Perceived Causes of Ethnic Disproportionality in Special Education: Consideration of Factors for the Purpose of Professional Development

Anita Moore Hawkins

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Committee
Chair/Advisor: Steven Knotek
Advisor: Jennifer Hiemenz
Reader: Barbara Wasik
Reader: Sandra Evarrs
Reader: Anne Wheeler
Reader: Rune Simeonsson

ABSTRACT

Anita M. Hawkins: Perceived Causes of Ethnic Disproportionality in Special Education: Consideration of Factors for the Purpose of Professional Development

(Under the direction of Steven Knotek, PhD and Jennifer Hiemenz, PhD)

The issue of ethnic disproportionality in special education has been a focus of much research. The purpose of the present study is to add to the current dialogue regarding the perceived causes of the disproportionate numbers of African-American students in both the mild to moderate intellectual disability and behavioral/emotional disability categories. For the current research, 424 Exceptional Children's Services (EC) directors, general education teachers, special education teachers, and school psychologists were randomly selected from 20 counties across North Carolina and asked to complete an online survey regarding what they perceive to be the primary cause(s) of ethnic disproportionality within the aforementioned disability categories. Additionally, the influence of cultural competency training on the primary cause endorsed was also examined. Results of the current research suggest that the perceptions of the 103 school personnel, who completed the survey, regarding the primary cause of ethnic disproportionality in special education are not as disparate as was originally hypothesized indicating factors related to student and family characteristics. In addition, results also suggest that cultural competency training did not have the effect on the primary cause endorsed as was initially hypothesized. Given the current results, factors for professional development and training are considered as a means of decreasing the ethnic disproportionality that currently exists within school systems.

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Perceived Causes of Ethnic Disproportionality in Special Education: Consideration of Factors for the Purpose of Professional Development

CHAPTER I: INTRODUCTION

Problem

The disproportionate numbers of African-American students identified within certain special education categories continues to remain a prevalent problem in society's schools. Despite the Reauthorization of the Individuals with Disabilities Education Act (IDEA, 2004), which sought to remediate the problem of overrepresentation of African-American students within special education, the phenomenon continues to remain. The number of African-American students referred, and subsequently identified as in need of special education services, has likely resulted, at least in part, from the continual focus on the remediation of the academic achievement gap that purportedly exists between them and their Caucasian peers.

Although African-American students have made significant academic gains in the last 30 years, an academic achievement gap persists between these students and their Caucasian peers. Much debate continues regarding the cause or causes of the achievement gap and continued research into the topic tends to elicit more questions than answers or solutions. Previous research has focused on causes ranging from society in general (e.g., stereotype threat, marginalization, etc.) to family characteristics (e.g., structure, socioeconomic status, values) to more specific individual characteristics (e.g., locus of control, attribution theory, disidentification/ disengagement, motivation). Results of the previous research, while

occasionally contradictory, often provide additional factors to consider and offer novel ways or support for existing ways to remediate the problem. Based upon the many causal factors that have been researched regarding the academic achievement gap, it is likely that a combination of these factors account for its existence and maintenance.

Such focus on the cause(s) of the achievement gap, in combination with legislation such as the No Child Left Behind Act (NCLB) and the Reauthorization of IDEA, has led to the implementation of solutions that have, subsequently and unfortunately, led to a disproportionate number of minorities, specifically African-Americans, being misidentified and mislabeled as in need of special education services. Considering the wealth of information regarding the achievement gap and disproportionality, the present research study seeks to further clarify and offer new information regarding the perceptions of Exceptional Children's services directors, general and special education teachers, and school psychologists that may contribute to and maintain the disproportionate numbers of African-American students within certain special education categories (i.e. mild to moderate intellectual disability and behavioral/emotional disability).

Rationale

While previous research has focused on such prominent causal factors as society in general and individual characteristics specifically, Bronfenbrenner (1977) posited that a child lives within an ecology that includes macro-systems and micro-systems. He argued that the relationship between a child and his/her ecology is bi-directional or reciprocal, influencing and being influenced in many ways. Research has shown that these macro- and micro-systems have a direct or indirect influence on a child's ability to succeed. Within these systems are risk factors, contributing to the likelihood of the child's failure, or resilience

factors, often mitigating the effects of risk factors. One important factor within the child's ecology is the school or academic domain. This context has a vast, direct influence on the likelihood that a child will fail or succeed.

Within the academic domain, research has shown that family characteristics such as family structure, values, beliefs, parenting style, and socioeconomic status can have a significant effect on a child's academic achievement, motivation, or future educational attainment (Halle, Kurtz-Costes, & Mahoney, 1997). Examining these family characteristics in light of race/ethnicity has revealed that differences exist between African-Americans and Caucasians. With respect to academics and achievement, it is important to note that racial/ethnic differences exist in defining what achievement means. In light of this, the perception of the achievement gap may be skewed, with minorities in general, and African-Americans specifically, questioning the existence of the gap and to what extent it needs to be remediated, if at all. The achievement gap is often defined and measured by empirical data that compares the standardized scores of African-American students to that of their Caucasian peers. The standard of achievement may be relative to a child's level of functioning as in the case of students with disabilities. If a child is in need of educational modifications and accommodations, and has simply not been "diagnosed" with a disability that would affect his/her learning, and subsequent achievement, these accommodations would not be available to aid in supplementing the child's abilities to succeed and achieve.

With such a zealous focus on remediating the achievement gap through educational modifications and accommodations, the issue of ethnic disproportionality in special education has, unfortunately, itself become a problem in need of remediation. Because of the history of African-Americans in American society and the statistics showing that a

disproportionate number of African-American students are over-referred, diagnosed, and placed in special education services (and underrepresented in academically/intellectually gifted services) (Salend, Duhaney, & Montgomery, 2002, and Daniels, 1998), it is likely that those individuals and systems involved in remediating these problems have misjudged and misidentified African-American students in need of special education in either the hope of making amends for societal inequalities (e.g., racism, poverty) or out of ignorance of a culture that they fail to understand how to interact with or perceive. Based upon this hypothesis, it is important to examine the perceptions of the causes of ethnic disproportionality in special education from the perspective of Exceptional Children's services directors, general and special education teachers, and school psychologists, who are integrally involved with placement and eligibility decisions in special education.

Research Questions

In order to help provide useful insight into perceived causes of disproportionality in special education that result from the efforts of school systems to remediate the existing academic achievement gap, the present study will examine the perceptions of four pertinent groups involved in the referral, assessment, and identification process for determining eligibility for special education. The four groups surveyed consisted of Exceptional Children's services directors, general education teachers, special education teachers, and school psychologists employed in public school districts in the state of North Carolina. Exceptional children's services directors oversee the special education referral, assessment, and identification process and work to ensure that all legal requirements are adhered to by the school. General education teachers provide the daily educational curriculum and are responsible for general classroom management. They also have the primary responsibility of

referring students they perceive to be in need of special education services. Special education teachers personally interact with students and provide the daily educational modifications and accommodations deemed necessary and appropriate. Traditionally, school psychologists develop an assessment plan and administer the appropriate standardized and qualitative measures based upon the stated reason(s) for referral. This role has been expanded over the years and currently involves not only the assessment aspect, but also includes a variety of responsibilities within the pre-referral process as well. According to the North Carolina Department of Public Instruction (http://www.ncpublicschools.org downloaded on March 31, 2008), school psychologists are involved in such processes as consultations and trainings with educational personnel, program development, and direct interventions with students. Such tasks often include working to implement positive behavioral support programs and providing basic mental health services (e.g., crisis intervention, support for anxiety and depression, etc.) within the school setting. While each school district may utilize the role of the school psychologist in various ways, the rationale for providing such pre-referral interventions is to reduce the number of students referred for assessment for special education, which subsequently and directly or indirectly affects the rates of ethnic disproportionality.

Specifically, the study will examine the differences in perceived causes of ethnic disproportionality among these four groups. The current study seeks to examine if the primary causal factors of ethnic disproportionality endorsed differs among these four groups of school personnel given their differing and varying roles within the referral and determination for eligibility process. Additionally, based on previous research indicating that when there is a "cultural mismatch" between students and teachers, Caucasian teachers often

misunderstand the African-American student's culture, behavior, or definitions of achievement thereby leading to referral, another issue to be addressed and discussed in the present study is whether or not cultural competence training affects the primary causal factor endorsed by school personnel.

While general systemic issues may have an effect on rates of disproportionality, it is also important to examine possible individual causes as well. Referral for special education is primarily subjective, based upon a teacher's perception of a student's academic and behavioral needs. It is important to note that although special education teachers are not typically directly involved in the referral process (as are general education teachers), they work with those students found eligible for special education based on this process; therefore, the perceptions of these teachers will be an important factor in the present study. Although the present study seeks to include an examination of the perceptions of special education teachers as well, who may not be directly involved in the referral process, these teachers work closely with a variety of general education teachers and have first-hand knowledge of the skills and achievements of the students they serve. Given this, their opinions and perceptions would help provide valuable insight as to why they believe students are referred for special education.

Related to the referral from teachers, there is a process by which a student is determined as eligible or in need of special education. This process involves not only the teachers, but the exceptional children's services director and the school psychologist as well. Once a student has been identified, by a teacher, as having academic and/or behavioral difficulties within the classroom setting, a referral is often made to the student assistance team process. Within the team process, a problem-solving approach is utilized to address the

student's difficulties and teacher's (or parents') concerns. This process may involve identifying and quantifying the problem(s), brainstorming solutions, developing and implementing the most appropriate evidence-based solutions, and monitoring the student's progress (through data collection). The school psychologist often participates in the student assistance team process through completion of classroom observations, provision of consultation, and assistance with the development and implementation of evidence-based solutions. When interventions are deemed unsuccessful (through a review of the collected data), or meet with limited success in addressing the student's difficulties, a referral for a standardized assessment may be made to the school psychologist. The school psychologist must provide an appropriate standardized assessment of an individual student, in conjunction with more subjective measures such as observations and clinical interviews, in order to determine the learning needs of the student and offer appropriate recommendations based upon the results of the assessment. The exceptional children's services director oversees this entire referral, assessment, and determination process, works to ensure that all legal requirements are met, and offers a recommendation to the team as a whole when all appropriate information has been gathered. Despite standardized assessments, the recommendation of the team may subsequently become subjective. Given the individual, subjective aspects of this process and the varying roles that each group plays, the primary question to be addressed in the present study examines whether or not the perceptions of these four groups differ as to the primary cause(s) of ethnic disproportionality in special education. Related to this, it will be important to also determine whether or not training in cultural competence has any effect on the perceptions held by these four groups. How many

hours of training and how long ago training was received will be an important aspect of this secondary question to be addressed.

Because attempts to remediate the academic achievement gap have subsequently contributed to the issue of disproportionality in special education, it is important to look briefly at this overarching issue of the achievement gap and examine its role in maintaining disproportionality. Therefore, the present study will discuss briefly the reported achievement gap within the selected counties in North Carolina in order to examine if there is any relationship between the magnitude of the achievement gap and the overall rates of ethnic disproportionality. It may be that counties with a larger academic achievement gap between African-American and Caucasian students have higher rates of ethnic disproportionality and until the former is redefined or remediated, the latter may continue to be an issue as long as the process remains subjective and in the hands of those groups herein surveyed.

CHAPTER II: LITERATURE REVIEW

Legislation

Within recent years, the passage of such federal legislation as the No Child Left Behind Act of 2001 (Public Law 107-110) has brought the issue of the academic achievement gap to the forefront of public policy once again. Such focus on the achievement gap has, in turn, likely led to a renewed focus on the issue of disproportionality within special education as well. The No Child Left Behind Act (NCLB) seeks to promote equity of outcomes and provide a quality education to all disadvantaged children (Donlevy, 2002). The impact of NCLB will affect not only those who have been defined as "disadvantaged children," but also children with disabilities. Historically, research has shown that poor and minority children tend to be at risk for poor academic achievement (O'Connor & Fernandez, 2006), and NCLB seeks to promote high standards of education and achievement for all students despite race, ethnicity, socioeconomic status (SES), or disability status.

"The overall goal of NCLB is to increase academic success for all children so that each and every child can learn in a supportive and safe school environment" (Donlevy, 2002, p. 258). According to NCLB, low achievement is affected by many variables and is often the result of exposure to inferior program quality and inadequately trained or uncertified teachers. Specifically then, with respect to education, the purpose of NCLB is "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (20 USC 6302 § 1001 cited in Faircloth, 2004, p. 35).

In order to determine whether or not these goals are met as set forth in NCLB, standardized assessments must be utilized to measure student achievement. The assessments must be aligned with each state's standards and the results are used to determine if each individual school makes Adequate Yearly Progress (AYP). Beginning in the 2005-2006 school year, all students in grades 3-8, including those with disabilities, must be assessed each year in reading/language arts and mathematics. Students in grades 9-12 must be assessed at least once. Beginning in the 2007-2008 school year, students will be assessed at least once in grades 3-5, 6-9, and 10-12 in the sciences. By 2013-2014, the ultimate goal is that all students will reach proficiency in reading, mathematics, and science. Proficiency is measured and then reported at both the school level, and at subgroup levels (e.g., poverty levels, races, ethnicities, disabilities, and limited English proficiencies) (Faircloth, 2004). It is the reporting of the proficiency levels by subgroups that seems to have spawned a renewed interest in closing the academic achievement gap that appears to exist between minority students (African-Americans in particular) and their Caucasian peers.

Although the No Child Left Behind Act seems to have brought the academic achievement gap to the forefront once again, it cannot be viewed separately from the Reauthorization of the Individuals with Disabilities Education Act (IDEA). "Since 1976-1977, the U.S. Department of Education has collected and reported on an annual basis the number of students, ages 6-21 years, with disabilities who receive services under the IDEA" (Bullock & Gable, 2006, p. 8). Since its inception, the number of students receiving services has grown to over 5 million. With several revisions to the original law through the years, the most recent reauthorization of IDEA in 2004 is closely aligned with the principles set forth in NCLB for students with disabilities (Congressional Digest, 2005). NCLB, as an

accountability system, would help to ensure that students with disabilities were held to appropriate academic standards that would promote relative high achievement. The Reauthorization also aims to reduce the over-identification and misidentification of non-disabled children as needing special education services, which would include minority youth and more specifically, African-Americans and students with Limited English Proficiency. School districts with a significant over-identification of minority students are required to work to reduce this phenomenon, hopefully, by eliminating the outdated IQ-achievement discrepancy model and incorporating a Response-to-Intervention model in identifying specific learning disabilities (Congressional Digest, 2005).

It is important to include the 2004 Reauthorization of IDEA here when speaking of an academic achievement gap and disproportionality primarily for two reasons. First of all, the question must be answered as to whether or not the academic achievement gap actually exists based on the notion that African-American students have been over-identified or misidentified as being in need of special education services. This seems to have resulted from the use of standardized assessments of intelligence and achievement and has likely led to feelings of cultural mistrust by African-American families in the assessment, treatment, and overall education of their children. The use then of standardized assessments to measure achievement for the purposes of NCLB and to measure intelligence for the purposes of determining the need for special education seems to reiterate this issue and again, begs the question of whether or not the academic achievement gap truly exists and whether or not a student is truly in need of special education services.

Second, the question is if the achievement gap does exist and if African-American students are correctly identified as needing special education, are African-American students

with disabilities receiving (educationally and culturally appropriate) special education services in order to meet the standards of relative high achievement? Therefore, both the Reauthorization of IDEA and NCLB have had an impact on the education of African-American students with and without disabilities. For the purposes of this present study, it is important to consider the issue of the academic achievement gap and its relation to the issue of disproportionality, as well as to examine and consider the perceptions of and responses to African-American students, with a suspected disability, by teachers and others involved in the special education process and further clarify the perceptions as to why there exist disproportionate numbers of African-American students represented within certain special education categories.

Historical Perspective

Prior to focusing on the primary issue of disproportionality, it is important to consider its origins in standardized intelligence and achievement testing. The two cannot be viewed separately for it is the combination of the two that has been historically used to determine the need for special education services. While racial/ethnic differences in intelligence are an important factor to consider, it is racial/ethnic differences in achievement that sets the stage for disproportionality. In other words, a student may have low IQ scores, but still achieve above what would be expected based on those scores. It is only when low IQ exists in conjunction with low achievement does it become obvious that intervention may be necessary. It is in light of these facts that the historical and current perspectives of both IQ and achievement are subsequently discussed.

Previous research regarding racial/ethnic differences in intelligence between African-Americans and Caucasians dates back many decades. There have been a number of causes

cited as to these differences ranging from biological (e.g., the idea that African-Americans are genetically inferior in terms of intelligence) to ecological (e.g., a history of oppression, marginalization, and an uneven distribution of wealth and power). Early research has shown that intelligence testing was considered quite controversial in that it was used to support "outrageous racial policies" by attempting to confirm, among other ideas, that minorities were less intelligent than their Caucasian counterparts (Herrnstein and Murray, 1994, p. 5). With such a history, the utilization of intelligence testing, and subsequently achievement testing, may be called into question as to whether or not it represents a true reflection of an individual's abilities, particularly those of African-Americans whom they initially sought to marginalize. It is, unfortunately, from standardized testing in these two areas that the issue of racial/ethnic disproportionality in special education has surfaced.

As stated previously, the racial/ethnic differences in intelligence cannot be viewed separately from differences in academic achievement; therefore, in looking at the academic achievement gap as it exists today, it is important to consider the history of this issue as well. Although there are studies cited as early as the mid- to late-1920s, it is difficult to find such studies in print today. However, one of the earliest dated studies on racial differences in academic achievement found in print was completed by Doxey Wilkerson in 1934. Long before the desegregation of schools and the Civil Rights era, the notion of racial differences in academic achievement emerged. Because of the limited information and study limitations, the reliability of some of the earlier studies is questionable; however, the results are still quite pertinent today.

In the review of studies completed by Wilkerson (1934), several issues are raised that remain relevant to the existence of the current academic achievement gap. For example,

results indicated that although the general achievement level of African-American students is seen to be lower than that of their Caucasian peers in each school system, “there is no evidence of a constant degree of disparity between the two groups in different systems” (p. 460). The results indicated that the disparity between the races varied among different school systems and between rural and urban schools within the same system. Some African-American students achieved as high as their Caucasian counterparts while some Caucasian students achieved at a level as low as that of their African-American peers. From the studies, Wilkerson found that the degree of the disparity depended largely upon the school system studied and that it could be assumed that some other factor, other than race, produced the variation.

Other factors were considered that may have had an effect on the achievement of African-American students, namely, socioeconomic status (including home status) and the school environment. Wilkerson’s review of the data from several studies indicated that the socioeconomic status of children has a significant influence on their scholastic achievement. Chauncey (as cited in Wilkerson, 1934, p. 469) through his study of the socioeconomic factor and its effect on achievement concluded that “inferior homes tend to retard, and superior homes tend to accelerate, the progress of children through the schools.” Since then, the majority of African-American families at that time had a socioeconomic status markedly below that of Caucasian families, the disparity in achievement in favor of Caucasian students would be assumed logical. The school environment was noted as being one of the most direct influences to condition scholastic success. Although the studies reviewed by Wilkerson were conducted before the desegregation of schools, not only were differences found between African-American schools and Caucasian schools, but also between rural and urban schools

as well. He posits that the "racial differences in scholastic achievement . . . may result largely from racial differences in educational opportunity" (1934, p. 472) and may, in some school systems, be a function of the quality of instruction the students receive, as well as school resources (p.475). According to Wilkerson (p. 475) "if school environment is, in fact, largely responsible for the relatively low educational accomplishment of the average Negro child, then it very probably offers the chief explanation of increasing racial disparity with increasing time spent in school."

It is important to examine from Wilkerson's review of the current literature of that time several key aspects. First of all, the results of such a historical study remain fairly accurate to-date, some 70 years later. It brings into question what steps have been taken to remediate the issues and their subsequent success and/or failure in reducing the disparity between the races in academic achievement. Secondly, such a study supports the ideas set forth in NCLB and has implications for where resources and interventions should be allocated and focused (i.e., funding, early intervention programs, and changes within the school environment and perceptions of teachers). The question remains as to what has or has not changed over time to remediate such issues and what factors remain that still have an affect on the academic achievement gap that exists today.

Additional studies surfaced again in the 1970s, perhaps as a consequence of the Civil Rights era and a focus on ethnic/cultural pride. One study to note, completed by Margaret Gordon (1976), found that "overachievement" and "underachievement" among children with similar IQ scores was related to race, as well as class situations (including the social mobility situations of their parents). In studying African-American and Caucasian middle-class and working-class girls and boys, Gordon found that the results were indicative of the following:

"(1) on the average, whites have higher scores than blacks and have higher scores than blacks of similar socioeconomic status; (2) middle-class children have higher average scores than working-class children of the same race; (3) girls tend to have higher average scores than boys; and (4) there is a marked similarity in the scores of black middle-class and white working-class children" (pp. 6-7). The results also indicated that racial differences were found at all IQ levels and at the higher levels of IQ, class differences also emerged. This study, as well as others, seemed to reiterate some of the key issues and factors noted in previous studies and served to further clarify the importance of socioeconomic status and class differences in the existence of the academic achievement gap.

During the 1970s, a number of thoughts and theories developed as to why there were racial/ethnic differences in intelligence and achievement. Again, such issues as the desegregation of schools (Brown v. Board of Education 1954), the Civil Rights Era of the 1960s, and a focus on ethnic/cultural pride in the 1960s and 1970s, may have contributed to the renewed focus on the academic achievement of African-American students. Kathleen Burlew (1979) posited that the notion of self-fulfilling prophecies was a factor in the motivational dynamics of and ultimate manifestation of the educational performance and accomplishments of African-American children. Due to the history (e.g., slavery and oppression) of African-Americans in the United States, Burlew believed that African-Americans had been left with little hope of achieving their ambitions; therefore, many African-American students who may want to pursue an education may have low expectations of achieving those goals, hence the self-fulfilling prophecies are actualized. Even when new opportunities become available, the thought was that the expectancies of African-Americans

would remain unchanged due to past realities and life histories. This expectancy theory could then also be applied to the performance issues of the poor as well.

Burlew (1979) addresses the issue of expectancy as it relates to teachers' expectations of students, as well as, the student's expectations of him/herself. McDonald (as cited in Burlew, 1979, pp. 166-67) "cautioned psychologists to distinguish among 'want,' 'can,' and 'try'." Although "want" tends to represent one's desires for a certain goal and "try" one's goal-directed behavior, these two are often mediated by "can" or one's self-perceptions of his/her ability to acquire or reach the desired goal. Because teachers may have preconceived notions about the abilities of minority students or students of lower socioeconomic status, these lowered expectations may be directly or indirectly (subtly or perhaps not so) be communicated to students. Students, then, may internalize and incorporate other's expectations and evaluations into their own and likely perform at a level consistent with these evaluations and expectations. Along with teachers' and others' perceptions, a student has expectations and perceptions of him/herself. According to L'Abate, Oslin, and Stone (1973), "positive expectations are directly related to scholastic achievement; however, more negative expectations have been observed among blacks, particularly the black boys" (p. 345). If a student is "strong" enough to overcome the low expectations of others, he/she must then cope with the dilemma of expecting more of him/herself than others expected of them (Burlew, 1979). In either case, it is important, according to expectancy theory, for teachers, as well as, parents to avoid communicating low expectations to students, especially African-American students as the majority will merely achieve as high, or in this case as low, as one would expect them to achieve.

Other thoughts and theories, along with expectancy theory, as to why an academic achievement gap exists between African-Americans and their Caucasian peers have included family factors, the desegregation of schools and the school environment in general, socioeconomic status, and self-concept and locus of control. Roberts and Horton (1973) noted that while some believed that education should assume the responsibility of reducing the achievement gap, others believed that factors brought into the school environment, by the student, were the keys to reducing the gap. It should be noted that such viewpoints currently continue, but both must be addressed in order to affect the most thorough and complete change in the situation. With respect to family factors, historically, studies have found that the total environment of a disadvantaged learner must be enriched through the "educational upgrading of the parents" (L'Abate, Oslin, & Stone, 1973, pp.328-29) in order to improve the achievement of disadvantaged children. With regards to the desegregation of schools and the overall school environment, it should be noted that the previous study by Wilkerson in 1934 was conducted prior to the desegregation of schools. Studies conducted in the 1970s, however, focused on the achievement of African-American students after the Brown v. Board of Education 1954 decision that desegregated schools. The results of some of the studies of the 1970s indicated that when factors such as IQ and socioeconomic factors were controlled, segregation-desegregation did not provide a significant difference in African-American or Caucasian achievement. L'Abate, Oslin, and Stone (1973) indicated, however, that "there is some basis for suggesting a significant segregation-desegregation difference for such variables as antisocial tendencies, self-concept, anxiety, self-esteem, period of attendance, standardized tests, teacher grades, dropout rate, and overall ability" (p. 345). As was noted previously by Burlew (1979), self-fulfilling prophecies may be operative based on the

expectations of teachers within the school environment especially for marginalized minorities (e.g., African-Americans). The quality of teachers/teaching was also another important issue raised in the studies of the 1970s (L'Abate, Oslin, & Stone, 1973), as was indicated by Wilkerson in 1934. Because socioeconomic status has previously been addressed by Gordon's study (1976), it will be mentioned here only to reiterate that student's achievement scores are also affected by the socioeconomic status and social mobility of the family (parents). With regards to self-concept and locus of control, it has been noted that a positive self-concept has an impact on achievement. Related perhaps to self-concept is the notion of locus of control. It was noted in the studies of the 1970s that until a student sees him/herself as the one in control, rather than a helpless victim of external circumstances he/she will not acquire academic mastery.

The thoughts and theories that developed, as to why the achievement gap exists, came about as early as the late 1920s and throughout the 1970s and have remained prevalent issues and factors into the early 2000s. Factors that were important to consider then (i.e. socioeconomic status, family influences, school environment, self-concept and locus of control, teacher/instructional quality and expectancy) remain so today and must be addressed if the disparity in achievement between the races, and subsequent disproportionality, is to be reduced. Reflecting on the timeline of research on this issue, as well as the key issues and factors that were found to be relevant will help guide current research and the development of interventions/preventions in the field.

Before delving into the achievement gap more specifically, it is important to look at two historical landmark cases cited as having an impact on the use of standardized IQ testing with African-American students for the purpose of determining special education eligibility,

the Larry P. vs. Wilson Riles case and the *PASE vs. Hannon* case. Both cases alleged that due to standardized IQ tests that were racially and culturally biased against African-American students, these students were placed in Educable Mentally Retarded (EMR) classrooms. Upon reexamination of the same students in the *Larry P. vs. Wilson Riles* case, using the same tests, but varying procedures to establish rapport, it was found that none of the students named in the suit were "mentally retarded." The *Larry P. vs. Wilson Riles* case came to trial in 1977 and was decided in favor of the plaintiffs in 1980. The case had implications that resulted in a California ban on the use of IQ tests as a means to place African-American children in EMR classrooms. This meant that new ways for determining EMR placements would have to be developed (Hilliard, 1992).

With such issues already a reality in the state of California, it is important to reexamine the issue of racial/ethnic differences in IQ, and more specifically, achievement (also based on standardized testing), in order to determine whether or not the achievement gap that we seek to remediate truly exists or if it is a byproduct of standardized assessments that have led to disproportionality and may be racially or culturally biased, having been based on Caucasian, (upper) middle-class standards. It is in light of recent Federal legislation such as NCLB and the 2004 Reauthorization of IDEA predicated upon such a historical perspective presented here that the issue of disproportionality as an indirect consequence of zealous remediation of the academic achievement gap is once again examined considering such additional factors as the perceived causes of disproportionality and cultural competence held by EC directors, general and special education teachers, and school psychologists involved in the special education referral and determination process.

Academic Achievement and the Educational Achievement Gap

In viewing the issue of disproportionality as an indirect consequence of attempts to remediate the academic achievement gap, it is important to first define the concept of achievement and examine the theories that purport to explain why the achievement gap exists. Research has shown that although African-Americans have made significant achievement gains in the last 30 years, and that the achievement gap between some ethnic and racial groups have narrowed, the average standardized test scores of African-Americans remain well below Caucasian students (Meece & Kurtz-Costes, 2001; McMillan, 2003). Phillips, Crouse, & Ralph (1998, as cited in Meece & Kurtz-Costes, 2001, p. 2) indicated that "disparities in achievement appear early in school, widen in the elementary years, and then remain fairly fixed during the secondary years." In addition, Hedges & Nowell (1998, as cited in Meece & Kurtz-Costes, 2001) noted that the greatest disparities appear to be at the top of the achievement distribution. According to Meece and Kurtz-Costes (2001), "race and ethnic differences in achievement are found in test scores, grades, course enrollment, high school graduation rates, and college enrollments and completions" (p. 2).

The cause(s) of these differences in achievement between African-Americans and Caucasians have been researched and debated for decades, which often leads to additional factors that must be considered. The limitations to prior research are varied; however, one of the most pervasive issues is the difficulty in untangling the confounding factors of race and ethnicity from socioeconomic status (Meece and Kurtz-Costes, 2001). This has particular implications for African-Americans as they tend to be overrepresented in the lower economic classes and, therefore, must contend with not only the effects of poverty, but also that of navigating in a society that favors the mainstream culture which has a history of oppressing and discriminating against them. That being said, "economic disparities among ethnic

groups, combined with institutionalized racism and a long history of discrimination for most minority ethnic groups . . . has led to a deficit model in which ethnic minority groups are perceived as inferior to the majority group" (Meece and Kurtz-Costes, 2001, p. 4).

For most intents and purposes, the academic achievement gap is viewed in terms of this deficit model in which the majority culture defines a standard from which minorities often fall short. Continuing efforts to "fix" ethnic minorities so as to close the achievement gap sends the message that there is something "inherently problematic" or deficient about being an ethnic minority, specifically African-American, and that this fact, in and of itself, is the cause of the documented differences in achievement (Romney, 2003). Achievement, according to Romney (2003), is context dependent, culturally defined, and, as cited by additional research, is also domain specific. With this in mind, remediation of the problem seems unattainable; however, changing how achievement is defined and measured will likely be an important part of the process.

McCombs (2000) has stated that in order for "educational systems to serve the needs of all learners, it is essential to have a focus on the individual learner as well as an understanding of the learning process and the essential knowledge and skills to be learned" (p. 31). "Thus what must change are the cultures of schools as well as the curriculum, such that the knowledge systems, ideologies, perspectives, and behaviors of diverse ethnic, racial, cultural, social class, and language groups are institutionalized and legitimized" (p. 32). In essence, when examining how children learn and their overall experiences with school, it is important to consider the role that the child's ecology, including ethnic and cultural beliefs and values, plays in motivation and the definition of achievement.

Existing Definitions

Prior to continuing to address the issue of the achievement gap, it is important to first define what it is. When speaking of the achievement gap, it is often defined and supported by empirical data that documents differences between minorities and their majority peers in grades, test scores, or the types of courses taken. It is also important, when speaking of an achievement *gap*, to define what achievement is/means. "Achievement is usually defined in terms of a particular type of learning outcome, specifically performance on tests and grades achieved in courses taken" (Romney, 2003). Existing definitions include both cultural differences as well as social class differences. The existing definitions of achievement indicate that minorities tend to define achievement differently than Caucasians. For Caucasian students, achievement primarily focuses on performance on tests, grades, going to college, and having a career. For African-Americans and Latinos, although academic success matters, studies have shown that there are other factors upon which these groups define achievement (e.g., making a contribution to their communities, keeping a connection to family, being happy, and learning about other cultures) (Romney, 2003). Such differences in definitions have implications for how the achievement gap is perceived by African-Americans and whether they think it "worthy" of remediation.

Defining achievement based on social class differences must also be considered. Research has shown that poor children tend to achieve below their peers in a higher social class (regardless of race/ethnicity). As early as 1966, the Coleman report (Equality of Educational Opportunity) indicated findings that "the background factors that significantly affect student achievement are not limited to racial classifications, but rather, include social class" (Wong & Nicotera, 2004, p.132). However, this SES variable is often confounded with race/ethnicity (Garland et al., 2005) as the majority (and disproportionately so) of those who

are considered poor by societal standards are African-Americans and other minorities. Ceci and Papierno (2005) noted that targeted interventions that seek to reduce group differences between “advantaged” and “disadvantaged” groups result in significant gains by “disadvantaged” children such that the gap is closed entirely or a major portion of it. However, they also found that when these targeted interventions were universalized to the “advantaged” children as well, the gap is either maintained, or in some cases, widened as the gains of the two groups are linear. Ceci and Papierno (2005) state that “disadvantaged groups may fail to benefit from interventions, not because of any innate deficiencies but rather because of a long history of power differentials, racism, and more subtle forms of institutional discrimination that moderate the effectiveness of interventions” (p. 152). Thus it seems that although it may be that the achievement gap exists between social classes rather than ethnic/racial groups, with the majority of the lower social classes being comprised of minorities, the results suggest that race/ethnicity continue to be a factor.

The definition of achievement from a standpoint of social class differences includes the value placed on education, and in turn, the amount of time and resources spent and type of instruction provided to students. Students from higher SES groups may view achievement as going to college and having a good-paying career while those from lower SES groups may view achievement as finishing high school, learning a trade, or being able to provide the necessities for a family. As stated previously, the correlation between SES and race/ethnicity suggests that the majority of those in lower SES strata will likely be minorities. The differences in defining achievement from a social class standpoint then lead back to the cultural differences in definition previously stated.

Related to social class differences in defining achievement, it is important to examine the *effects* of social class on the achievement of minority students. Studies have shown that social class differences have had an effect on teacher expectations of students, which have led to self-fulfilling prophecies, and lowered student achievement. Dusek & Joseph (1983, cited in Alvidrez & Weinstein, 1999, p. 732) stated that "teacher expectations for ethnic minority children or children from lower socioeconomic groups are generally lower than those for other children" (also Hauser-Cram, Sirin, & Stipek, 2003; see also Weinstein et al., 2004). Baron, Tom, and Cooper (1985, cited in Alvidrez & Weinstein, 1999, p. 732) found that "teacher judgments about White and middle-class students were more favorable than those for Black and lower SES students, despite comparable achievement."

In a study conducted by Alvidrez and Weinstein (1999), the authors found that teachers tended to overestimate and underestimate the abilities of children from higher and lower SES backgrounds, respectively. They also found that the discrepancy between teacher judgments and IQ scores at the age of 4 revealed that SES was a significant factor. Although some suggest that teacher perceptions/judgments based on group stereotypes "simply mirror the external reality of an SES-IQ relationship in our society" (Jussim & Eccles, 1995a cited in Alvidrez & Weinstein, p. 740), reflecting them back to students can be detrimental to the educational success of those affected by such stereotypes leading to the actualization of self-fulfilling prophecies. Hauser-Cram, Sirin, and Stipek (2003) noted that young children from low-income families and young children of color seem to be particularly vulnerable to negative effects brought about by teacher expectations. This tends to be associated with research that has focused on locus of control and its effects on achievement. Finn and Rock (1997) cited research indicating that African-Americans tended to have a more external locus

of control and that the locus of control "accounted for a significant proportion of variation in Blacks' school achievement" (p. 224). Although teacher perceptions, expectations, and judgments regarding social class differences (and in effect race/ethnicity) have such a profound and significant effect such that future achievement is influenced by these factors (Alvidrez & Weinstein, 1999; Hauser-Cram, Sirin, & Stipek, 2003) other theories as to why the achievement gap exists must also be explored.

Existing Theories

Just as there are varying definitions as to how achievement is defined (as well as the gap), there is also a variety of theories proposed as to why it exists. As previously stated, although research has shown that, over the past 30 years, racial and ethnic gaps in educational achievement have narrowed, substantial gaps continue to remain, primarily between less advantaged (e.g., African-Americans) and more advantaged (e.g., Caucasians) groups (Kao & Thompson, 2003). A theoretical overview as to why the gap exists was set forth by Kao and Thompson (2003) and indicated that most recent theories fall into two general categories: "how cultural orientations of certain ethnic groups promote/discourage academic achievement" and "how the structural position of ethnic groups affects the children's (parent, peer, and school) environments" (p. 419). The first category of theories posits that ethnic groups hold cultural orientations that will either benefit or harm their odds of economic (or, in this case, educational) success relative to other groups, while the second category suggests that it is the societal position of ethnic groups (including social class) that primarily affects the educational outcomes and achievement of their children (Kao & Thompson, 2003).

Within this first category of theories, it is important to discuss the concept of educational aspirations, although currently a more controversial topic than in the past. Although some believe that these aspirations were an important predictor, some argue that they are merely "a report of students' likelihood of attending college and not a motivating factor per se" (Alexander & Cook, 1979 and Jencks et al, 1983 cited in Kao & Thompson, 2003, p. 422). For minorities, including African-Americans, reports of higher aspirations were much higher than would be expected given the socioeconomic status of the family (Kao & Tienda, 1998). Although it has been reported that most children self-report extremely high educational aspirations, subsequent attainment of these aspirations is much lower (Kao & Thompson, 2003).

Related to educational aspirations and attainment, family background is also an important factor to consider. Mare & Winship (1988 cited in Kao & Thompson, 2003, p. 425) noted that "for all groups except Asians, family background explains a large proportion of the differences in educational attainment between white and nonwhite ethnic-racial groups. In many cases, family background explains one half to two thirds of the difference." White and Kaufman (1997) noted that there are ethnic differences in not only school performance, but also in terms of expectations that lead to differences in dropping out of high school and Velez (1989 cited in Kao & Thompson, 2003) found that family background (high SES) reduced this likelihood for all students. Kao and Thompson (2003) noted that related to family income, parental education is likely the "best predictor of eventual academic outcomes" among young people and this factor helps to explain a substantial portion of the variance in educational outcomes (p. 431). This being said, the conclusion then would be that within this category of theories as to why the achievement gap exists, the culture as a whole,

and family factors in particular, affect not the desire to achieve and attain at higher levels, but rather the positive, concrete attitudes and resources regarding the obtainable outcomes that educational achievement purports to provide.

The second category of theories looks primarily at the societal position of ethnic groups and how this position affects educational achievement and outcomes. Negative stereotypes regarding minorities, especially African-Americans, tend to exist on a systemic/societal level and "members of ethnic-minority groups, no matter how able or motivated, cannot improve their position in society because barriers impede the advancement of certain social groups" (Schmader, Major, and Gramzow, 2001, p. 99). Within this societal position lies the socioeconomic status of the family, which has been found to have a significant influence on the educational outcomes of the child. Kao and Thompson (2003) posit that the SES of the parents is then associated with parental participation, quality of instruction, school peers, teachers, and other influences. They state that "class differences are manifested through varying parental practices and schooling opportunities, which in turn favor more advantaged students" (p.419).

If societal position is to be considered as to why the achievement gap exists, it is important to discuss the notion of tracking in schools. According to research cited by Kao and Thompson (2003) "studies have shown that poor children and racial and ethnic minorities are disproportionately placed in low-ability groups early in their educational careers and in non-college-bound groupings in junior high and high school" (p. 423). This tracking of low income and racial/ethnic minorities will lead to differential outcomes in comparison to more advantaged, majority students. Studies have shown that tracking has a negative effect on the achievement of those students in the lower track and a weak-to-modest

positive effect on those in high tracks. The conclusion then of this category of theories would be that, if the achievement gap exists, it exists because of the effects that result from society's devaluation of the minority as a whole rather than from the minorities' devaluation of the attainable outcomes of education and achievement in particular.

Disengagement and Disidentification. From a review of the literature, several prominent theories emerge that could be placed within one of the previously mentioned categories. One theory suggests that the academic achievement of minority students is affected as a result of their psychological disengagement or disidentification with academic performance (Schmader, Major, and Gramzow, 2001). Psychological disengagement has been defined as "a defensive detachment of self-esteem from one's outcomes in a domain such that self-esteem is not contingent upon one's successes or failures in that domain" (Major & Schmader, 1998; Major et al., 1998 cited in Schmader, Major, and Gramzow, 2001, p. 94). Related to disengagement, according to Steele (1992, cited in Cokley, 2002), academic disidentification is "a process whereby the general self-concept becomes increasingly less identified with academic performance the longer one stays in school (p. 379)." Thus, as a coping strategy, the theory of disengagement/disidentification suggests that in order for minority students to maintain a high, stable level of self-esteem, despite such outcomes as poor grades or test scores, they must psychologically disengage from the academic process. This, in turn, over time can lead to academic disidentification as a way of protecting self-esteem due to low academic performance.

Major and Schmader (1998, cited in Schmader, Major, and Gramzow, 2001) define psychological disengagement in terms of two psychological processes: devaluing and discounting. According to the authors, when a domain (e.g., education) is devalued, "the

outcomes received in that context are no longer viewed as relevant or important to how a person defines or evaluates the self" (p. 95). The question of why one would devalue education incorporates the notion that the individual does not view the outcome as relevant or important in defining or evaluating oneself. Historically, African-Americans were not allowed to be educated and when education did become a reality, conditions were often substandard and financial support lacking. African-Americans were "forced" out of necessity to find alternative ways to define and achieve their own definition of success in a society that treated them as inferior and less than human. From such a historical context, despite the many achievements that were accomplished by African-Americans, negative stereotypes were generated and perpetuated. When an evaluation or feedback (e.g., grades or test scores) is discounted, the validity of the evaluation is called into question and deemed a poor indicator of an individual's academic ability.

For minority students, especially those who have been negatively stereotyped, these two processes may have an effect on academic motivation and, in turn, academic achievement. Schmader, Major, and Gramzow (2001) believe that "perceptions of ethnic injustice [*at the systemic level*] predict processes of psychological disengagement among ethnic minority students" (p. 99). Although there is limited empirical support for this specific hypothesis, the impact of ethnic-minority injustice is well documented in a variety of areas. Perceived ethnic-minority injustice likely activates coping strategies such as discounting and/or devaluing in order to help buffer the effects of the injustice on one's self-esteem. This psychological disengagement (as a coping strategy), in turn, could lead to poorer academic performance, thus perpetuating the ethnic group differences in academic achievement (Schmader, Major, and Gramzow, 2001).

Stereotype Threat. Negative stereotypes regarding ethnic minorities remain quite prevalent in today's society and, unfortunately, continue to be perpetuated. Because of the historical issues regarding African-Americans in this country, such negative stereotypes continue to wield power. What emerged out of the prevalent existence of negative stereotypes was the theory that has been termed "stereotype threat," which may help to explain the difference in the academic achievement of African-Americans and their Caucasian peers. Stereotype threat was termed and defined by Steele and Aronson and suggests that "the existence of such a [widely-known, negative] stereotype [about one's group] means that anything one does or any of one's features that conform to it make the stereotype more plausible as a self-characterization in the eyes of others, and perhaps even in one's own eyes" (Steele and Aronson, 1995, p. 797).

Stereotype threat is a situational threat and is not confined to African-Americans and achievement, but rather can affect anyone with a group identity about which negative stereotypes exist (Suzuki and Aronson, 2005). The notion that stereotype threat has an effect on the academic achievement of African-Americans is reasoned by Steele and Aronson as this: "whenever African-American students perform an explicitly scholastic or intellectual task, they face the threat of conforming or being judged by a negative societal stereotype . . . about their group's intellectual ability and competence. . . . And the self-threat it causes . . . may interfere with the intellectual functioning of these students, particularly during standardized tests" (p. 797). Steele seeks to include the interfering pressure of stereotype threat within a long list of other pressures that have long been shown to disrupt academic performance such as text anxiety, choking, evaluation apprehension, and token status (Steele, 1997).

Results of studies conducted by Steele and Aronson (1995) suggested that, in situations where a negative stereotype is applicable, one is at risk of conforming to the stereotype as a self-characterization (see also Stangor, Carr, & Kiang, 1998), therefore negatively affecting performance. More specifically related to African-Americans and achievement, Steele and Aronson found that those participants who were vulnerable to these negative stereotypes about their group's intellectual abilities showed depressed standardized test performance relative to their Caucasian counterparts (Steele and Aronson, 1995 and Steele, 1997). Steele goes on to argue that stereotype threat only affects a portion of the stereotyped group, and in the case of academic achievement, only more confident students are likely to be the greatest affected (Steele, 1997). Perhaps this is because stereotype threat is situational and likely affects those ("confident students") who recognize that if their actions/abilities conform to negative group stereotypes, it makes the stereotype more plausible as a self-characterization. Steele's argument is that these confident students remain identified with the domain of academics and are thus motivated to do well so as not to conform to the negative stereotypes; however, stereotype threat in situations of standardized testing will likely lead to the daunting task of attempting to disprove the stereotype which, in turn, may lead to depressed performance to some degree thus proving the stereotype they sought to disprove (Steele, 1997).

If stereotype threat affects primarily engaged and identified students, it lacks then the ability to wholly explain the academic achievement gap between African-Americans and their Caucasian peers. It does not appear to provide a plausible reasoning regarding those who are disidentified from the academic domain although the notion of disidentification offers a likely and plausible explanation. Unfortunately, as well, the theory of stereotype

threat has come under scrutiny due to the number of misinterpretations of the resulting data found by Steele and Aronson in 1995. According to Helms (2005), the question of whether or not stereotype threat could generally account for the academic achievement gap (as defined by standardized test score disparity) between African-Americans and Caucasians was not addressed in the original Steele and Aronson study. Sackett, Hardison, and Cullen (2004) report that the results of Steele and Aronson's original study indicate that "absent stereotype threat, the two groups [African-Americans and Caucasians] differ to the degree that would be expected based on differences in prior SAT scores" (p. 7). Therefore, eliminating stereotype threat (through eliminating negative stereotypes, etc.) will not eliminate the test score gap between African-Americans. Eliminating stereotype threat may, however, reduce the gap to what would be expected based on previous test score differences. The theory of stereotype threat is important, however, in that it helps to identify additional information which must be considered as society struggles to close the academic achievement gap. Because stereotype threat is not the one answer to achieving such an undertaking, other theories (and interventions) must also be considered which address "potential contributing factors, such as differences in educational and economic opportunities of African-American and White youth" (Sackett, Hardison, & Cullen, 2004, p. 11).

Cultural-ecological Perspective. One such theory that addresses additional contributing factors to the academic achievement gap is Ogbu's cultural-ecological perspective (Sanders, 1998; Norman et al, 2001). Much research has shown that children from disadvantaged minority groups tend to receive poorer academic outcomes as evidenced by lower grades, lower standardized scores, higher dropout rates, and lower college grades. While most research tends to lump all disadvantaged minority groups together, Ogbu argues

that not all minority groups are the same (Osborne, 1999; Ogbu, 2004). According to Ogbu's perspective, there are two types of minorities: those who come into a society voluntarily (voluntary minorities) and those who have been brought to a society against their will (involuntary minorities). It is this status, as voluntary or involuntary, that often leads to different social realities and outcomes. Osborne (1999) noted that "involuntary minorities . . . tend to develop social or collective identities that are in opposition to the social identity of the dominant group (in the case of the United States, Whites)" (p. 558). According to Ogbu (2004), the collective identity formed among African-Americans (during slavery) is rooted in a collective experience of oppression and exploitation. He states that ". . . regardless of social class and gender, Black Americans tend to code their experiences with White Americans and with social institutions in terms of race, and not class or gender" (p. 8). Specifically related to academics and schooling, Ogbu's perspective would purport that "African-American students tend to view education as a system controlled by the group that subjugated and oppressed them and their ancestors. School, for them, is seen as an inappropriate aspect of what they deem 'proper' African-American identity" (Fordham & Ogbu, 1986 cited in Osborne, 1999, p. 558). School, then, for African-Americans would be affected by anticipated discrimination which would likely cause them to withdraw from academics (Ogbu, 1991, cited in Kao & Thompson, 2003; Sanders, 1997).

From this notion, Ogbu termed the concept of "cultural inversion" in which African-American children are encouraged to value other aspects of society that are in opposition to what would be considered Caucasian values. Fordham and Ogbu (1986, cited in Osborne, 1999) also suggest that those African-American students who do succeed in school are still not truly accepted or rewarded commensurate with their Caucasian counterparts, and this

combined with peer pressure and the cultural pressure to not "act white," pressures students to disidentify with academics and schooling. Ogbu's solution to such an issue would be to alter the way in which involuntary minorities view academic achievement by changing community and family norms and celebrating those who do well in academics while placing pressure on those who do not perform well (Osborne, 1999). Another strategy related to this is what Ogbu would refer to as "accommodation without assimilation" in which involuntary minorities are able to "participate successfully in two cultural frames for different purposes without losing their own cultural identity or undermining their loyalty to their minority community" (Osborne, 1999, p. 558).

Cool Pose. Ogbu is not alone in his oppositional perspective involving the effects of social issues on how African-Americans view and respond to their place in society. Similar to the perspective of Ogbu, Majors and Billson termed what they called the "cool pose" theory in which African-American males tend to develop a ritualized approach to masculinity as a coping and survival mechanism in "an environment of social oppression and racism, including that found within U.S. schools" (Osborne, 1999, p. 558). "Cool pose" has been defined as "the presentation of self many black men use to establish their male identity. Cool pose is a ritualized form of masculinity that entails behaviors, scripts, physical posturing, expression management, and carefully crafted performances that deliver a single, critical message: pride, strength and control" (Majors and Billson, 1992, p. 4 cited in Hatchett, 1993, p. 234). According to their theory, African-American males learn and engage in such behaviors early in life in order to counter the damage caused by being a member of a subjugated minority group. Like Steele, Majors and Billson believe that these males become

the victims of their own coping strategies and, eventually, begin to disidentify with academics leading to a devaluing of academics and education as a whole (Osborne, 1999).

"*Acting White."* Both Ogbu's and Majors and Billson's theories rest, at least in part, on the notion that African-Americans tend to disidentify with academics as the result of their difficulty in existing within two cultural frames of reference. In other words, to identify with (and perform well in) academics suggests that one has been "disloyal" to or no longer fully identifies with their minority status. Ogbu (2004) argues that it is not making good grades that is deemed "acting White," but rather the "White attitudes and behaviors conducive to making good grades" (Ogbu and Simons, 1998 cited in Ogbu, 2004, p. 28). This, in turn, is what has likely led into the theory of "acting white" and the resultant disidentification with academics experienced by those who have been deemed as such. According to the "acting White" theory, there is an assumption that there is "a positive association between high achievement and high Eurocentric values (i.e. performing well in school is associated with an extreme White salience belief system, or high Eurocentrism)" (Spencer, Noll, Stoltzfus, and Harpalani, 2001, p. 25). Those deemed by their peers as "acting White," based on the results of performing well academically, tend to lose not only their peers within their minority group, but also cross-racial friendships as well, thus adding to the stigma of "acting White" (Douthat and Poe, 2005). This may, possibly, lead to decreased academic efforts especially during such a critical time of identity formation. It is important to note also that "acting White" may not refer to a "homogeneous phenomenon" in that there are additional contextual variables that must also be considered, such as socioeconomic status as well as the relevance of ethnicity, religion, and other affiliations.

Family Influences. Related to the notion that other factors must be considered when referring to the heterogeneity of the term and consequences of "acting White," other factors outside of those previously discussed must also be considered when examining theories as to why the academic achievement gap exists. Each of the aforementioned theories focuses primarily on the child's race/ethnicity as the most salient factor to consider when addressing the issue as to why the academic achievement gap exists. However, much research has also focused on the influence of the family in the academic success of children. Research has shown that the structure of the family can have an impact on the child's success in the school environment. For example, Mulkey, Crain, and Harrington (1992, cited in Bankston and Caldas, 1998) reported that students from single-parent households tend to have significantly lower grades and test scores than those from two-parent households; however, other studies have not produced commensurate results. Single-parent households are likely to have fewer economic resources, and if education is not viewed as a priority, less time and fewer resources would be spent by the family in this area, thus validating the supposition that family structure, inclusive of SES, may indeed be a contributing factor to the achievement gap. The U.S. Bureau of the Census (1992, cited in Bankston and Caldas, 1998) has indicated that "the poverty rate of families headed by women is six times that of other families in the U.S." (p. 716). Based on this information, and the knowledge that approximately 43% of African-American families are single-parent households headed by women (http://www.census.gov downloaded on March 31, 2008), this will have a profound effect on the academic outcomes of African-American children. Bankston and Caldas (1998) noted that, based on their review of the literature, "research suggests that family structure can have a strong, direct effect on school performance, independent of socioeconomic status and on

behavior and attitudes relevant to school performance" (p. 716). They found in their study of this issue that coming from female-headed families tends to contribute to a significant negative relationship with school achievement perhaps due to inadequate socialization or inadequate supervision and social control. Regardless of the reasoning, such results add to the theory that the family is likely a significant factor in the academic success (or lack thereof) of the child.

As stated previously, socioeconomic status has played an important role in the academic success of children and, unfortunately, many African-Americans (and disproportionately so) find themselves in the lower income classes. However, according to Halle, Kurtz-Costes, and Mahoney (1997, p. 527) "although economic hardship and social discrimination provide difficult obstacles to overcome, parents' behaviors, beliefs, attitudes, goals, and lifestyles may circumvent the detrimental effects of poverty, thereby fostering not only achievement striving but also academic success in some disadvantaged children." They found as a result of their study that the parents' achievement-related beliefs about their child(ren), including their eventual educational attainment, were "more strongly linked with child outcomes than were parents' achievement-oriented behaviors" (e.g., parenting style, helping with homework, school involvement) (Halle, Kurtz-Costes, and Mahoney, p. 527). They further posit that having the family maintain a positive attitude about the child's academic abilities may be one of the most important family characteristics related to the child's future success.

Although each of the presented theories as to why the academic achievement gap exists offers compelling insights into the phenomenon, no one theory alone presents an all-inclusive presentation of the many variables and factors that must be considered if the

"problem" is to be remediated. It is likely that a combination of components from each of them offers the best explanation as to the existence of the achievement gap. For example, one cannot discuss an academic achievement gap between African-Americans and Caucasians without discussing the influence of race/ethnicity. Race and ethnicity cannot, in turn, be viewed separately from the history of minorities in this country, specifically as it relates to African-Americans and the years of oppression, stereotyping, and marginalization that they have endured. As a result then, one cannot neglect that this oppression and marginalization has led to a disproportionate distribution of wealth and power and has relegated many African-Americans to the lower socioeconomic statuses. In an effort to retain and regain a sense of identity, some African-Americans have then developed coping and survival mechanisms that have, unfortunately in many cases, led to a devaluing of what has been deemed "Eurocentric (White) values" including the importance and benefit of education, which has caused many to disidentify with academics and, in turn, has led to the academic achievement gap. This being said, the resulting achievement gap may only be seen as such if the gap truly exists, primarily since it appears to be based on a deficit model, where the deviation from Caucasian, (upper) middle-class norms has been set as the standard.

How the Academic Achievement Gap is Measured

For most intents and purposes the achievement gap is defined using empirical data that has been collected and analyzed through standardized tests/measures (such as End-of-Grade or End-of-Course tests, California Achievement Test, etc.), with some focus on grades, school performance, and attrition (school-drop out rates) (Romney, 2003; Peebles-Wilkins, 2005). How a student performs on standardized tests and/or in school is affected by a variety of factors which are often not taken into consideration when using such measures.

Spencer, Noll, Stoltzfus, and Harpalani (2001) stated that "when analyzing the achievement gap between African-American and White youth, attention is given only to the objective magnitude of the gap, rather than to the diverse ways that youths respond to conflicting messages concerning the nature of the self as an individual and as a member of a particular cultural unit" (p. 23). Such information would be important to consider when attempting to determine the most appropriate and effective course of remediation.

As stated previously, the achievement gap is often measured through the use of standardized test scores, and perhaps even more so since NCLB was enacted in 2001. Although the use of empirical data often defines the existence and extent of the achievement gap, teacher perceptions and individual work samples/portfolios also affect how students are treated in schools with regard to their ability to achieve higher standards. With the inception of NCLB, achievement has been reduced to a single test score and is no longer inclusive of portfolios, projects, and teachers' evaluations; however, these additional factors continue to affect the academic achievement gap in other ways. The difficulty in relying on standardized tests is that questions remain as to what the tests actually measure and the tests tend to be associated with a significant margin of error (Elmore, 2002). That being the case, such critical decisions as grade promotion and graduation should not be determined based on a single test score, yet the standard of achievement of many marginalized minorities has rested upon their performance in relation to this single score.

Although the existence and extent of the achievement gap is based primarily on empirical data, schools tend to also examine other factors related to how achievement is defined within the mainstream culture (i.e. grades, courses taken, graduation rates). Although school performance, in general, is often defined by a student's work and overall behavior, it

is nevertheless, evaluated by teachers, introducing the notion of subjective evaluation and self-fulfilling prophecy. The issue of teacher perceptions offers important information in measuring achievement as these perceptions often lead to judgments, which in turn, affect curricular and instructional decisions and "are used as proxies for standardized measures of achievement or psychopathology" (Alvidrez and Weinstein, 1999, p. 731). According to Alvidrez and Weinstein (1999), "teacher judgments are strong predictors of future achievement" (p. 732; see also Jussim et al., 1996 and Kuklinski & Weinstein, 2001 cited in Hauser-Cram, Sirin, & Stipek, 2003). For example, Baron, Tom, and Cooper (1985, cited in Alvidrez and Weinstein, 1999, p. 732) "found that teacher judgments about White and middle-class students were more favorable than those for Black and lower SES students, despite comparable [standardized] achievement."

Much evidence has shown that students are often assigned different educational pathways, including ability-based instructional groups and educational tracks (courses of study) that often are reflective of teacher judgments regarding their ability. An awareness of low teacher expectations is often associated with decreased motivation and disidentification with academics, likely leading to decreased academic achievement and a widening of the academic achievement gap (Alvidrez and Weinstein, 1999). Jussim and Eccles (1995, cited in Alvidrez and Weinstein, 1999) offer a compelling argument regarding teacher expectations that must also be considered. As stated previously, they suggest that "teachers' perceptions that are based on group stereotypes may be accurate. . . . [Their] use of social class information in formulating their expectations for child intelligence may simply mirror the external reality of an SES-IQ relationship in our society" (p. 740). If this is the case, then there must be, at some point, an implementation of interventions aimed at unlinking these

two factors so as to change the perceptions of teachers and the resulting negative student outcomes. Reducing negative outcomes and improving academic resilience can likely "be fostered by [supportive] home environments that encourage cognitive efforts" (Alvidrez and Weinstein, 1999, p. 733).

Taking all of these additional factors into consideration may widen, perhaps even reduce, the gap that reportedly exists. However, it is likely that only empirical data will be the standard by which achievement is judged so as to fulfill the requirements of NCLB, justify its enactment, and systematically measure progress. It is this renewed focus on standardized testing and empirical data that has, as an indirect consequence, contributed to the issue of racial/ethnic disproportionality within select special education categories. The results of low IQ and low achievement scores, as measured by standardized testing, has contributed to referrals for special education in disproportionate numbers. Although the determination of necessity for special education services is a team decision, inclusive of exceptional children's (EC) directors, general and special education teachers, and school psychologists, this team process, based on subjective perceptions and referrals in conjunction with standardized testing, has undoubtedly, and unfortunately, led to this issue of racial/ethnic disproportionality.

Perceptions of Disability

Prior to examining perceptions of disability, it is important to discuss why such an examination is necessary, especially as it relates to the achievement gap and subsequently, disproportionality. With the enactment of NCLB in 2001, the resulting outcome data has been utilized as the means for defining and measuring the extent of the academic achievement gap between African-American and Caucasian students. The outcome data

provided through the NCLB Act is aggregated into subgroups including race/ethnicity and disability groupings. A review of this data, along with current research, has shown that there are disproportionate numbers of minorities, particularly African-Americans, represented within certain disability categories (i.e. mild to moderate intellectual disability and behaviorally/emotionally disabled).

Those students within this disability subgroup are often afforded educational modifications to address their academic needs and the standards of achievement expected are relative to the disabilities of these students. The supposition is that school personnel are to be trained in identifying those students at risk for failure and those who are achieving below what would be expected. The training and expertise in recognizing and identifying those students in need, in conjunction with the referral to the special education process, have unfortunately become subjective and based on factors unrelated to true risk factors and low achievement. As a result, there have been a disproportionate number of African-American students, especially male students, who have been referred for and placed in special education, and therefore, the cycle of undiagnosed and misdiagnosed disabilities remains.

Referring to the concept of "disability" often evokes a variety of definitions, causal theories, and intervention strategies (based on the former two issues). All three issues are based, however, on the perception of disability. In other words, how one perceives a disability will influence how the disability is defined, what factors are attributed to its cause, and which interventions will be most (culturally) appropriate. Wright (1988, cited in McCaughey and Strohmer, 2005, p. 90) noted that in dealing with attitudes regarding persons with disabilities, "if a salient feature of a person is regarded as negative and the context surrounding the individual is sparse, the negative view will guide the observer's perception,

thoughts, and feelings about the person." It is assumed then that perceptions shape attitudes, which in turn, shape subsequent behaviors (McCaughey and Strohmer, 2005).

Generally, there does not seem to exist a significant difference between racial/ethnic minorities and Caucasians with respect to the perception of medical diagnoses/disabilities. Perhaps this is because medical or physical disabilities have much more "obvious, objective symptoms" that are consistent across races/ethnicities, socioeconomic statuses, and cultures. Typically, there are "clearly defined eligibility criteria and methods of diagnosis" upon which to base medical disabilities (e.g., visual or hearing impairments) (Blanchett, 2006, p. 25). Perceptions of mental health symptoms are much more varied across cultures, which may help to explain why African-Americans may not perceive behavioral, emotional, social, or learning difficulties as problems in need of remediation. According to the research conducted by McCaughey and Strohmer (2005, p.96) examining the prototypes ("cognitive representations of characteristics that define an object or person") held regarding people with various disabilities, "core prototype characteristics of a person with mental retardation . . . were *helpless* and *slow learner*." Taking this into consideration, the stigma attached to such a label may help to explain why families, especially African-American families, are less likely to perceive a child's school difficulties as a problem. Since the African-American culture has historically achieved success despite such misapplied labels of intelligence and achievement, it may be that behavioral, social-emotional, or learning problems would have to be much more obvious and severe before being perceived as a "disability" in need of remediation.

Perceptions of disability may then be a factor in understanding the choices that are made by families, students, and teachers when presented (or confronted) with what the school has deemed a "problem" in need of a solution. Understanding these perceptions may

be viewed in light of one theory that has been cited as aiding in the understanding of the social and academic motivation of African-American children and adolescents, attribution theory. Attribution theory provides a conceptual framework for addressing the perceived responsibility in self and others. Some of the issues that have been cited as attributions in the social and academic motivation of African-American children and adolescents are in the areas of cognition, socialization, perceived causes of success and failure at school, and belief about others' responsibility for negative outcomes. In connecting this with the research and work that has been conducted regarding the achievement gap, it is important to look at the principles of attribution theory to help explain not only the differing perceptions of disability, but also whose responsibility it is to help "fix" the problem. Depending on what the difficulties are attributed to, differing courses of action must be taken. This will likely have an effect on the types of prevention and intervention strategies that should be implemented and utilized in order to achieve the greatest effectiveness.

Specifically, attributional style has been defined as "a general tendency to make internal (versus external), stable (versus temporary), and global (versus specific) attributions for positive and negative events, [and] has been bound to be related to a number of variables" (Belgrave, Johnson, and Carey in Burlew et al. [eds.], 1992, p. 173). When applied to the academic domain, Graham (1997, p. 22) noted that "success and failure often are attributed to an aptitude or ability factor, an effort factor that includes both short-term and long-term exertion, the difficulty (ease) of the task, luck, mood, family background, and help or hindrance from others." Research has shown that ability and effort tend to be the most prevalent of these factors (Graham, 1997; Clark, 1997). From this, it is important to note that ability is typically seen as internal, stable, and uncontrollable, while effort tends to be seen as

internal, unstable, and controllable. To this end, academic success would be attributed to intelligence and hard work. Relating attribution theory to the achievement of African-Americans would posit that African-Americans do not value effort and hard work, perceiving that barriers to mobility will remain regardless of this effort, and/or that high achievement and effort are associated with "acting white" and in opposition to their minority culture (Graham, 1997).

From the principles of attribution theory, arises a discussion of motivation. Although research has shown that self-esteem and academic achievement are positively correlated (Graham, 1988), it is possible that this relationship is not the case among African-Americans. Research has shown that the self-esteem of African-Americans is consistent with that of their Caucasian peers; however, they consistently perform less well in academics (Graham, 1988). As stated previously, a devaluing of the benefits of education may take place among African-Americans, thus leading to decreased motivation to perform well. If success and failure are seen as outside of their control, based on their history and negative experiences in this society, this will likely affect their level of motivation to achieve according to society's standards.

Conversely, if students succeed or fail, a teacher may attribute this success or failure to the students' efforts or abilities, leading the teacher to take certain actions based on their own personal attributions applied to the students. These actions may be rooted in anger or pity and often lead to rewards or punishment and differential expectations based on perceived ability of the students (Clark, 1997). These actions and interactions, by teachers, with students "can affect the students' perceptions of personal control over success and failure" (Clark, 1997, p. 71). This cycle would likely lead to self-fulfilling prophecy where the

student believes that s/he will perform less well based on teacher expectations and behaviors, and in turn, teacher responses to failure merely reinforce this perception, behavior, and outcome.

Connected with the notion of attribution theory, there are also differences between parent and teacher perceptions. Overall, teachers tend to recognize specific problems more so than parents. Two specific issues are interesting to note from two studies. In looking specifically at the perceptions of behavioral problems, Caucasian teachers' ratings of behavior problems in African-American students are typically higher than those of African-American teachers (Zimmerman et al., 1995). Research has shown that "teacher perceptions of a student's conformity to classroom behavioral norms can lead to lowered teacher expectations of student academic skills and result in differential treatment of students" (see Zimmerman et al., 1995, p. 182). In the second study, it was noted that when teachers are aware of a student's learning disability diagnosis, they respond to children predicated on the belief that the student will fail more, that they are more deserving of pity and less anger, and that they should be given more reward and less punishment (Clark, 1997). As stated previously, such behavior by the teacher may then lead the student to perceive that he has less ability or competence, which, in turn, leads to issues of self-esteem and the motivation to achieve.

If this is the rule, rather than the exception, then it brings into question how Caucasian teachers perceive and respond to African-American students and especially those who have been "labeled" as having a learning disability. It has been shown that "minority children tend to be referred for psychoeducational evaluations at higher rates than their overall enrollments would indicate . . . and it is likely that more minority students will be

placed in special education by virtue of greater percentages of these students being referred and tested" (Suzuki and Valencia, 1997, p. 1109). This leads to questions regarding parents' openness to consent to standardized testing of intelligence and achievement, especially in light of the fact that "Blacks are nearly three times more likely than whites to be labeled mentally retarded . . . and twice as likely to be labeled emotionally disturbed" (National Education Association, 2003, p. 8; see also Meier, Stewart, and England, 1989 cited in Weinstein et al., 2004, p. 512) and 1.3 times as likely to be labeled as having a learning disability (Council for Exceptional Children, 2002 cited in Green, 2005, p. 33).

In contrast to teacher perceptions, research has shown that minority parents are less likely to recognize or label their children's behavior as having a mental health basis which would require professional intervention (Roberts et al., 2005). In relating parental perceptions of disability to the academic domain, Halle, Kurtz-Costes, and Mahoney (1997) noted that the behaviors, beliefs, attitudes, goals, and lifestyles of the parents of economically disadvantaged students [who are likely African-Americans and other marginalized minorities] may serve to circumvent the detrimental effects of poverty and foster achievement and academic success in their children. The authors posit that parental perceptions and expectations about the child's abilities and eventual educational attainment are related to the child's current and future achievement and note that outside of external sources of support, maintaining "a positive attitude about the child's academic abilities and skills may be one of the most important family characteristics associated with future success" (1997, p. 535). It is likely then that this current and eventual success would also hold true for African-American children who may have a disability, but due to parental perceptions about the causes and definitions of disability, may not receive the appropriate "professional"

interventions. It would be hoped that, despite the differences between teacher and parental perceptions of disability and their responses to such, that those factors that serve to protect the academic success of children will far outweigh the risks of academic failure.

Disproportionality

As stated previously, the presumption exists that perceptions shape attitudes, which in turn, shape subsequent behaviors (McCaughey & Strohmer, 2005). Therefore, a logical consequence resulting from an individual's perceptions and attitudes is exhibiting behaviors related to and taking action aimed at addressing and/or remediating the perceived issue. Historically, African-Americans have not experienced positive encounters with mainstream society in the diagnosis and treatment of medical or mental health issues (including behavioral and social-emotional issues) (Alston & Bell, 1996). A "healthy, cultural paranoia" exists based on the history of African-Americans in this society including such issues as slavery, the Tuskegee Syphilis Study, among others, as well as more current issues such as the overrepresentation and misidentification of African-American students in need of special education and the resulting issue of disproportionality. This cultural mistrust has been defined as "African Americans' tendency to distrust Whites. [It] is characterized by a lack of trust in other people (i.e. White Americans), suspicion of the motives of others, uncertainty about the sequence of events, a sense of individual powerlessness, and a belief that caution is necessary to avoid trouble" (Terrell and Terrell (1981, cited in Alston and Bell, 1996, p.17; see also Nickerson, Helms, and Terrell, 1994). In the subsequent examination of the concept of disproportionality and the theories as to why it exists, this "healthy, cultural paranoia" and cultural mistrust will likely seem justified, but hopefully, will also serve as a catalyst for change in the system that created it.

It is important to note that the concept of disproportionality does not only address the issue of overrepresentation, but under-representation in certain categories as well (i.e. African-American students identified as academically/intellectually gifted). For the purposes of the present study, however, only over-representation in specific special education categories (i.e. mild to moderate intellectual disability and behaviorally/emotionally disabled) will be examined as these categories tend to see the greatest amount of disproportionality for African-American students.

As defined by Yates (1998, cited in Salend, Duhaney, & Montgomery, 2002, p. 289), disproportionate representation refers to "the presence of students from a specific group in an educational program being higher or lower than one would expect based on their representation in the general population of students." In 1999, Oswald, Coutinho, Best, and Singh (cited in Salend, Duhaney, & Montgomery, 2002, p. 289) related this definition to disproportionate representation within special education noting that it is "the extent to which membership in a given ethnic group affects the probability of being placed in a specific special education disability category." From the latter definition, it was proposed that the degree to which this disproportionate representation exists can be calculated as an odds ratio. An odds ratio, according to Salend, Duhaney, and Montgomery (2002, p. 289), may be calculated using the following formula:

$$\text{Odds Ratio} = \frac{\frac{\text{\# of students of X ethnicity in Y disability category}}{\text{\# of students in X ethnicity in the student population}}}{\frac{\text{\# of students of all other ethnicities in Y disability category}}{\text{\# of students of X ethnicity in the student population}}}$$

According to the Office of Special Education and Rehabilitative Services (OSERS), relative risk ratios that exceed 1.5 are of concern as this is indicative of overrepresentation by race in a special education category or in the overall disabilities count (http://www.nasponline.org downloaded January 15, 2008).

The two special education categories of most concern for disproportionality are mild to moderate intellectual disability and behavioral/emotional disability. “Blacks are nearly three times more likely than Whites to be labeled mentally retarded . . . and twice as likely to be labeled emotionally disturbed” (National Education Association, 2003, p. 8; see also Meier, Stewart, & England, 1989 cited in Weinstein et al., 2004, p.512). Research has shown that, nationally, African-American students represent 34% of those students in the intellectual disability category and 26% of the emotionally disabled population. Within the state of North Carolina, those figures jump to 60% and 53%, respectively (NCCRESt & NCDPI, 2005). In light of this data, it is important to examine those factors that may be contributing to such significant disproportionality within these categories.

Theories as to Why Disproportionality Exists

There are a number of reasons or causes given as to why disproportionality exists ranging from general systemic issues to specific individual characteristics and interactions. Typically, these theories fall into one of several categories including sociocultural issues, socioeconomic status, sociodemographic factors, and faulty perceptions or bias. In general, according to Reid and Knight (2006), the problem of disproportionality was spawned as a result of utilizing a “medical model” approach to the concept of disability within education which views the “disabled” from a deficit-oriented perspective. This group of “disabled” students becomes marginalized within the educational setting as they do not conform to the

standards held by the historical Caucasian, Eurocentric ideal (Reid & Knight, 2006). Even more unfortunate is the plight of those students who are not only disabled from this perspective, but who are also culturally and linguistically outside the norm of their majority peers. “Proponents of the medical model argue that minorities need special education because of their cognitive, linguistic, or class-related ‘deficits’” (Reid & Knight, 2006, p. 19).

Attention must then be turned to how society arrived at this deficit-oriented perspective (including through standardized measures) which has subsequently resulted in the misdiagnosis and overrepresentation of minority students, and more specifically African-American students, within special education. Each of the aforementioned categories (i.e. sociocultural issues, socioeconomic status, sociodemographic factors, and faulty perceptions or bias) will be examined in turn in order to help clarify the primary beliefs held as causes of the problem of disproportionality in special education.

Sociocultural Issues. Sociocultural issues may be best defined as those systemic issues within society that serve to marginalize minority groups and thus place them at a disadvantage within the educational system. Such factors include “white privilege” and institutionalized racism. As was stated previously, there are differences between Caucasians and African-Americans with regard to how achievement and success is defined. Thus, deeming one standard or definition better than another serves only to perpetuate this deficit model and subsequent disproportionality that results from attempting to overcome the perceived deficits.

Factors such as “white privilege” and institutionalized racism can only be overcome when they are first recognized as contributing factors to the problem. “White privilege” is

defined as “any phenomena, whether individual, structural, political, economic, or social, that serve to privilege Whites while oppressing people of color and promoting White supremacy” (McIntosh, 1990 cited in Blanchett, 2006, p. 24). Unfortunately, most Caucasians do not recognize this privilege as such as they have not ever been without it or suffered the consequences of being without it. It is difficult to identify with someone who has been mistreated and marginalized based on the color of his/her skin when it is skin color that affords one individual privileges while marginalizing another in the process. Without recognizing that society is historically based on providing advantages to Caucasian individuals, to the detriment of minorities, it would be difficult to overcome an educational system that seeks to remediate those individuals who do not conform to the standards set by the privileged (Bell, 1992 and McIntosh, 1990 cited in Blanchett, 2006 and Blanchett, 2006).

Institutionalized racism must be viewed in connection with “white privilege.” It may be defined as those systemic factors ingrained in society as “the norm” by those who benefit from “white privilege” and perpetuate the cycle of marginalization of minorities. Bell (1992 cited in Blanchett, 2006, p. 24) defined it as “individual, structural, political, economic, and social forces that serve to discriminate against and disadvantage people of color on the basis of their race for the purpose of maintaining White dominance and power.” While overt racism is no longer tolerated in this society, there has been a failure of the system to change the lingering effects of such attitudes and perceptions. For example, according to research cited in Salend, Duhaney, and Montgomery (2002, p. 290), “norm-referenced standardized tests are culturally and socially biased and do not give accurate measures of some students’ abilities and potential,” which researchers believe contributes to these students being misclassified as having some type of disability.

Work has been done to ensure that such tests are not inherently biased (i.e. constructed and normed on the Caucasian majority) and it is important to note that much research agrees that standardized tests of intelligence and achievement do not contain inherent sources of cultural bias (termed test bias) (Skiba, Knesting, and Bush, 2002). It is also important to note, however, that the administration and interpretation of results, although reportedly standardized, may remain subjective and vulnerable to bias (termed "testing bias"). Skiba, Knesting, and Bush (2002, p. 65) note that "the strong potential for examiner effects in assessment argues that having a test that is culturally unbiased does not necessarily guarantee that the test will be used in a culturally competent manner." This is important to the research on disproportionality as the two primary categories that reveal the greatest disproportions are both open to more subjective perspectives than any other, namely mild to moderate intellectual disability and behavioral/emotional disability. While an issue such as testing bias may be better examined from the category of faulty perceptions/bias, the fact that such issues affect standardized testing situations which have been endorsed as an unbiased, valid measure of determining disability, it is appropriate to categorize it within the systemic factors that serve to contribute to disproportionality.

Socioeconomic Factors. Socioeconomic status has long been held as a cause of disproportionality with many researchers pointing out the correlation between poverty and poor academic achievement. As was stated previously, it is poor academic achievement that subsequently leads to disproportionality in special education as schools attempt to remediate this problem and close the academic achievement gap. As socioeconomic status is examined as a factor contributing to disproportionality, it is important to remember that the variables of race and poverty are confounded as there are disproportionate numbers of African-Americans

within the lower socioeconomic status levels. In 2001, the U.S. Bureau of the Census noted that "14.4% of White children lived in homes at or below the poverty line in 2000, whereas 30.4% of African American children . . . lived in families below the poverty level" (as cited in Skiba et al., 2005, p. 132). Because these two variables are confounded, it has been difficult for previous research regarding the perceptions of school personnel to determine whether or not the disproportionality that exists within special education is that of race or poverty (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, and Chung, 2005); therefore, the present study seeks to address these issues with school personnel in an attempt to help clarify the issue.

According to O'Connor and Fernandez (2006, p. 6), the National Research Council issued a report in 2002 maintaining that "minority students are more likely to be poor and that 'being' poor heightens exposure to social risks that compromise early development and increase the need for special services." Skiba et al. (2005, p. 131) set forth the four assumptions that are implicitly involved in linking poverty and disproportionality and include the following:

1. Minority students are disproportionately poor and hence are more likely to be exposed to a variety of sociodemographic stressors associated with poverty.
2. Factors associated with living in poverty leave children less developmentally ready for schooling and ultimately yield negative academic and behavioral outcomes.
3. Students who are low achieving or at risk for negative behavioral outcomes are more likely to be referred to, and ultimately found eligible for, special education service.
4. Therefore, poverty is an important contributing factor that increases the risk, presumably in a linear fashion, of special education placement for minority students.

Despite these suppositions, such a relationship has not been proven, but much research agrees that being socioeconomically disadvantaged significantly reduces school readiness

(Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, & Chung, 2005). Where research disagrees is on the significance of this impact on the issue of disproportionality. While it would be expected that the distribution of racial disparities across populations and disability categories would be strongly correlated with poverty, research has not proven this hypothesis. In support of this finding, Skiba et al. (2005) noted that while poverty is also widespread among the Latino population, there is inconsistent disproportionality among Latinos in special education. The authors also note that the disproportionality of African-American students is greater in what they refer to as judgmental special education categories (i.e. intellectual disability, emotional disability, and learning disability). Therefore, according to the authors, the theory that poverty, in and of itself, is the cause of racial disproportionality in special education is unsubstantiated. This conclusion may be called into question, however, as it does not take into consideration the issue of limited English proficiency and English as a Second Language among the Latino population, which affects the referral, assessment, and determination process for special education. It may likely, however, in conjunction with the aforementioned sociocultural factors (i.e. white privilege and institutionalized racism) and the subsequent factors of sociodemographics and faulty perceptions/bias, contribute significantly to the issue of disproportionality.

Related to the poverty of individuals and families, it is important to also consider the poverty of the school systems in which these individuals often find themselves. Coming from economically disadvantaged homes is often indicative of being in inferior school environments compared to more economically well-off peers (Halle, Kurtz-Costes, and Mahoney, 1997). Severe disparities in school funding tend to create additional problems as well. Halle, Kurtz-Costes, and Mahoney (1997, p. 535) also note that economically

disadvantaged schools tend to have "lower teacher morale, less qualified teachers, more discipline problems, and fewer students who place a priority on learning." Salend, Duhaney, and Montgomery (2002) cite research noting that lack of adequate and equitable funding to schools limits the access that students have to quality pre-referral and ancillary services that would help reduce the extent to which students are referred for special education. All of these factors likely contribute to less motivation by African-American students to achieve academically, thereby fueling the need of school personnel to work to reduce a resulting achievement gap, which may subsequently lead to greater disproportionality in special education. While this appears be a logical sequence, there is some research to suggest that the sociodemographics of school systems may actually decrease the amount of disproportionality in special education, which will be subsequently examined.

Sociodemographics. Sociodemographic factors cannot be viewed separately from sociocultural and socioeconomic factors as they include such issues as poverty (of individuals and schools and access to general education options). Sociodemographic factors also include the racial and ethnic make-up of school systems as well, which may have an effect on the rates of disproportionality in special education. For example, Coutinho, Oswald, and Best (2002, p. 54) noted that "both individual student characteristics and district sociodemographics are important in determining the likelihood of LD identification."

As stated previously, certain sociodemographic factors may actually decrease the amount of disproportionality within special education. For example, research has shown that LD identification tends to decline as the percentage of minorities within a district increases (Coutinho, Oswald, & Best, 2002). This decline in identification may also hold true for other subjective disability categories as well such as mild to moderate intellectual disability and

behavioral/emotional disability. It would stand to reason, based on sociodemographic factors, that if a school district is composed of primarily minority students, the homogeneous nature of the student demographic would lend itself to less obvious differences in motivation and achievement, thereby reducing the number of referrals for special education and, subsequently, lead to less racial/ethnic disproportionality.

Faulty Perceptions/Bias. The notion of faulty perceptions or bias from teachers must be examined as it relates to the issue of ethnic disproportionality in special education. Teachers may attribute a student's success or failure to the student's efforts or abilities, leading the teacher to take certain actions based on their own personal attributions applied to the students. These actions may be rooted in anger or pity and often lead to rewards or punishment and differential expectations based on perceived ability of the students (Clark, 1997). These actions and interactions, by teachers, with students "can affect the students' perceptions of personal control over success and failure" (Clark, 1997, p. 71) and can negatively affect a student's perceptions of him/herself, leading to a self-fulfilling prophecy that s/he will perform less well, which in turn, may lead the teacher to refer the student for special education in order to increase the student's motivation and achievement.

Zimmerman et. al. (1995) demonstrated that students' behavior also has an effect on teacher perceptions, leading teachers to conclude that those individual students who do not conform to classroom behavioral norms have lower academic skills, which results in differential treatment of these students. Monroe (2005) has cited in a review of the literature that African-American students are targeted for disciplinary action more so than any other group and that these students are two to five times more likely to be suspended than their Caucasian peers. Because it has been found that racial (as well as gender) stereotypes often

underlie how teachers interact with students (Monroe, 2005), faulty perceptions by teachers, including misinterpretation of behavior, often have a domino effect that leads to the referral of African-American students for special education and increasing the rate of disproportionality in the process.

In order to truly understand the issue of faulty perceptions and bias, it is important to discuss the issue of cultural competence, or lack thereof, among teachers, as well as other school personnel, particularly those involved in the special education referral and eligibility process. As stated previously, teachers respond to students based on their own personal attributions given to a student's behavior and academic success and/or failure. Cultural competence is not only necessary for teachers in their interactions with students, but is also important for school psychologists in choosing and administering standardized tests and in interpreting standardized test results for the purpose of determining special education eligibility. Currently, in North Carolina, while cultural competency training is a required standard within teacher training and school psychologist training programs, the way in which this standard is met is determined by individual training programs. Training may range from one class focusing on diversity issues to more practical applications of diversity issues within field placement experiences. Once training programs have been completed and licensure granted, continuing education units (CEU) are required for continued licensure; however, there are no documented requirements to receive CEUs in cultural competency training. A lack of true cultural competence would contribute to responses and decisions of special education eligibility within a system designed to characterize those factors and behaviors outside of the Caucasian, upper-middle class norm as in need of remediation.

Upon reviewing the theories as to why racial/ethnic disproportionality exists (i.e. sociocultural factors, socioeconomic status, sociodemographic issues, faulty perceptions/bias), it appears that no one theory has been proven as a definitive cause. Instead, however, based on current research, it is likely that a combination of each of these factors contributes to the overall issue of disproportionality. From general systemic issues such as "white privilege" and institutionalized racism (including test and testing bias) to issues of poverty (of individuals and school systems) to individual characteristics such as faulty perceptions and personal bias, the issue of disproportionality seems to have arisen from a well-intentioned system seeking to reduce the academic achievement gap and promote the academic success of a group of students marginalized by an oppressive and inequitable history in this society.

Research Question

The existence of the academic achievement gap (including its varying definitions, theories as to why is exists, and how it is measured) and how to remedy it has been a focus of educators and policy makers for many decades and the subject of much research and debate. Yet, more than 70 years since some of the initial research into this phenomenon was conducted, there remain factors that have not yet been included in the research as having an influence on the gap. While indirect consequences of the achievement gap, such as the issue of disproportionality, have been studied extensively, there remain factors to be considered as to the (perceived) cause(s) of such an issue. Among those factors are the perceptions of school personnel (i.e. directors, teachers, and school psychologists) involved in the special education referral and determination process, for it is this process that has culminated in the disproportionate numbers of African-American students found in certain special education

disability categories. After considering all of the information regarding the achievement gap and the issue of disproportionality (as an indirect consequence), it is important to consider such issues in combination when looking to improve the academic achievement of African-American students.

Based upon a review of the literature in this context, the primary question to be researched and analyzed focuses on the perceived causes of the disproportionate numbers of African-American students receiving special education services within select disability categories as perceived by exceptional children's directors, general and special education teachers, and school psychologists.

Research Question #1: Are there differences in the perceived primary cause of disproportionality between those school personnel involved in the referral and determination process for special education (i.e. exceptional children's directors, general education teachers, special education teachers, and school psychologists)? Because the aforementioned groups perform different roles in the referral and determination process, it is hypothesized that each group will endorse a different primary cause of disproportionality from their perspective and role within the process. It is also hypothesized that while there will be a general congruence between the perceptions of these four groups with previously identified causal factors of disproportionality, these four groups will likely differ among themselves regarding the primary cause(s) of the issue.

- *Hypothesis 1a: Exceptional Children's directors will endorse standardized testing (conducted by school psychologists) as the primary cause of disproportionality.*

- *Hypothesis 1b: General education and special education teachers will indicate characteristics related to the student/family as the primary cause of disproportionality.*
- *Hypothesis 1c: School psychologists will indicate the referral and determination process as the primary cause of disproportionality.*

A secondary question to be researched and addressed focuses on the amount of cultural competence training these school personnel have received and how long ago the training was received in order to determine whether or not this type of training has any effect on the noted perceptions.

Research Question #2: Does cultural competence training have an impact on the perceived causes of ethnic disproportionality? Specifically, does the number of hours and recency of training have an effect on the primary cause endorsed? Because research has shown that Caucasian school personnel often have misperceptions regarding African-American students' behavior and abilities, cultural competence training may help eliminate these misperceptions of cultural norms (behavior, motivation, and achievement) thereby leading to less referrals and eligibility determinations for special education.

- *Hypothesis: School personnel receiving more hours of training more recently will endorse causes of disproportionality unrelated to the individual student and/or family characteristics.*

Overall, the perceived causal factor(s) of disproportionality will affect the attitudes of those involved, and subsequently, their behaviors directed toward that perceived cause, leading either to discord among those involved in the process or to the necessary changes in perceptions that will effectively address the issue of disproportionality.

CHAPTER III: METHODS

Participants

The participants for the current study were recruited from a number of public schools across the state of North Carolina. Participants consisted of four groups of school personnel: Exceptional Children's (EC) services directors, general education teachers, special education teachers, and school psychologists. Given that there is one EC director per county in NC, the 20 EC directors of the public school systems within the selected counties were contacted regarding participation in the current research. A random sample of general education teachers, special education teachers, and school psychologists representing elementary, middle, and high schools from counties across NC were also contacted for participation in the research. The number of participants recruited was dependent upon the number of counties and schools within those counties selected to participate.

For the purposes of the current study, school districts from 20 counties were selected from across NC. Twenty counties of varying sizes, by population, with a minimum of three elementary schools, two middle schools, and two high schools were selected for participation. Such selection provided a study design ensuring that perceptions of school personnel from smaller counties were equally represented within the study. Given the exclusion criteria, it is likely that the counties with the minimum number of schools required were of comparable size. From all elementary, middle, and high schools within these counties, the number of schools selected was evenly divided across counties with general education teachers, special education teachers, and school psychologists randomly selected

from each school level. Given the number of responsibilities held by both EC directors and school psychologists in serving multiple schools, it was hypothesized that the response rate would be approximately 20%-30%. While teachers also have a number of responsibilities within and outside of the classroom, it was hypothesized that the response would be slightly higher at approximately 30%-40%.

Measures

Survey

Based upon the current review of the literature regarding the causes of ethnic disproportionality in special education, a web-based survey was created and developed for the purposes of the current research. Because the survey measure utilized was created and developed specifically for the current research, no scientific measure of reliability or validity can be placed upon the survey as a whole. Because the survey was conducted confidentially, survey questions regarding respondent demographics were considered to be reliable and valid. Additional questions contained in the survey were developed to reflect the personal perceptions of the respondents regarding ethnic disproportionality in special education. A list of causes/factors related to disproportionality was provided based upon a review of the literature; however, respondents may also provide additional causes/factors based upon personal perceptions. Given the limited reliability and validity of the current survey measure, results of the present research should be interpreted with caution; however, the information and analyses gathered provides important information in the continued research in finding appropriate solutions to the problem of ethnic disproportionality in special education.

The survey was developed and implemented using Qualtrics and consisted of eleven questions to be completed confidentially by EC directors, general education teachers, special education teachers, and school psychologists. The survey consists of the following questions:

1. Please indicate your position (EC director, general education teacher, special education teacher, or school psychologist).
2. Please indicate your ethnicity (African-American, Caucasian, Hispanic, Mixed Race, or other).
3. Is your school a Title I school?
4. Have you completed cultural competence training and, if so, how many hours of training and how long ago was training completed?
5. Please indicate what you perceive to be the significant cause(s) of ethnic disproportionality in the category of mild to moderate intellectual disability.
6. What do you believe is the most primary factor/cause of disproportionality with regards to mild to moderate intellectual disability?
7. Please indicate what you perceive to be the significant cause(s) of ethnic disproportionality in the category of behavioral/emotional disability.
8. What do you believe is the most primary factor/cause of disproportionality with regards to behavioral/emotional disability?
9. What one factor, if changed, would have the greatest impact on decreasing disproportionality within the mild to moderate intellectual disability category?
10. What one factor, if changed, would have the greatest impact on decreasing disproportionality within the behavioral/emotional disability category?
11. Please provide any additional factors you believe will be helpful in addressing the issue of disproportionality.

Aggregated Outcome Data

In order to address the requirements of the No Child Left Behind Act (NCLB) of 2001, each state reports and publishes aggregated outcome data to determine if the specified proficiency goals have been obtained. Information regarding the academic performance of racial/ethnic groups as well as disability groups is provided within the outcome data and was utilized for the purposes of discussion in conjunction with the present analyses. Only disaggregated data regarding the selected counties in North Carolina was used with the present analyses. Information gathered from the outcome data consisted of standard scores on End-of-Grade tests in core academic areas divided by subgroups (e.g., African-American,

Caucasian, and disability categories) in order to examine the extent of the academic achievement gap between African-American and Caucasian students. Information was also obtained regarding the percentage of each race/ethnicity receiving special education services in both the mild to moderate intellectual disability and behavioral/emotional disability categories within the selected counties. Information regarding the rates of ethnic disproportionality in North Carolina was gathered from the North Carolina Department of Public Instruction website in order to examine differences between the selected counties in North Carolina.

Procedures

Approval for the current research was obtained from the University of North Carolina at Chapel Hill (UNC) institutional review board (IRB) in order to contact the participants. Approval was also obtained for the survey measure utilized in the present study. Upon completion of the IRB process, an email was sent to participants in order to provide an explanation of the purpose of the present study and to request participation in completing the survey.

Participants were contacted via email and were directed to the IRB-approved survey posted on Qualtrics via the internet. Participants were informed, via email, that participation in the study would take approximately five minutes, is confidential and voluntary, and that no identifying information would be utilized. Completion of the survey denoted implied consent to participate in the study. The participants were informed that the survey would be posted for four weeks and could be completed at his/her convenience. A reminder email was sent after two weeks and again with one week remaining requesting participation in completing the survey. At the completion of the four week period, data was collected and analyzed from

the survey in order to determine if there were group differences in perceptions of the primary cause(s) of racial/ethnic disproportionality in special education. Only data received from completed surveys was included in the analyses. Of the surveys completed, there would be a percentage of EC directors, general education teachers, special education teachers, and school psychologists. Within the sample, a percentage would be Caucasian and a percentage will be African-American.

Other factors examined would include whether or not those individuals having received more cultural competency training more recently would endorse student/family characteristics as the primary causal factor of ethnic disproportionality. After analyses of the surveys were completed, the disaggregated outcome data, published by the state of North Carolina, was reviewed in order to determine if there were any racial/ethnic differences in academic achievement as defined by standardized testing. The data was also reviewed in order to obtain the most recent percentages of racial/ethnic disproportionality in the targeted special education categories. Given the procedures utilized and the limited focus of the sample, the results that were derived should be interpreted with caution as the outcome data may be different when taking into account a greater sample.

Data Analysis

Surveys and Aggregated Outcome Data

Data was analyzed using SPSS Version 15.0 for Windows. Three separate chi-square analyses were performed in order to determine whether the hypothesized results (that there will be differences between the perceptions of EC directors, general education and special education teachers, and school psychologists regarding the primary cause(s) of racial disproportionality in special education) would be verified by the evaluation analysis.

Variables utilized for analyses consisted of personnel group (i.e. EC directors, general education teachers, special education teachers, and school psychologists) and primary cause endorsed (Table 1). It was hypothesized that differences in perceptions would be based on the different roles of each group within the referral and eligibility determination process. Specifically, since standardized testing has traditionally been the major factor in determining eligibility, it was hypothesized that Exceptional Children's directors would endorse standardized testing (conducted by school psychologists) as the primary cause of disproportionality. Given teachers daily interactions with students and their families, it was hypothesized that special education and general education teachers would endorse causes related to student/family characteristics as the primary cause. Because school psychologists' involvement in the process is initiated through referrals, it was hypothesized that they would endorse the referral and eligibility determination process as the primary cause of disproportionality. A logistic regression analysis was conducted to determine if the amount of cultural competence training (number of hours of training) and how recent training was completed had an effect on the primary causal factors of disproportionality endorsed by school personnel. The independent variables utilized for analyses consisted of the number of hours of training and the years since training was completed. The dependent variable consisted of the endorsement of student/family characteristics as the primary cause of disproportionality (Table 1).

For the purposes of discussion, in conjunction with the present analyses, a review of the aggregated outcome data provided by the state of North Carolina was conducted in order to determine if there were any racial/ethnic differences in academic achievement as defined by grade-level performance on end-of-grade standardized testing and to determine the

percentages of racial/ethnic disproportionality within the selected counties. If there were differences in the academic achievement of African-Americans and Caucasians (i.e. that the percentage of African-Americans meeting grade level requirements is consistently lower than that of their Caucasian peers), as defined by the outcome data, it would be important to look at the results of the analyses of the surveys regarding the primary causal factors of disproportionality. If there is an academic achievement gap, based on this standardized testing, between African-American and Caucasian students, then it was hypothesized that the percentage of disproportionality would be strongly correlated with the magnitude of the percentage of the achievement gap and that the primary causal factor(s) of disproportionality endorsed by the school personnel would be related to student/family characteristics.

CHAPTER IV: RESULTS

The purpose of the current study was to survey school personnel involved in the special education referral and determination process in order to obtain their perceptions as to the primary causal factors of ethnic disproportionality regarding African-American students. Data was analyzed utilizing SPSS version 15.0 for Windows. The original sample of participants invited to participate in the online survey consisted of a total of 424 participants including 20 Exceptional Children's Services directors (EC), 140 general education teachers, 140 special education teachers, and 124 school psychologists. The number of school psychologists differed given the exclusion criteria and that most often provide services for more than one school. Of the 424 school personnel requested to complete the survey, 122 (28.8%) initiated responses; however, only 103 (24.3%) completed the survey.

Only data from completed surveys were analyzed for the purposes of the present study. Of the 103 completed surveys, 8 (7.8%) were EC directors, 18 (17.5%) were general education teachers, 41 (39.8%) were special education teachers, and 35 (34.0%) were school psychologists (Table 2). The ethnic composition of the 103 respondents was as follows: 8 (7.8%) were African-Americans, 89 (86.4%), were Caucasian, 1 (1.0%) was Hispanic, 1 (1.0%) was Mixed-Race, and 2 (1.9%) placed themselves within the "other" category. Two additional respondents did not choose to indicate their ethnicity (Table 3). The response rates for the specific categories of school personnel were as follows: 8 of 20 Exceptional Children's services directors (40%), 18 of 140 general education teachers (12.86%), 41 of

140 special education teachers (29.29%), and 35 of 124 school psychologists (28.23%) (Table 4).

Table 2. Respondents' School Personnel Position

Position	Number of Respondents	Percentage of Total Respondents
Exceptional Children's Directors	8	7.8
General Education Teachers	18	17.5
Special Education Teachers	41	39.8
School Psychologists	35	34.0
Missing Value	1	0.9
TOTAL	103	100

Table 3. Ethnic Composition of Respondents

Ethnicity	Number of Respondents	Percentage of Total Respondents
African-American	8	7.8
Caucasian	89	86.4
Hispanic	1	1.0
Mixed-Race	1	1.0
Other	2	1.9
No response	2	1.9
TOTAL	103	100

Table 4. Response Rate of School Personnel

Position	Number of Respondents	Response Rate Percentage
Exceptional Children's Directors	8	40
General Education Teachers	18	12.86
Special Education Teachers	41	29.29
School Psychologists	35	28.23

In responding to questions within the current survey regarding the perceived primary causal factors of ethnic disproportionality within the mild to moderate intellectual disability category and the behavioral/emotional disability category, participants were provided with a list of factors from which to choose. These factors consisted of the following: student behavior, student intelligence, student achievement, referral and determination process for special education, standardized IQ tests, achievement tests, lack of cultural competence of school personnel, economic resources of school system or district, low socioeconomic status

of family, and "other." For the purposes of the analyses, those specific data points endorsed as student behavior, student intelligence, student achievement, and low socioeconomic status of family were collapsed into one category—"student/family characteristics." The data points of standardized IQ tests and achievement tests were collapsed into the category of "standardized testing." Specific data points endorsed as "other" were examined and recoded into appropriate categories when possible.

Research Question #1: Primary Causal Factor(s)

In order to address the perceptions of school personnel as to the primary causal factor(s) of ethnic disproportionality in special education regarding African-American students in both the mild to moderate intellectual disability category and the behavioral/emotional disability category, three separate chi-square analyses were performed. To test each hypothesis (Hypotheses 1a-1c) for both categories with the chi-square analyses, a cross-tabulation, based on the school personnel position indicated in the survey response and the primary cause endorsed, was conducted. For the purposes of the analyses, the general education and special education teachers were grouped together into one group and specific data points endorsed as "other" were examined and recoded into appropriate categories when possible. The question to be addressed focused on whether or not there were differences in the perceived primary cause of disproportionality between those school personnel involved in the referral and determination process for special education (i.e. exceptional children's directors, general education teachers, special education teachers, and school psychologists). Because each group performs a different role within the process, it was hypothesized that (1) Exceptional Children's (EC) directors would endorse standardized testing (performed by school psychologists) as the primary cause of disproportionality, (2) general education and

special education teachers would indicate characteristics related to the student/family as the primary cause, and (3) school psychologists would indicate the referral and determination process as the primary cause of disproportionality.

Hypothesis 1a

To test the hypothesis (1a) that EC directors would endorse standardized testing as the primary cause of ethnic disproportionality, the data was entered into a 2x2 table comparing EC directors to other school personnel (teachers and school psychologists) on the endorsement of standardized testing (standardized IQ testing and achievement testing collapsed into one factor) compared to the endorsement of all other factors (Figures 1a. and 1b.). Results of the chi-square analysis indicated that the hypothesis was not supported by the data for neither the mild to moderate disability category nor the behavioral/emotional disability category (χ^2 =0.955, p<0.329; χ^2 =0.091, p<0.763, respectively) as no statistical significance was found.

Table 5a. Mild to Moderate Intellectual Disability

Position	Standardized Testing	Other Factors	Total
EC Directors	0	8	8
Teachers & School Psychologists	1	88	89
Missing Values			6
Total	1	96	103

Table 5b. Behavioral/Emotional Disability

Position	Standardized Testing	Other Factors	Total
EC Directors	0	8	8
Teachers & School Psychologists	1	88	89
Missing Values			6
Total	1	96	103

Hypothesis 1b

In order to perform the chi-square analysis for general education and special education teachers, the data for the groups were merged prior to the analysis. To test the hypothesis (1b) that teachers would endorse student/family characteristics as the primary cause of ethnic disproportionality, the data was entered into a 2x2 table comparing teachers to other school personnel (EC directors and school psychologists) on the endorsement of student/family characteristics (i.e. student behavior, student intelligence, student achievement, and low socioeconomic status of family collapsed into one factor) to the endorsement of all other factors (Figures 2a. and 2b.). The results of the chi-square analysis indicated that there was no statistically significant difference between teacher perceptions in comparison to other school personnel regarding student/family characteristics as the primary cause of disproportionality for both disability categories. The results of the analysis were as follows: mild to moderate intellectual disability category (χ^2 =0.090, p<0.764) and the behavioral/emotional disability category (χ^2 =1.196, p<0.274), indicating that the hypothesis was not supported by the data.

Table 6a. Mild to Moderate Intellectual Disability

Position	Student/Family Characteristics	Other Factors	Total
Teachers	41	18	59
EC Directors & School Psychologists	28	14	42
Missing Values			2
Total	69	32	103

Table 6b. Behavioral/Emotional Disability

Position	Student/Family Characteristics	Other Factors	Total
Teachers	41	14	55
EC Directors & School Psychologists	27	15	42
Missing Values			6
Total	68	29	103

Hypothesis 1c

To conduct the chi-square analysis regarding the perceptions of school psychologists, the data was entered into a 2x2 table comparing school psychologists to other school personnel (EC directors and teachers) on the endorsement of the referral and determination process to the endorsement of all other factors (Figures 3a. and 3b.). The hypothesis (1c) was not supported by the data for neither the mild to moderate disability category nor the behavioral/emotional disability category as no statistical significance was found (χ^2=0.067, p<0.796; χ^2=0.384, p<0.535, respectively).

Table 7a. Mild to Moderate Intellectual Disability

Position	Referral & Determination Process	Other Factors	Total
School Psychologists	3	31	34
EC Directors & Teachers	7	60	67
Missing Values			2
Total	10	91	103

Table 7b. Behavioral/Emotional Disability

Position	Referral & Determination Process	Other Factors	Total
School Psychologists	4	30	34
EC Directors & Teachers	5	58	63
Missing Values			6
Total	9	88	103

Research Question #2: Cultural Competency

A second question was addressed within the present research in order to obtain additional information regarding the perceptions of school personnel. This second question examined whether or not cultural competency training had an impact on the perceived causes of disproportionality, specifically, if the number of hours and recency of training affected the primary cause endorsed. It was hypothesized that school personnel receiving more hours of

training more recently would endorse causes of disproportionality unrelated to the individual student and/or family characteristics.

Hypothesis 2

In order to test the current hypothesis (hypothesis #2), a binary logistic regression analysis was performed. Data from all completed surveys were analyzed together. Survey responses for the variables of "hours of training received" and "recency of training" were initially expected to be continuous numerical variables; however, given the types of responses provided and the number of missing cases, the variables were unable to be utilized in the data analysis. For example, types of responses given for "hours of training received" consisted of statements such as "I don't know," "2 days," "1 semester of graduate school," and "65 CEUs." Types of responses given for "recency of training" consisted of "not sure," "2 years ago," "in graduate school," and "ongoing." The endorsement of student/family characteristics (i.e. student behavior, student intelligence, student achievement, and low socioeconomic status of family collapsed into one factor) was designated as the dependent variable with a binary outcome of "yes or no" (0=no, not choosing student/family characteristics; 1=yes, choosing student/family characteristics). The independent variable was cultural competency training (0=yes or 1=no) incorporating hours of training received, and recency of training. Specific data points endorsed as "other" were examined and recoded into appropriate categories when possible.

Based on the above, a logistic regression analysis was conducted utilizing the dependent variable of endorsing student/family characteristics and the independent variable of having received cultural competency training. Results of the analysis did not support the hypothesis that those school personnel having received cultural competency training would

not endorse characteristics related to the student and/or family as the primary cause of ethnic disproportionality in both the mild to moderate intellectual disability category (Exp(b)=1.061, p<0.893) and the behavioral/emotional disability category (Exp(b)=0.573, p<0.225). The results for the mild to moderate intellectual disability category suggested that those respondents who had not received cultural competency training were only 6% more likely to endorse student/family characteristics than those respondents who had received cultural competency training. Within the behavioral/emotional disability category, results suggested that those respondents who had not received cultural competency training were approximately 43% less likely to endorse student/family characteristics than those who had received cultural competency training.

Additional Information

Although no statistically significant differences were found between school personnel groups regarding the primary perceived cause of ethnic disproportionality within the mild to moderate intellectual disability and behavioral/emotional disability categories, it is useful to review perceived causes/factors endorsed by personnel group in order to identify which factors were endorsed most often, particularly within collapsed categories (Tables 8-11). Also, given that no significant differences were found between school personnel groups regarding the perceived primary cause of ethnic disproportionality, specific information regarding what one factor respondents felt should be changed in order to have the greatest impact on decreasing disproportionality was examined. Within the mild to moderate intellectual disability category, 58 of 100 respondents indicated that early intervention programs aimed at addressing the low socioeconomic status and lack of resources of the family would have the greatest impact on decreasing ethnic disproportionality. Twenty-two

percent of respondents indicated a need to increase interventions aimed at increasing students' motivation to achieve. Within the behavioral/emotional disability category, 32 of 100 respondents indicated the same primary factor (i.e. early intervention programs addressing low socioeconomic status and lack of resources of the family) while 23% of respondents indicated additional training in classroom management of student behavior and 23% indicated increased interventions aimed at increasing students' motivation to achieve.

As part of the current survey, respondents were also given the opportunity to provide any additional information they thought would be helpful in addressing the issue of disproportionality. Of the 103 respondents, 35 offered additional information they felt would be useful. Of those, 30 were Caucasian (85.7%), 4 were African-American (11.4%), and 1 was of Mixed Race (2.9%). A categorization by school personnel position indicated that 6 were Exceptional Children's services directors (17.1%), 20 were teachers (57.1%), and 9 were school psychologists (25.7%). Responses given fit within several categories: system related changes (16), student/family characteristics (8), and additional teacher training/cultural competency (5).

Table 8. Mild to Moderate Intellectual Disability—Endorsement of Factors by Personnel Group

	EC Director	General Education Teacher	Special Education Teacher	School Psychologist	TOTAL
Student Behavior	4	9	19	9	41
Student Intelligence	2	2	6	14	24
Student Achievement	5	12	21	9	47
Referral and Determination Process	2	3	10	4	19
Standardized IQ tests	4	4	8	10	26
Achievement tests	3	6	13	6	28
Lack of Cultural Competence of School Personnel	2	4	7	6	19
Economic Resources of School System or District	1	5	6	6	18
Low Socioeconomic Status of Family	5	11	26	26	68
Other (see Table 8 for unedited text)	1	2	8	7	18

Table 9. Mild to Moderate Intellectual Disability--Other Factors Contributing to Disproportionality (Unedited Text)

Count						
		Please indicate your position				
		EC Director	General Education Teacher	Special Education Teacher	School Psychologist	Total
Other-TEXT	No response given	7	16	33	29	85
	="Familial educational expectations"	0	1	0	0	1
	="I do not feel that our district is ethnically disproportionate"	0	0	0	1	1
	="instrucational diversity"	0	0	0	1	1
	="lack of academic support/exposure during the preschool and school aged years"	0	0	1	0	1
	="lack of experiences offered to the student at an early age as well as lack educational support by family"	0	0	1	0	1
	="lack of exposure to language and vocabulary in the developmental period"	0	0	0	1	1
	="lack of high or comparable expectations on the part of some school personnel"	0	1	0	0	1
	="lack of motivation"	0	0	1	0	1
	="not considering enough assessment data such as adaptive behavior"	1	0	0	0	1
	="not considering other options"	0	0	0	1	1
	="Our population has a limited number of African-Americans thus the schools number of African-Americans is low. Since 1984 I have never taught an African-American student in special education in our county."	0	0	1	0	1
	="Parent participation and lack of parenting"	0	0	0	1	1
	="parental influence/priority"	0	0	1	0	1
	="pre-natal care; lack of parental involvement"	0	0	1	0	1
	="Significantly low adaptive functioning"	0	0	0	1	1
	="Student motivation and expectation level from staff"	0	0	1	0	1
	="We have an opposite effect here"	0	0	1	0	1
Total		8	18	41	35	102

Table 10. Behavioral/Emotional Disability—Endorsement of Factors by Personnel Group

	EC Director	General Education Teacher	Special Education Teacher	School Psychologist	TOTAL
Student Behavior	6	15	31	25	77
Student Intelligence	1	2	5	1	9
Student Achievement	3	9	18	8	38
Referral and Determination Process	2	7	10	9	28
Standardized IQ tests		2	2		4
Achievement tests	2	4	2	2	10
Lack of Cultural Competence of School Personnel	4	7	9	12	32
Economic Resources of School System or District	1	4	5	8	18
Low Socioeconomic Status of Family	4	11	16	24	55
Other (see Table 10 for unedited text)	1	1	8	7	17

Table 11. Behavioral/Emotional Disability--Other Factors Contributing to Disproportionality (Unedited Text)

Count						
		Please indicate your position				
		EC Director	General Education Teacher	Special Education Teacher	School Psychologist	Total
Other-TEXT	No response given	7	17	34	28	86
	="cultural/socioeconomic differences between home and school behaviors"	0	0	1	0	1
	="differences in language skills and social-cultural experiences"	0	0	0	1	1
	="environmental factors"	0	0	0	1	1
	="family acceptablity of "different" behaviors"	0	0	1	0	1
	="family instability"	0	0	0	1	1
	="Family involvement"	0	0	0	1	1
	="I do not feel that our district is ethnically disproportionate"	0	0	0	1	1
	="ineffective interventions"	1	0	0	0	1
	="influences from the community in which the child lives"	0	0	1	0	1
	="lack of family unit and/or parental involvement"	0	0	1	0	1
	="lack of understanding of what constitutes true BED/SED"	0	0	0	1	1
	="Limited understanding of the effects of institutional disenfranchisement"	0	1	0	0	1
	="mental health issues, fetal syndromes"	0	0	1	0	1
	="Parent participation and lack of parenting"	0	0	0	1	1
	="Parents"	0	0	1	0	1
	="Same response"	0	0	1	0	1
Total		8	18	41	35	102

Table 12. Mild to Moderate Intellectual Disability

What ONE factor, if changed, would have the greatest impact on decreasing disproportionality within the mild to moderate intellectual disability category

Count

	Additional training in classroom management of student behavior	Increase in interventions to increase student motivation to achieve	Changes in the referral and determination process for special education	Discontinued use of standardized IQ tests for determination purposes	Discontinued use of standardized achievement tests for determination purposes	Additional training in cultural competence	Improvement in economic resources of school/district with more per student spending	Early intervention programs to target issue of low socioeconomic status of family and lack of resources	Other	Total
EC Director	0	3	0	0	0	0	0	2	3	8
General Education Teacher	1	4	0	0	1	1	0	10	0	17
Special Education Teacher	0	10	2	0	1	0	0	21	7	41
School Psychologist	0	5	1	1	0	0	1	25	1	34
Total	1	22	3	1	2	1	1	58	11	100

Table 13. Behavioral/Emotional Disability

What ONE factor, if changed, would have the greatest impact on decreasing disproportionality within the behavioral/emotional disability category

Count

	Additional training in classroom management of student behavior	Increase in interventions to increase student motivation to achieve	Changes in the referral and determination process for special education	Additional training in cultural competence	Improvement in economic resources of school/district with more per student spending	Early intervention programs to target issue of low socioeconomic status of family and lack of resources	Other	Total
EC Director	1	3	0	0	0	1	3	8
General Education Teacher	1	6	0	3	0	6	1	17
Special Education Teacher	9	9	2	1	0	14	6	41
School Psychologist	12	5	0	2	1	11	3	34
Total	23	23	2	6	1	32	13	100

Table 14. Mild to Moderate Intellectual Disability

What ONE factor if changed would have the greatest effect on decreasing disproportionality in the mild to moderate disability category (Unedited Text)

Count						
		Please indicate your position				
		EC Director	General Education Teacher	Special Education Teacher	School Psychologist	Total
TEXT	No response given	5	18	35	34	92
	careful consideration of ALL available information by the team with guidance from peers (other school psychs) has significantly made a difference in my county	0	0	0	1	1
	Early interventions coupled with close monitoring within the home as well as the school	0	0	1	0	1
	early, ongoing, continuous interventions for ALL students	0	0	1	0	1
	Educational settings which accept cultural differences in importance of educational achievement	1	0	0	0	1
	folder reviews of process	1	0	0	0	1
	higher parental responsibility	0	0	1	0	1
	many of my students have parents that were special ed	0	0	1	0	1
	Parental, teacher, and community intensive training.	0	0	1	0	1
	programs to involve parents; community involvement	0	0	1	0	1
	use of a non-categorical identifcation system for mild disabilities	1	0	0	0	1
Total		8	18	41	35	102

Table 15. Behavioral/Emotional Disability

What ONE factor if changed would have the greatest effect on decreasing disproportionality in the behavioral/emotional disability category (Unedited Text)

Count						
		Please indicate your position				
		EC Director	General Education Teacher	Special Education Teacher	School Psychologist	Total
TEXT	No response given	5	17	35	32	89
	Careful consideration of all data and all the options by the team with guidance from other staff such as reviewing with other school psychologists has made a big difference in this county	0	0	0	1	1
	Close monitoring of african american males among fatherless homes with strong male mentors	0	0	1	0	1
	diversity in graduation requirments and types diploma offerings	0	0	0	1	1
	early, ongoing interventions without placement in EC services until all resources/opportunities have been exhausted	0	0	1	0	1
	Educational settings which accept cultural differences in importance of educational achievement	1	0	0	0	1
	Empathy and understanding but not from a bureaucratic "cultural competence training" source	0	1	0	0	1
	focus on parenting skills	0	0	1	0	1
	increase number of minority familes with two parents	0	0	0	1	1
	increased expectation of students and parents	1	0	0	0	1
	parent programs/ community involvement	0	0	1	0	1
	parent training	0	0	1	0	1
	Parental, teacher, and community intensive training.	0	0	1	0	1
	use of a non-categorical identifcation system for mild disabilities	1	0	0	0	1
Total		8	18	41	35	102

CHAPTER V: DISCUSSION

Current Findings

Results of the current research suggested that the perceived primary causes of ethnic disproportionality in special education in both the mild to moderate intellectual disability and behavioral/emotional disability categories do not appear to be as disparate between school personnel groups as was initially hypothesized. While the original hypotheses suggested that only teachers would be more likely to endorse student and/or family characteristics as the primary cause of ethnic disproportionality in special education given their personal contact with students on a daily basis, EC directors and school psychologists also endorsed these characteristics more than other factors. Approximately 67.0% of respondents endorsed these types of characteristics as the primary cause of disproportionality. Specifically, with regards to the mild to moderate intellectual disability category, the endorsement of "low socioeconomic status of family" rated most among all factors while within the behavioral/emotional disability category, "student behavior" rated most among all factors.

Results of the present analyses indicating student/family characteristics, with specific reference to "low socioeconomic status of the family," as the primary perceived cause of disproportionality endorsed in the mild to moderate disability category adds to the dialogue of previous research regarding a link between poverty, race, and poor academic achievement (O'Connor and Fernandez, 2006). While previous research agrees that being socioeconomically disadvantaged reduces school readiness (Skiba et al., 2005), it does not agree as to the significance of the impact on the issue of disproportionality. As stated

previously, while Skiba et al. (2005) set forth four assumptions that would implicitly link poverty and disproportionality, they also noted that despite these suppositions, such a relationship between these two factors has not been proven. The authors have noted that the theory that poverty, in and of itself, is the cause of racial disproportionality in special education is unsubstantiated and that this disproportionality exists mainly in what has been deemed subjective disability categories (i.e. mild to moderate intellectual disability and behavioral/emotional disability).

Current results suggested that according to those school personnel involved in the referral and determination process for special education, low socioeconomic status was perceived as the primary student/family characteristic that contributes to the disproportionate number of African-American students within the mild to moderate intellectual disability category. While this link may be unsubstantiated, as suggested by Skiba et al. (2005), the perception that this link exists may contribute to it being held as fact and, in turn, attitudes and subsequent actions, based on these perceptions, may have an effect on disproportionality. It may be that because poverty (which is often confounded with race) has been shown to be a risk factor for poor academic achievement and educational outcomes, suggesting that it should likely be remediated through the special education system, disproportionality appears to have become the subsequent result. Current perceptions that continue to shape the same attitudes that shape the recurring behaviors (by school personnel) need to be addressed in order to find new, more culturally appropriate methods of addressing the issues of the academic achievement gap and ethnic disproportionality within the mild to moderate intellectual disability category.

Current findings regarding ethnic disproportionality in the behavioral/emotional disability category indicated that student/family characteristics, specifically, student behavior, is perceived to be the primary cause. Although it may seem intuitive that student behavior would be the student/family characteristic that most likely contributes to the primary cause of disproportionality endorsed regarding behavioral/emotional disability, it does not offer an explanation as to why there are a disproportionate number of African-American students within this disability category. This perception does not take into consideration other factors that may have contributed to the behavior including community, school environment, and cultural match with school personnel.

While it was hypothesized that having obtained cultural competency training would decrease the likelihood of endorsing student/family characteristics as the primary cause of ethnic disproportionality, the current results obtained in the behavioral/emotional disability category suggest that not having cross cultural competency training had the opposite effect than what was initially hypothesized (i.e. lack of cross cultural competency training would increase the likelihood of the endorsement of student/family characteristics as the primary cause of disproportionality). Such results should be further examined; however, it may be that due to the perceptions of school personnel that student/family characteristics are the primary cause of disproportionality, the influence of factors such as cultural competency training become unresolved.

While the results of the present research analyses have contributed to previous research and assumptions with regards to the primary cause(s) of ethnic disproportionality in the mild to moderate intellectual disability and behavioral/emotional disability categories (e.g., socioeconomic factors and faulty perceptions of behavior), it was also hypothesized

that respondents having received more hours of cultural competency training more recently would not endorse student/family characteristics as the primary cause of ethnic disproportionality given a deeper and clearer understanding of the culture. Results of the current research indicated that 51 out of 99 (51.5%) respondents had not received any cultural competency training (Table 16). Results of the data analysis also suggested that cultural competency training may not be providing school personnel the cultural understanding necessary to view African-American students from a perspective that includes the totality of his/her environment as indicated by the endorsement of student/family characteristics as the primary cause of disproportionality.

Table 16. Cultural Competency Training by Personnel Group

	Have you completed cultural competency training		
	yes	no	TOTAL
EC Director	4	4	8
General Education Teacher	5	12	17
Special Education Teacher	16	23	39
School Psychologist	23	12	35
TOTAL	48	51	99

When examining the additional comments provided by survey respondents, several themes seemed to emerge. First, the majority (45.7%) of those offering additional information indicated that system related changes are needed in order to address the issue of ethnic disproportionality. System related changes included such factors as better research-based interventions, increased diverse staffing, response-to-intervention and positive behavior support, changes in the types of standardized testing utilized, and clearer guidelines across the state regarding how a student is identified for special education. Second, respondents (22.9%) indicated that student and family characteristics need to be addressed. Such factors included pre-natal care and early childhood community programs, more support

and a greater value placed on education, the need for a solid family structure, and increased motivation in order to increase the success of students from the low socioeconomic status. Finally, respondents (14.3%) indicated the need for additional teacher training and cultural competency. Information provided included changes in teacher confidence and consistency, teacher expectations, more professional development when it comes to educating Black males, and more training regarding learning styles and cultural awareness. Additional comments (17.1%) related to general information regarding the respondents' personal experiences within their given school/district.

As stated previously, while cultural competency training is a required standard in both teacher training and school psychology training programs throughout North Carolina, the way in which the standard is met is determined by individual training programs. The content of cultural competency courses is also varied and may include issues of diversity related not only to race/ethnicity, but also to religion, sexual preference, class, and gender. Given such a wealth of diversity topics, one semester of training would seem insufficient to cover the necessary issues in a substantial manner. Upon graduation and licensure, continuing education units within cultural competency have not been required, and if additional training is obtained, it remains at the discretion of the individual. Given the variability in training programs for meeting the cultural competency training standard and the elective nature of fulfilling training requirements post-licensure, it seems that cultural competency training may need to be modified in order to provide school personnel the professional development necessary and culturally appropriate to inform decision making and policy.

The question then remains regarding what changes should be instituted in order to provide school personnel the professional training necessary to obtain a better understanding of racial/ethnic diversity in terms of cultural and behavioral norms, learning styles, and definitions regarding motivation and achievement. For example, as stated previously, racial and gender stereotypes often underlie how teachers interact with students (Monroe, 2005) and teachers often conclude that those students who do not conform to classroom behavioral norms have lower academic skills which leads to differential treatment of these students (Zimmerman et al., 1995). Given such information, cultural competency training should increase its focus on the racial/ethnic differences in culture, behavior, learning style, motivation, and achievement. There should also be consistent statewide standards across programs regarding how the cultural competency training standard is met.

While perhaps a cultural match between school personnel and the student population would contribute to different perceptions based on a personal understanding of the culture involved, such sociodemographics are not only unlikely, but would lead to a resegregation of school environments and decreased tolerance and understanding. Ongoing training, therefore, should be required and modified as the sociodemographics of our state and individual school districts continue to change and fluctuate over time. Otherwise, the Eurocentric values and definitions of motivation and achievement and other Eurocentric cultural norms will continue to view minority cultures from a deficit perspective in need of remediation.

Aggregated Outcome Data

As stated previously, the issue of ethnic disproportionality in special education is likely an indirect consequence of a zealous remediation of the academic achievement gap that seems to exist between Caucasian students and their African-American counterparts as

schools search for methods to reduce the gap and provide minority students with the assistance necessary to achieve academically. In order to obtain a clearer picture of the issue in conjunction with the current results, an examination of the disaggregated outcome data from the twenty counties utilized in the survey within the state of North Carolina was conducted. It was hypothesized that those counties with higher percentages of an achievement gap would also have higher disproportionality rates and those school personnel surveyed would endorse student/family characteristics as the primary cause of this disproportionality.

An examination of the disaggregated outcome data from the North Carolina Department of Public Instruction (DPI) suggested that there continues to remain an academic achievement gap between Caucasian students and their African-American peers. During the 2008-2009 academic year, African-American students consistently scored lower than their Caucasian peers in core academic areas with far fewer African-American students scoring at or above grade level on EOG/EOC standardized testing. For example, based on the math and reading composite scores for the 2008-2009 academic year, within the twenty counties utilized for the present research, the percentage of African-American students scoring at or above a Level III (grade-level proficiency) on standardized EOG testing for grades 3-8 ranged from a low of 28.6% to a high of 54.4%. This is compared to a low of 63.0% and a high of 86.8% for Caucasian students. The percentage differences, between African-American students and their Caucasian peers scoring at or above a Level III on EOG testing, ranged from 20.1% to 45.6% within the twenty counties. Such percentage differences are indicative of the fact that an academic achievement gap continues to persist between these two groups of students.

With the continued existence of such an academic achievement gap, schools continue to search for methods to reduce the gap thus leading to special education referrals as a means of decreasing the academic disparities and increasing the opportunities for minorities to succeed. Unfortunately, however, this likely leads to over-referrals of minority students, which may lead to disproportionality as a result. According to the National Center for Culturally Responsive Educational Systems (NCCRESt), African-Americans continue to be 55% more likely to be identified for special education across all categories than their Caucasian peers (risk ratio of 1.55) and four times more likely to be identified in the intellectual disability category than their Caucasian peers (http://www.nccrest.org downloaded on August 24, 2010). The persistence of this academic achievement gap may continue to be a catalyst and sustaining factor in the existence of the ethnic disproportionality that currently exists in the more subjective special education categories of mild to moderate intellectual disability and behavioral/emotional disability as school personnel endeavor to find ways to decrease this achievement gap.

Results of the current study indicated that those school personnel surveyed perceive that student/family characteristics are the primary cause of the racial/ethnic disproportionality that exists within their given counties. These school personnel also perceive that early intervention programs targeted at the low socioeconomic status and lack of resources of the family will likely have the greatest impact on decreasing the ethnic disproportionality that exists within both the mild to moderate intellectual disability and behavioral/emotional disability categories. Additional training in classroom management of student behavior and increased interventions aimed at increasing students' motivation to achieve are also perceived as necessary in addressing the issue of disproportionality.

While it may be that this type of research conducted on a larger scale would indicate otherwise, it may be that this small sample is indicative of the perceptions of these school personnel groups as a whole. Examining the achievement gap within the twenty counties utilized for the current survey as well as the disproportionality rates within the state of North Carolina in conjunction with the perceptions of the school personnel involved in the special education referral and determination process offers more insight into the issue of ethnic disproportionality as it provides a unique perspective on how the issue of disproportionality may be maintained. Without a change in the perceptions of those involved in the process, teaching styles, academic and behavioral expectations, and policy will remain the same leading to referrals that will continue as they have previously, subsequently contributing to the disproportionality that currently exists. Given the results of the current study and the information provided by the school personnel herein surveyed, professional development in the areas of cultural competency, classroom management of student behavior, early intervention, and interventions aimed at increasing student motivation to achieve may be necessary and appropriate as a starting point in addressing the issue of ethnic disproportionality in special education within the mild to moderate intellectual disability and behavioral/emotional disability categories.

Limitations

The limitations of the current research require that results must be interpreted with caution. Given the low response rate from respondents, the limited information provided by the data analyses does not allow for an accurate view of the perceptions of these school personnel groups regarding the issue of ethnic disproportionality in special education within these two disability categories. Such a low response rate may be for several reasons. First,

respondents may have questioned receiving an email invitation from an unknown person requesting participation in an online survey. Also, given the professional demands of Exceptional Children's directors, teachers, and school psychologists, finding the time to complete the survey may have been an issue as well. This issue may have been compounded by the fact that the participation request was sent toward the end of the academic school year. While this would allow for more time to complete the survey in the work environment, the demands of end of the year preparations and preparing for the summer may have taken precedence over the survey. Despite the low response rate, the information obtained from the present research will serve to add to the current dialogue regarding what is perceived as the primary causal factor(s) of ethnic disproportionality in special education within the mild to moderate intellectual disability and behavioral/emotional disability categories.

Future Directions

Given the results of the present research, in conjunction with the wealth of information previously cited from additional studies, the question remains as to what should, or better stated, could be done to remediate the problem of ethnic disproportionality in special education. As long as the perceptions of school personnel involved in the referral and determination process overwhelmingly endorse factors related to student and family characteristics as the primary cause, it may be that ethnic disproportionality in special education within these two categories will remain an issue in need of remediation. Nevertheless, recognizing and voicing the perceptions held by school personnel marks a starting point for change. Conducting this type of survey research on a much larger scale may provide additional information from those directly and personally involved with the issue (Table 17). As stated previously, given that perceptions shape attitudes which, in turn, shape

behaviors, it is important to first know and understand the perceptions in order to provide any additional professional training and competency necessary to bring clarity regarding the culture of African-American students and families. While the weight of the problem does not rest solely upon the shoulders of the school personnel involved in the referral and determination process, it is important that the expertise they offer takes into account all of the influential factors involved in order to cultivate a school environment that legitimizes the culture of every student.

FIGURES

Figure 1a. Exceptional Children's Services Directors--Mild to Moderate Intellectual Disability

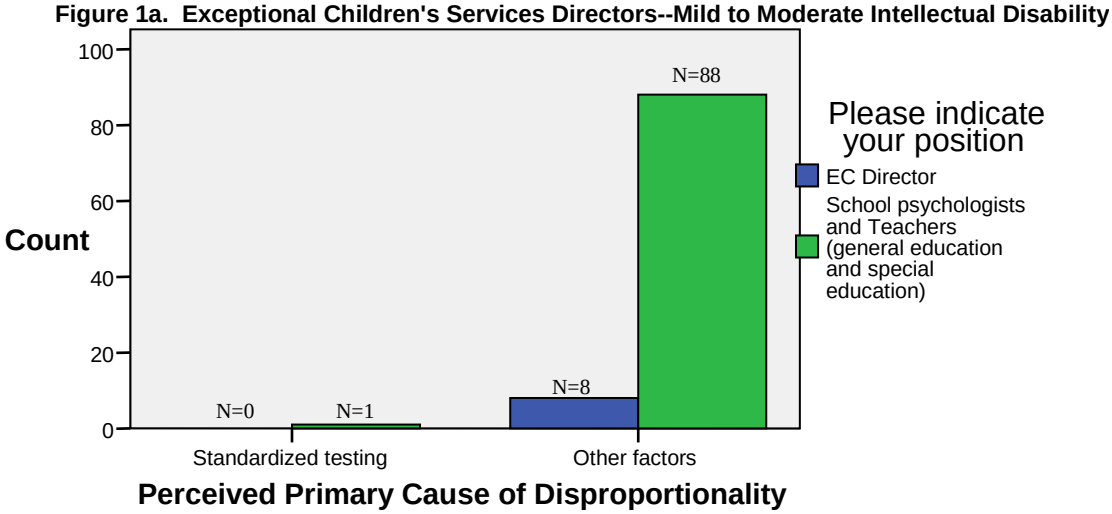
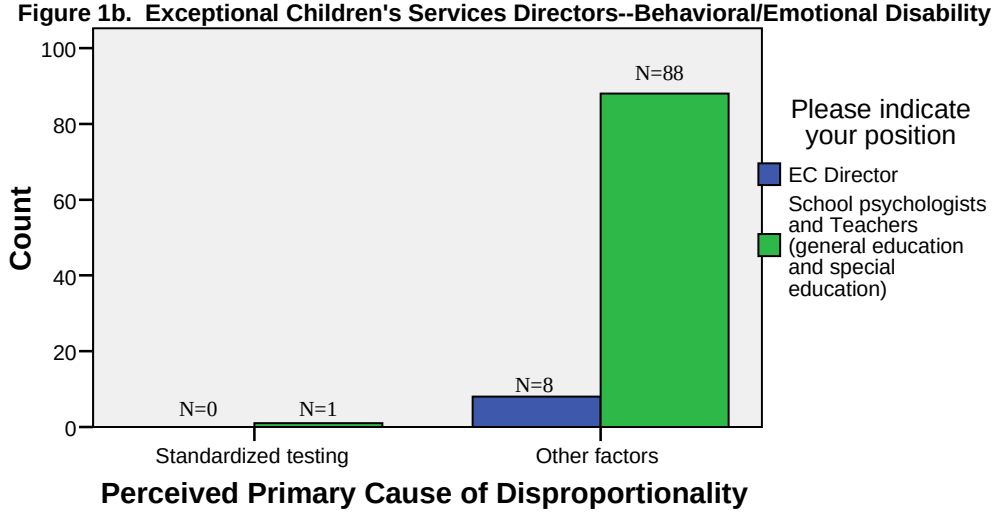


Figure 1b. Exceptional Children's Services Directors--Behavioral/Emotional Disability



FIGURES

Figure 2a. Teachers (general and special education)--Mild to Moderate Intellectual Disability

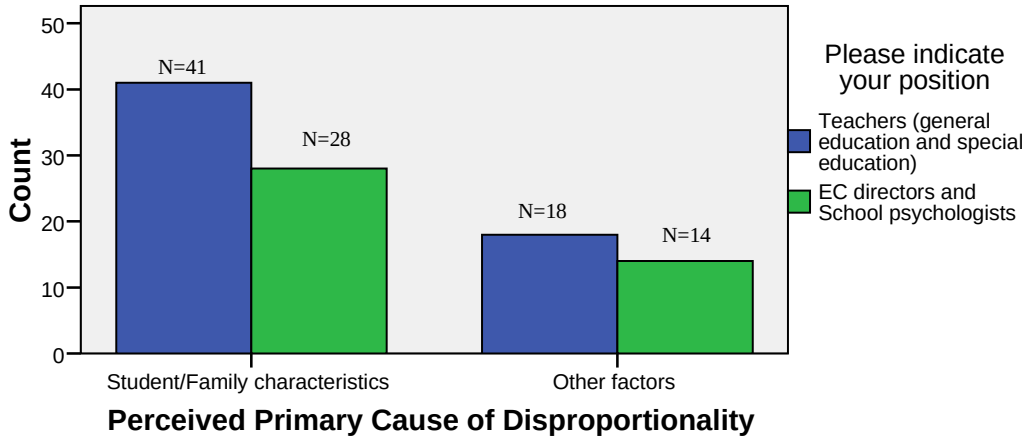
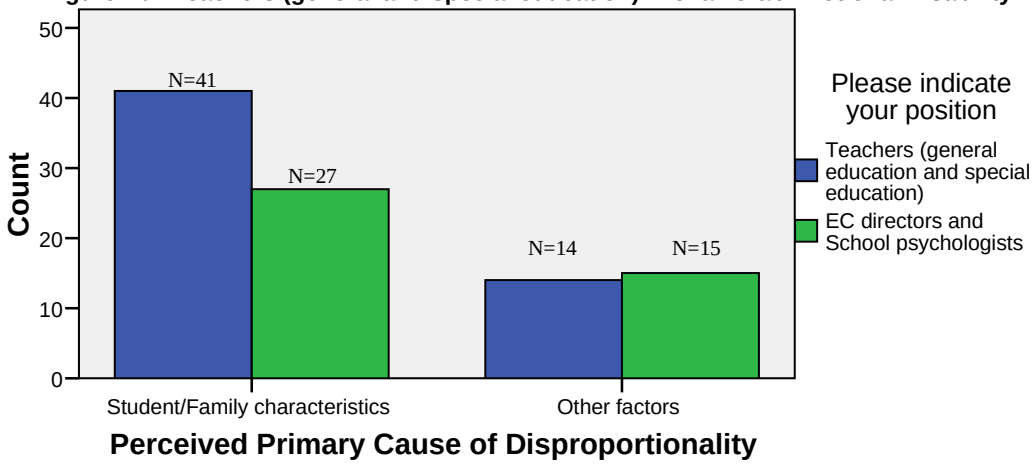


Figure 2b. Teachers (general and special education)--Behavioral/Emotional Disability



FIGURES

Figure 3a. School Psychologists--Mild to Moderate Intellectual Disability

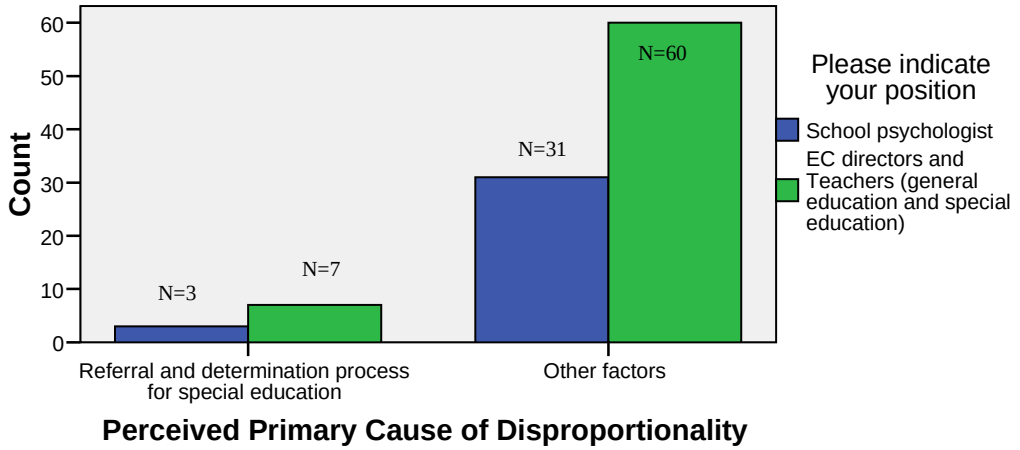
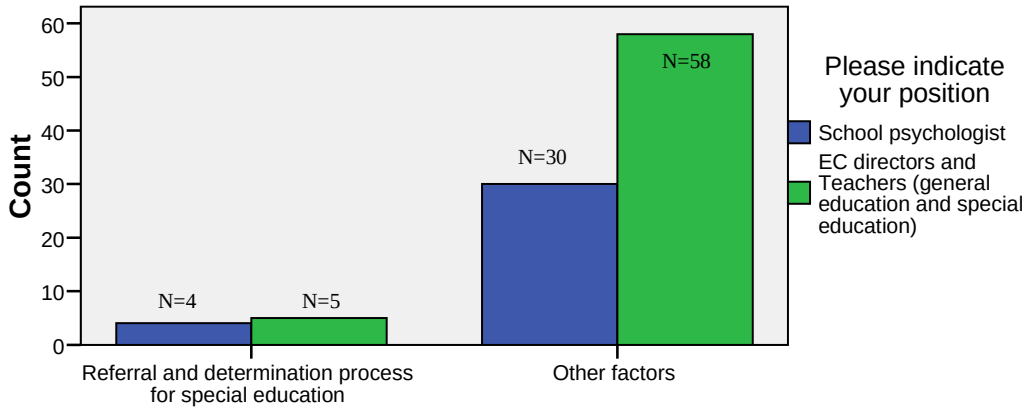


Figure 3b. School Psychologists--Behavioral/Emotional Disability



TABLES

Table 1. Research Questions and Data Analyses

Research Questions	Hypothesis	Variables	Data Analysis
Question 1: Are there differences in the perceived primary cause of disproportionality between those school personnel involved in the referral and determination process for special education (i.e. exceptional children's directors, general education teachers, special education teachers, and school psychologists)?			
	Hypothesis 1a: Exceptional Children's directors will endorse standardized testing (by school psychologists) as the primary cause of disproportionality.	-Personnel group -Primary cause endorsed	Chi-square test
	Hypothesis 1b: General education and special education teachers will indicate characteristics related to the student/family as the primary cause of disproportionality.	-Personnel group -Primary cause endorsed	Chi-square test
	Hypothesis 1c: School psychologists will indicate the referral and determination process as the primary cause of disproportionality.	-Personnel group -Primary cause endorsed	Chi-square test
Question 2: Does cultural competence training have an impact on the perceived causes of ethnic disproportionality? Specifically, does the number of hours and recency of training have an effect on the primary cause endorsed?			
	Hypothesis: School personnel receiving more hours of training more recently will endorse causes of disproportionality unrelated to the individual student and/or family characteristics.	Independent Variables: -Hours of training -Years since training completed Dependent Variable: -Endorsement of student/family characteristics	Logistic regression

Table 17. Additional Factors Provided by Respondents Believed to be Helpful in Addressing Ethnic Disproportionality (unedited)

We're starting to switch to OHI to avoid BED or LD to avoid ID-MI - be careful not to exclude students who need services BECAUSE they will tip the proprotionality scale.
In our county, we actually have more low economic status families who are caucasion who exhibit the same issues as some of our african american families.
Providing opportunities that are linked to staying academically engaged at younger ages , similar to athletics in high school
Clearer guidelines across the state. many districts receive children already identified.
Response to Intervention, School-wide Positive Behavior Supports, meaningful alternative educational opportunities
Doing our folder reviews and reevaluations if necessary greatly reduced our risk ratio
This survey is addressing issues that have wider social ramifications. These questions are limiting and the answer choices imply that these possibilities are not linked in inextricable and complex ways. Is there a qualitative aspect to this study?
Motivation is what will determine success of low income socioeconomic students.
solid family structure and support
It is very important for students to know that they belong and to know that the school environment wants them to succeed.
student's don't know how to behave-they were not taught it in early grades or at home
teacher expectations that minority sztudents will cause problems, will not conform to teacher's image of "perfect" students
More training for teachers in the use of learning styles and cultural awareness training to help provide greater access to the general curriculum for those students who may need more than one mode of input of information..
I work at a small, rural, K-8 school with 400 students. Of the 21 students in special education none are African aAmerican nor Hispanic, so this is not an issue I have to deal with.
Many students now in special ed have low IQ scores that mirror their achievement level-is that really LD? Additionally, many have young parents with significant moral issues related to drugs/alcohol, etc.

within our school system, it is not the african americans who are disporportionately placed, but the hispanic population
None
young, single parents are often poor parents who fail to nuture thier children and value education
Reading programs
More professional development for educating black males----they tend to dominate the behavior/emotional disability category
Follow the guidelines: awareness of the limits of IQ tests as well as inclusion of the vast majority of students in the regular education classroom as long as possible
more training to identify and work with students with disabilities.
Teacher confidence and consistency
More research based interventions based on parental influence, teacher preparedness, and systemic reformation.
This issue is not consistent over the area. To specify that it is disproportionate to African-American other reasons would have to apply-neighborhood population in relation to the attending district school; the health habits of the population and the relvant availability of jobs/living funds.
I believe African Americans that are identified as needing special education services need the services.. We can change the instruments and provide interventions in the school but this will not change the heart of the issue. These students lack experienes and educational support from the family at a very young age.. This will ultimately spur these students to get their needs met by the gangs in the community so they may feel a sense of belonging. Society needs to change before this issue will change.
Pre-natal care programs; early childhood community programs not necessarily public school programming; parent education (often times grandparents)
Patterson studied prediction of reading achievement at end of first grade based on factors using birth certificate, APGAR scores, and parental ZIP code
IEP Teams need to be vigilant about looking at the child as a whole including adaptive and environmental factors when determining eligibility in these categories.
Branching out to the community to help the families; providing resources for parenting

classes early in the child's development; teaching parents how to actively participate in their child's education; teaching school personnel how to work with people of ll cutures and backgrounds; distributing a needs assessment among the community to learn what would make parents feel more at ease when coming to their child's school
As a school psychologist I think it is important to always administer a nonverbal IQ test when there is a significant disparity present between verbal and nonverbal IQ. This is a pattern I often see when assessing African American students. Typically, te student's nonverbal ability is far superior to verbal ability. These students tend to learn best using visuals, manipulatives, and hands-on learning activities.
Increase staffing of diverse individuals within schools.
Just to clarify my response, my county has set up a process where all possible ID and SED students - regardless of race and ethnicity - are reviewed with a central office team of psychologists and educators. The purpose has been to be sure all factors an options are considered. It provides an outside "eye" to look at what the team is proposing. The final decision is left to the school-based IEP team but often this review has led to team realizing that SLD or OHI may be a better option to consider.
The assessments used for one group may be invalid for another.
Intervention Teams are not always doing researched based academic or behaviroal interventions. However, theIiEP Team want us to test even without quality interventions.
Use of nonverbal IQ tests may be helpful

APPENDIX

Perceived Causes of Ethnic Disproportionality in Special Education Regarding African-American Students
Survey Questions

Your participation in this survey is completely voluntary and confidential as no identifying information will be utilized. All completed surveys utilized for data analysis will be collected by the researcher, independent from school districts and will not be linked to individual responders. Completion of the survey will take approximately 5 minutes and denotes your consent for your responses to be aggregated into the present research. Information gathered from the survey will serve to further the understanding of the causes of ethnic disproportionality in special education regarding African-American students in order to work to remediate this important issue.

Background Information:

For the purposes of the present survey, ethnic disproportionality in special education is defined as "the extent to which membership in a given ethnic group affects the probability of being placed in a specific special education disability category" (Oswald, Coutinho, Best, and Singh cited in Salend, Duhaney, & Montgomery, 2002, p. 289). This means that given the percentage of African-American students in a given school/district student population, there is a disproportionate number of African-American students classified in the categories of mild to moderate intellectual disability and behavioral/emotional disability. Research has suggested that there are a variety of factors associated with the cause of the disproportionate numbers of African-American students in these special education categories. These factors range from individual student characteristics to school personnel to general systemic issues. Based on your professional experience within your given schools/districts, please complete the following survey indicating what you perceive to be the primary causal factors for ethnic disproportionality in special education regarding African-American students in the aforementioned categories.

Perceived Causes of Ethnic Disproportionality in Special Education Regarding African-American Students
Survey Questions

1. Please indicate your position
   - o EC director
   - o General education teacher
   - o Special education teacher
   - o School psychologist

2. Please indicate your ethnicity
   - o African-American
   - o Caucasian
   - o Hispanic
   - o Mixed Race
   - o Other _____

3. Is your school a Title I school?
   (For school psychologists and EC directors please indicate how many schools you serve and how many schools are Title I schools. For example, 1 out of 3 schools are Title I schools).
   - o Yes
   - o No

   School Psychologists and EC directors
   Number of schools served _____
   Number of Title I schools _____

4. Have you completed cultural competence training?
   - o Yes
   - o No

   If so, how long ago?
   - o _____

   If so, how many hours of training did you receive?
   - o _____

5. Please indicate what you perceive to be the significant cause(s) of ethnic disproportionality in special education in the category of ***mild to moderate intellectual disability*** regarding African-American students. (Check all that apply)
   - o Student behavior
   - o Student intelligence
   - o Student achievement
   - o Referral and determination process for special education
   - o Standardized IQ tests
   - o Achievement tests
   - o Lack of culture competence of school personnel

- o Economic resources of school system or district
- o Low socioeconomic status of family
- o Other _____

6. From the aforementioned list, what do you believe is the most primary factor/cause of disproportionality with regards to ***mild to moderate intellectual disability***?
   - o _____

7. Please indicate what you perceive to be the significant cause(s) of ethnic disproportionality in special education in the category of ***behavioral/emotional disability*** regarding African-American students. (Check all that apply)
   - o Student behavior
   - o Student intelligence
   - o Student achievement
   - o Referral and determination process for special education
   - o Standardized IQ tests
   - o Achievement tests
   - o Lack of culture competence of school personnel
   - o Economic resources of school system or district
   - o Low socioeconomic status of family
   - o Other _____

8. From the aforementioned list, what do you believe is the most primary factor/cause of disproportionality with regards to ***behavioral/emotional disability***?
   - o _____

9. What ONE factor, if changed, would have the greatest impact on decreasing disproportionality within the *mild to moderate intellectual disability* category?
   - o Additional training in classroom management of student behavior
   - o Increase in interventions to increase student motivation to achieve
   - o Changes in the referral and determination process for special education
   - o Discontinued use of standardized IQ tests for determination purposes
   - o Discontinued use of standardized achievement tests for determination purposes
   - o Required self-monitoring tasks of school personnel for possible cultural bias
   - o Additional training in cultural competence
   - o Improvement in economic resources of school/district with more per student spending
   - o Early intervention programs to target issue of low socioeconomic status of family and lack of resources
   - o Other _____

10. What ONE factor, if changed, would have the greatest impact on decreasing

disproportionality within the *behavioral/emotional disability* category?

- o Additional training in classroom management of student behavior
- o Increase in interventions to increase student motivation to achieve
- o Changes in the referral and determination process for special education
- o Discontinued use of standardized IQ tests for determination purposes
- o Discontinued use of standardized achievement tests for determination purposes
- o Required self-monitoring tasks of school personnel for possible cultural bias
- o Additional training in cultural competence
- o Improvement in economic resources of school/district with more per student spending
- o Early intervention programs to target issue of low socioeconomic status of family and lack of resources
- o Other _____

11. Please provide any additional factors you believe will be helpful in addressing the issue of disproportionality.

_____
_____
_____

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