by looking at teaching experience, faculty attitudes, and actions related to academic accommodations. The global findings from the study revealed that on average, the respondents in the study reported favorable attitudes toward providing accommodations for students with special needs. However, the data showed that the total years of teaching experience, academic discipline, and prior disability-related training were significant factors related to teacher perception toward students with disabilities and did not influence teacher decisions to refer to special education (Dallas et al., 2014). The findings from my study revealed that teacher attitude toward inclusion was a significant predictor along with teacher years of teaching in special education, thus showing some support for Dallas et al. (2014).

Teacher Experience in General and Special Education

Alter et al. (2013) conducted a mixed method analysis with a large sample of teachers to determine what classroom behaviors teachers perceived as most prevalent and problematic in the classroom. They examined the effect of four different teacher demographic variables, one being teacher years of experience and the grade level taught

on their responses. Teachers with the least years of teaching experience were more likely to refer students with challenging behaviors than teachers with significant years of teaching experience. Subsequently Alter et al.'s data on years of teaching experience were connected to my study because it did reflect some significance in how teachers with more years of experience viewed certain challenging behaviors differently than those teachers with less years of teaching experience. This difference might affect the likelihood of referral to special education evaluation because teachers with the least amount of experience may be more likely to refer due to lack of understanding or ability to manage challenging classroom behaviors. However, the Alter et al. study did not include teacher likelihood of referring a boy student, particularly an African American student, for special education evaluation based on student challenging behaviors. My study connects to Alter et al. because teacher years of experience were variable examined. However, my data analysis revealed that teacher years of experience in special education and years of teaching experience in regular education were not statistically significant predictors of how likely a teacher would be to refer a boy student based on behavior for special education evaluation.

Anderson et al. (2012) examined how teacher attitudes toward teaching students with learning defects affected their decisions to refer a student for special education evaluation. The data uncovered that in-service teachers responded less positively about working with children diagnosed with ADHD than did preservice teachers without experience. Additionally, in-service teachers had more positive behaviors than preservice teachers with experience. Subsequently, my study makes a connection with Anderson et

al. because the results showed that years of teaching experience in regular education was a statistically significant predictor of how likely a teacher would refer a student for special education evaluation. However, years of teaching experience in special education was not a significant predictor of teacher likelihood of referring a student for evaluation.

Severity of Behavior Based on Race of Student

The second research question for this study examined whether there were differences in teacher ratings regarding the severity of described classroom behaviors based on the students' race/ethnicity. The following section presents an interpretation of findings relative to each variable.

Race of Student

Vincent, Sprague, et al. (2012) reported that Hispanic and African American students were over-represented in all exclusionary discipline practices. Moreover Green (2012) contended there was no substantial difference in the statistics around the relationship between the race of the student and the classification of Emotional Disturbance. My study examined special education referrals by teachers based on their rating of the severity of specific behavior quantitatively. My statistical analysis showed that race of the student was statistically significant predictor but there was no correlation race and referral of boy students for special education evaluation. My results for the most part are not consistent with previous research. Because of this, the apparent contradiction in the results of the two studies has questionable significance. The Raines et al. (2012) study indicated that the statistics for minority students, particularly boy students of

African descent, are higher because they are often labeled disproportionately as having emotional or behavioral disorders.

Bradshaw et al. (2010) study revealed that Africa American students were considerably higher odds for being reported for ODR by a teacher. My study is connected the Bradshaw study because the severity of student behavior is a variable related to both ODR reporting and special education referral. Moreover, my data purported that White boy students had higher average rating for ratings for referral over African American and Hispanic boys. Data from my study produced contrasting results from the Bradshaw study in that African American boys in my study did not have the higher rating for teacher referral. McGrady and Reynolds (2013) investigated the question of whether teachers' perceptions of the behavior of African American students and White students differed based on student behavior. Findings showed that teacher's negative perceptions about African American students were correlated with the likelihood of African American students being referred for special education. Findings from my study contradicted results presented by McGrady and Reynolds (2013) because the Black boys in the study did not have the highest rating for teacher referral.

Severity of Behavior

Alter, Walker, and Landers (2013) conducted a qualitative survey of teachers to determine what challenging behaviors teachers perceive are most prevalent and problematic in the classroom. Results revealed that teachers reported verbal disruptions as less predominant then other behaviors. The results of my study revealed that teacher referral for special education evaluation was based on the severity of the behavior and

was not significant. The mean ratings for how likely a student would be referred were: Hispanics =2.09, Whites =1.76 and African Americans =2.08.

In another study Vincent, Tobin, et al. (2012) investigated whether there was a connection between teacher referrals for special education and the degree of severity of student disruptive behavior. Results showed that students with increased disruptive behaviors were most often referred to special education. My data does confirm the results of their research.

Connections of Research to Conceptual Framework

Cultural theory and social exclusion were used as the philosophical basis for this research. Cultural theory broadly suggests that individuals form perceptions of their world experiences that are consistent with the broad systems of attitudes and beliefs, which reflect their cultural way of life (Kahan, 2012). What is known is that social exclusion is an observable fact that is frequently observed in the educational system (Kastanakis & Voyer 2014). Findings from my research both confirm and fail to confirm past research that has used the premises of these theories to ground the research. My study is mildly supported by the findings however the literature does reflect in many studies that boys are disproportionately referred for special education overall. Consequently, my study examined the race of the student, the race of the teacher (socially exclusive traits in American society) and the teacher attitude about inclusion (again, a culturally conditioned trait) all of these variables were found to be statistically significant predictors in how boy students but not by race were referred to special education.

Social Exclusion Theory

Social exclusion is a prevalent social condition that exposes groups of people to social hindrances caused by individual bias and prejudice (Fallon, 2012). Most commonly social exclusion relegates and discounts groups of people from social opportunities (WHO, 2015). What is known is that social exclusion is an observable fact that is frequently observed in the educational system (Kastanakis & Voyer 2014). My study examined social exclusion as a variable that was related to race/ethnicity of the student. Results from previous literature showed that exclusion occurred at disproportionally higher rates for minority students. However, results from my data showed that White students received the highest rating for how likely a teacher would refer to special education evaluation based on severity of behavior. Findings from this study failed to support the premises of social exclusion theory for this sample of participants. In addition, Hispanic and African American boys had lower ratings for teacher perceptions of severity of behavior. However, teachers reported higher referral ratings for White boy students based on perceptions of severity of behavior.

Research by Bradshaw et al. (2010) supported the premises of social exclusion theory in that results from the study revealed that African American boys were more likely to receive ODRs for disruptive classroom behavior. Although not evaluated in this study, it is possible that the teachers may have referred Hispanic and African American boys for ODR, which could lead to other adverse disciplinary actions. Findings from my study partially supports the premises of social exclusion theory in that ODRs could lead

to African American students being excluded from the classroom due to teacher perceived disruptive behavior (Bradshaw et al., 2010).

Cultural Theory

The premise of cultural theory broadly suggests that individuals form perceptions from their world experiences that are consistent with the broad systems of attitudes and beliefs that reflect their cultural way of life (Kahan, 2012). The worldviews held by members of various groups frequently lead to cultural biases, which cause the group members to judge others based on the adopted cultural biases. Therefore, the major premise of the cultural theory is relevant for explaining cultural beliefs that influence teacher perceptions of student behavior in the classroom. Cultural theory connects to the premises of my study and its findings related to race and ethnicity of teacher and students. Both race of the student and teacher were statistically significant predictors. However, race was not a factor for how likely a teacher would refer a student for special education evaluation. Therefore, the results did not appear to show bias toward a particular student based on student race.

Limitations of the Study

This study has several limitations. First, there is the possibility that the results from the sample may not represent the total population of teachers in the school districts across the United States. If the study were replicated on a larger cross-sectional sample of teachers from across the United States, the results may be different. If the study were replicated with a sample of teachers from different states or with teachers from schools in

in neighborhoods of students from different socioeconomic backgrounds, the results also may be different.

Secondly, the teachers may have had stereotypes or predilections toward a particular race/ethnicity that were not reflected in their responses to the data collection instruments, and therefore true responses to the survey may not provide an honest outcome. A third limitation is that the study included teachers with general and special education teaching experiences from a single high school, and these results may not be generalizable to elementary school, private, or middle school teachers.

Other limitations of this study pertain to the wording that was used to describe the fictitious students on the TRF. The wording described the race of each fictitious student, which may have enabled teachers to give what they perceived to be socially desirable ratings. With social desirability respondents answer questions according to what they perceived to be the socially acceptable option versus giving their honest responses. The racial descriptions on the TRF may have enabled teachers to mask their true biases and prejudices toward minority students. Consequently, the teachers may have altered their attitudes after reading the survey items and adjusted theirs view after seeing the race of the student. Although responses to the TRF were anonymous, the teachers still may not have wanted to appear biased or prejudiced.

Recommendations

The findings here suggest that future investigation must take a more systems centered approach to this well-defined phenomenon of disproportionate referral of African American boy students to special education and the subsequent issues of social

disruption that occur. Perhaps the use of a quantitative and qualitative mixed method approach might produce data that sheds more light on the underlying causes or factors that were overlooked in this study around this important social problem. The quantitative nature of the research would essentially remain the same and measure the same variable. The only change would include a qualitative component where the researcher could get at possible underlying reasons through interview or open-ended questions around teachers' decisions based on certain classroom behaviors to refer to special education. In addition, the aim of the qualitative portion of the study would attempt to identify related or unrelated themes that provide a better understanding of teacher perspective on the causes for why boys are disproportionally referred for special education evaluation. A redo of this same study, using a sample of teachers from different geographical areas, or from different sections of the city and include elementary grades because those grades according to the literature are where boy students are getting referred earlier. This may provide a deeper understanding of variables related to boy students being referred to special education evaluation based on the same independent, dependent, and controlled variables.

Implication for Social Change

The positive social change implications encouraged by this study were that the findings could be used to raise the awareness of teachers and other professional practitioners regarding the connections between teacher characteristics, students' characteristics, and teacher referral of boys for special education evaluation. Results from the study could be used to advocate the need for cultural sensitivity awareness and

training seminars that inform educators of the how variables such as student race/ethnicity, teacher gender, teacher race/ethnicity, and teacher attitude toward inclusion are related to the teacher referral of boys for special education evaluation.

The training would be designed to increase awareness and promote more culturally sensitive practices among teachers. Consequently, by being more culturally sensitive and aware, teachers then may be less likely to refer boys for special education. Perhaps the teachers would work to develop more culturally relative and sensitive classroom management procedures, which would also reduce the need to refer students for either special education or Office Disciplinary Referrals (Bradshaw, Mitchell, et al., 2010). Such training could hypothetically reduce the number of boy students, particularly African American boys, being referred for special education evaluation.

Professionals within the educational system could use this study results to make specific suggestions regarding the development of cultural awareness programs and develop policies that would ultimately lead to social change within the educational system. Educators could use findings from this study to become informed agents of social change by recognizing that the race of student should not be a significant predictor for the how likely a teacher would refer of boy students for special education evaluation. In addition, educators can use information from this study to advocate for the development of existing programs or policy too ultimately to effect social change.

Conclusion

Findings from my research examined the connection between student and teacher characteristics and how likely a teacher would refer students for special education

evaluation. Likewise, this study provided insight into teacher responses associated with boy student behaviors. In addition, my study showed that race and ethnicity were significant but not a predictor leading to special education referral of boy students. The outcomes from examining severity of behaviors by race of the student almost showed no significant correlation to how likely a teacher would refer for special education evaluation. This means that there was absolutely no connection between a student's race/ethnicity and the teacher's perception of severity of behavioral disturbance. Of the six predictor variables (years of teaching experience, years of teaching experience in special education, race of the teacher, gender of the teacher, race of the student, and teacher attitude toward inclusion). Gender of the teacher and years of teaching special education were not significant in predicting how likely a teacher would refer a student for special education evaluation.

None of the six variables had a meaningful impact on a teacher's likelihood to refer boy student particularly African American boys for special education evaluation. The adjusted R^2 of only 3% indicated that the independent variables were not useful in predicting the dependent variable. Again, the difference among the three means of likelihood of referral was not based on student race.

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Appendix A: TRF

Read the behavioral descriptions for each of the nine students. **All students are in the 9th grade, all are male, and all are doing quite poorly academically.** Read the scenario for each student, and then decide how likely you world refer that student to the school's multi-disciplinary team to determine whether the student qualifies for ED (emotionally disturbed) placement. Circle the number which reflects the likelihood that you would refer the student by circling the appropriate number. Also, mark the response that best represents your opinion regarding the severity of the behaviors for each student. Then on the next page, please answer the demographic questions. Thank you!

Use the scale below to rate how the likelihood that you would refer each student for evaluation based on the description that has been given		**Indicate the level of severity of the behavior described in each scenario by circling the appropriate number.**
1 = Very unlikely to refer		**1 = mild**
2 = Somewhat unlikely to refer		**2 = moderate**
3 = Uncertain		**3 = severe**
4 = Somewhat likely to refer		
5 = Very likely to refer		

Student	**Behavioral Description**	**Likelihood of referral**						**Severity of behavior**		
A	The student bullies his classmates frequently. The bullying is sometimes verbal, but often it is physical. In addition, this student, who is Hispanic, often curses out or uses vile language at his teachers.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
B	The student sometimes hums loudly, and at other times makes odd noises. He does not seem to be aware he is doing this. At other times, this student, who is White, uses profanity, but this is directed only at other students. He has also been known to lie to	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**

	his teachers without hesitation.									
C	The student very often is seen or heard threatening other students with violence if they don't give in to his demands. He is often spotted carrying large sums of money. When this African-American youth is sometimes confronted by adults about his threats, he not only does not deny it, but he shows no guilt or remorse about his conduct.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
D	The student often bothers his classmates by making rude or insensitive remarks. He is White. He is overly demanding of his teachers, and often gets frustrated easily when his demands are not met right away.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
E	The student often teases the other students, and does not seem to be aware of how hurtful this can be. Also, he is sometimes spotted cheating on tests and quizzes. this Hispanic youth's attitude towards his teachers can be summarized as defiant.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
F	The student is unusually loud in class, and for this reason is annoying or distracting to his classmates. Another problem of this African-African youth is that many of his peers are known to be trouble-makers. It is felt that these peers tend to coax or egg him on to be disruptive.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**

Please turn the page over to complete the ratings for the last 3 students.

Use the scale below to rate how the likelihood that you would refer each student for evaluation based on the description that has been given		**Indicate the level of severity of the behavior described in each scenario by circling the appropriate number.**
1 = Very unlikely to refer		**1 = mild**
2 = Somewhat unlikely to refer		**2 = moderate**
3 = Uncertain		**3 = severe**
4 = Somewhat likely to refer		
5 = Very likely to refer		

G	The student, who is African-American, is quite frankly very disobedient. He seems to have no compunction or inhibition about disrupting the class. Sometimes, he does not annoy his peers or his teachers, but instead just stares into space.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
H	The student frequently gets into fistfights, even with boys larger than he is. When he gets into these altercations, he often spews vicious insults at them. On other days, during class, this White youth has been observed to fall asleep—or else pretend to fall asleep. Most people think he is not acting, because his snoring during these times is quite realistic.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**
I	This student often clowns around during class, distracting his teachers, but will often stop right away when they confront him about it. However, at other times this Hispanic boy were overheard making cruel jokes about his classmates to his buddies.	**1**	**2**	**3**	**4**	**5**		**1**	**2**	**3**

Demographic Information

This section gathers basic demographic information about individuals who complete this questionnaire. The data will only be used to provide an aggregate description of those who complete the questionnaire. Please answer all items.

1. Gender: a) Boy b) Feboy c) Transgender d) Prefer not to answer

2. Which of the following best describes your ethnicity?

   ____Not Hispanic or Latino

   ____Hispanic or Latino

3. Which of the following best represents your race: (Check all that apply)

   ____American Indian or Alaskan Native

   ____Asian

   ____Black or African American

   ____Native Hawaiian or Other Pacific Islander

   ____White

   ____Two or more races

   ____Other (please specify _____)

   ____Prefer not to answer

4. Number of years teaching experience: _____

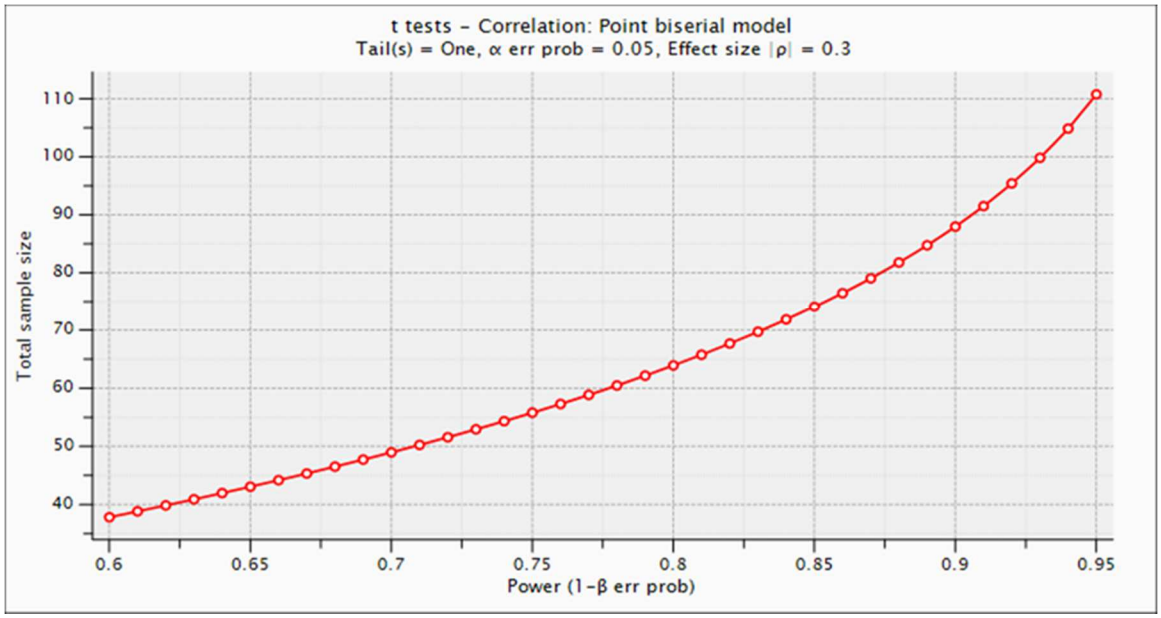
5. Number of years of training in special education: _____

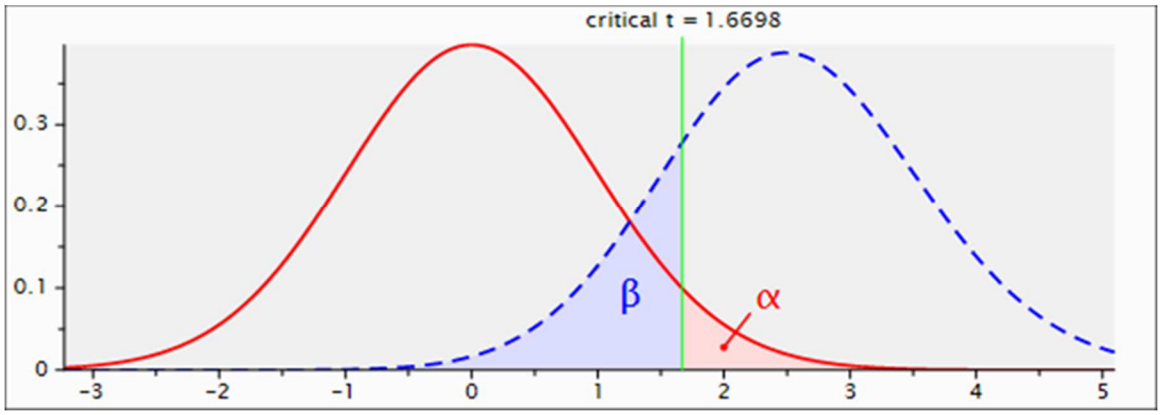
6. Number of years of teaching in special education: _____

7. *Inclusion* is the practice/policy of providing students who have been identified as having special education needs with services inside the regular classroom where possible. Indicate the degree to which you agree or disagree with the practice of *inclusion* by circling the appropriate option below:

Strongly Disagree	Somewhat Disagree	Uncertain	Somewhat Agree	Strongly Agree

Appendix B: G-Power Analysis





F tests - Linear multiple regression: Fixed model, R^2 increase

Analysis:	A priori: Compute required sample size		
Input:	Effect size f^2	= 0.15	
	α err prob	= 0.05	
	Power (1-β err prob)	= 0.80	
	Number of tested predictors	= 4	
	Total number of predictors	= 4	
Output:	Noncentrality parameter λ	=	12.7500000
	Critical F	= 2.4858849	
	Numerator df	= 4	
	Denominator df	= 80	
	Total sample size	= 85	
	Actual power	= 0.8030923	

F tests - ANOVA: Fixed effects, omnibus, one-way

Analysis:	A priori: Compute required sample size		
Input:	Effect size f	= 0.35	
	α err prob	= 0.05	
	Power (1-β err prob)	= 0.80	
	Number of groups	= 3	
Output:	Noncentrality parameter λ	=	10.2900000
	Critical F	= 3.1093105	
	Numerator df	= 2	
	Denominator df	= 81	
	Total sample size	= 84	
	Actual power	= 0.8118799	

Appendix C: Letter of Cooperation from a Research Partner

[redacted]

[redacted] (Vice Principal)

May 17, 2016

Dear Mr. Lorenzo A. Woodson,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Teacher and Student Variables Affecting Special Education Evaluation and Referral within the [redacted] As part of this study, I authorize you to conduct your study with the high school teachers at [redacted]

- A letter of introduction with a letter of informed consent will be submitted to the school administrator and teachers requesting their voluntary participation in the survey.
- After being granted permission from all required parties. The researcher will request a time and date to introduce the survey packet to the voluntary participants at the designated public high school ([redacted]) during a scheduled teacher in-service.
- A packet will be given to the participants that will include the consent form and the TRF survey.
- The researcher will explain to the participants that the study is voluntary and they are not required to give any personal identifying demographic information.
- During the 25 minute, allotted time the survey packet/envelope will be given to the participants and they will be asked to return both the completed survey and consent form as a packet sealed in the same packet/envelope after taking the survey one time only.
- The researcher will ask the voluntary participants after they have completed and returned their survey packets if they have any questions or concerns with regard to completing the entire survey packet.
- Participants will be provided with general contact information to contact the researcher if they have any questions after completing the survey packet.
- The researcher will thank the voluntary participants for their time and then have the research assistant collect the sealed survey packets.
- In addition after all the voluntary participants have returned their survey packet they will receive a five dollar gift card.
- Finally after the data collection and analysis, has been complete by the researcher a brief summary of the results will be provided by written and oral presentation to the Philadelphia school district for that designated school where the study was conducted.

Individual participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: providing the space such as an auditorium, library, lunchroom, classroom or gym. This will allow you to introduce yourself and pass out your surveys. We reserve the right to withdraw from the study at any time if our circumstances change.

The student will be responsible for complying with our site's research policies and requirements, including the PROTECTION OF HUMAN SUBJECTS (Protection of children and children with disabilities): FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (Protect the privacy of student education records): Family Educational Rights and Privacy Act (FERPA) and Protection of Pupil Rights Amendment (PPRA).

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

[redacted]

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verifies any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).

Appendix D: Pilot Study Survey Expert 1

Read the behavioral descriptions for each of the nine students. **All students are in the 9th grade, all are male, and all are doing quite poorly academically.** Read the scenario for each student, and then decide how likely you world refer that student to the school's multi-disciplinary team to determine whether the student qualifies for ED (emotionally disturbed) placement. You as an expert were requested to indicate whether each description of the behavior is mild, moderate, or severe. You will also be asked whether each of the behavioral scenarios warrant referral (yes) or (no) for special education evaluation. Thank you

Would you Refer 1=mild 2=moderate 3= severe

Student	**Behavioral Description**	**yes**	**no**		**Indicate the level of severity of the behavior described in each scenario by circling the appropriate number. Severity of behavior**		
A	The student bullies his classmates frequently. The bullying is sometimes verbal, but often it is physical. In addition, this student, who is Hispanic, often curses out or uses vile language at his teachers.	**x**			**1**	**2**	**(3)**
B	The student sometimes hums loudly, and at other times makes odd noises. He does not seem to be aware he is doing this. At other times, this student, who is White, uses profanity, but this is directed only at other students. He has also been known to lie to his teachers without hesitation.	**x**			**1**	**2**	**(3)**
C	The student very often is seen or heard threatening other students with violence if they don't give in to his demands. He is often spotted carrying large sums of money. When this African-	**x**			**1**	**(2)**	**3**

	American youth is sometimes confronted by adults about his threats, he not only does not deny it, but he shows no guilt or remorse about his conduct.						
D	The student often bothers his classmates by making rude or insensitive remarks. He is White. He is overly demanding of his teachers, and often gets frustrated easily when his demands are not met right away.		**x**		**(1)**	**2**	**3**
E	The student often teases the other students, and does not seem to be aware of how hurtful this can be. Also, he is sometimes spotted cheating on tests and quizzes. this Hispanic youth's attitude towards his teachers can be summarized as defiant.		**x**		**1**	**(2)**	**3**
F	The student is unusually loud in class, and for this reason is annoying or distracting to his classmates. Another problem of this African-African youth is that many of his peers are known to be trouble-makers. It is felt that these peers tend to coax or egg him on to be disruptive.		**x**		**(1)**	**2**	**3**

Please turn the page over to complete the ratings for the last 3 students.

G	The student, who is African-American, is quite frankly very disobedient. He seems to have no compunction or inhibition about disrupting the class. Sometimes, he does not annoy his peers or his teachers, but instead just stares into space.		**x**		**1**	**(2)**	**3**
H	The student frequently gets into fistfights, even with boys larger than he is. When he gets into these altercations, he often spews vicious insults at them. On other days, during class, this White youth has been observed to fall asleep—or else pretend to fall asleep. Most people think he is not acting, because his snoring during these times is quite realistic.	**x**			**1**	**(2)**	**3**
I	This student often clowns around during class, distracting his teachers, but will often stop right away when they confront him about it. However, at other times this Hispanic boy were overheard making cruel jokes about his classmates to his buddies.		**x**		**(1)**	**2**	**3**

Appendix E: Pilot Study Survey Expert 2

Read the behavioral descriptions for each of the nine students. **All students are in the 9th grade, all are male, and all are doing quite poorly academically.** Read the scenario for each student, and then decide how likely you world refer that student to the school's multi-disciplinary team to determine whether the student qualifies for ED (emotionally disturbed) placement. You as an expert were requested to indicate whether each description of the behavior is mild, moderate, or severe. You will also be asked whether each of the behavioral scenarios warrant referral (yes) or (no) for special education evaluation. Thank you

Would you Refer 1=mild 2=moderate 3= severe

Student	**Behavioral Description**	**yes**	**no**		**Indicate the level of severity of the behavior described in each scenario by circling the appropriate number. Severity of behavior**		
A	The student bullies his classmates frequently. The bullying is sometimes verbal, but often it is physical. In addition, this student, who is Hispanic, often curses out or uses vile language at his teachers.	**x**			**1**	**2**	**(3)**
B	The student sometimes hums loudly, and at other times makes odd noises. He does not seem to be aware he is doing this. At other times, this student, who is White, uses profanity, but this is directed only at other students. He has also been known to lie to his teachers without hesitation.	**x**			**1**	**2**	**(3)**
C	The student very often is seen or heard threatening other students with violence if they don't give in to his demands. He is often spotted carrying large sums of		**x**		**1**	**(2)**	**3**

	money. When this African-American youth is sometimes confronted by adults about his threats, he not only does not deny it, but he shows no guilt or remorse about his conduct.						
D	The student often bothers his classmates by making rude or insensitive remarks. He is White. He is overly demanding of his teachers, and often gets frustrated easily when his demands are not met right away.		**x**		**(1)**	**2**	**3**
E	The student often teases the other students, and does not seem to be aware of how hurtful this can be. Also, he is sometimes spotted cheating on tests and quizzes. this Hispanic youth's attitude towards his teachers can be summarized as defiant.		**x**		**1**	**(2)**	**3**
F	The student is unusually loud in class, and for this reason is annoying or distracting to his classmates. Another problem of this African-African youth is that many of his peers are known to be trouble-makers. It is felt that these peers tend to coax or egg him on to be disruptive.		**x**		**(1)**	**2**	**3**

Please turn the page over to complete the ratings for the last 3 students.

G	The student who is African-American, is quite frankly very disobedient. He seems to have no compunction or inhibition about disrupting the class. Sometimes, he does not annoy his peers or his teachers, but instead just stares into space.		**x**		**1**	**(2)**	**3**
H	The student frequently gets into fistfights, even with boys larger than he is. When he gets into these altercations, he often spews vicious insults at them. On other days, during class, this White youth has been observed to fall asleep—or else pretend to fall asleep. Most people think he is not acting, because his snoring during these times is quite realistic.	**x**			**1**	**2**	**(3)**
I	This student often clowns around during class, distracting his teachers, but will often stop right away when they confront him about it. However, at other times this Hispanic boy were overheard making cruel jokes about his classmates to his buddies.		**x**		**(1)**	**2**	**3**