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# The Relationship Between Overrepresentation of Minority Students and Explicit and Implicit Bias

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**The Relationship Between Overrepresentation of Minority Students  
and Explicit and Implicit Bias**

by

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A Starred Paper

Submitted to the Graduate Faculty of

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in Partial Fulfillment of the Requirements

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## **Chapter 1: Introduction**

Special education, an intervention that intermingles with services that help and give students with disabilities and special needs a chance to succeed, gives children with disabilities and special needs access to programs that help them prevent, defeat, or remove obstacles that block a child from learning. Special education curriculum is different from general education. Most special education programs use adapted or specialized materials and methods to teach students. The Individuals with Disabilities Education Act (IDEA) entitles all children to receive a Free and Appropriate Public Education (FAPE). It means that eligible students qualify for nondiscriminatory assessments, identification of disability, and services for children with special needs and disabilities. Students who receive these specialized services gain many strides from the extra assistance. Special education utilizes a set of strategies that schools, teachers, parents, and students use to help create a specific education plan. Each student who qualifies for special education services acquires a team that helps determine detailed learning objectives and strategies to help the student succeed and documents these strategies in the students Individualized Education Plan (IEP). Through the IEP students meet objectives and goals that will help them achieve independence and success, so they know how to perform work, academics, daily living, as well as with learning hobbies for leisure and in succeeding in the community.

### **Disproportionality**

Although this looks wonderful on paper, issues surrounding the implementation of special education services exist. The disproportionality of minority students enrolled has become a national issue as the number of students requiring special education services increases

yearly. The National Education Association (NEA) and the National Association of School Psychologists (NASP) define disproportionality as overrepresentation or underrepresentation of particular groups of people in special education services or gifted-talented programs in relation to their representation in the total school population (National Education Association [NEA] & National Association of School Psychologists [NASP], 2007).

Even though the demographics of minority students has risen to 35%, the number of minority students referred for special education services has exceeded that proportion. According to the U.S. Department of Education (2018), teachers referred minority students for special education services more often than non-minority students. Native Americans received special education services four times more often for developmental delays compared to all ethnic groups combined (NEA & NASP, 2007). African Americans met the requirements for special education services related to emotional disturbance and intellectual disability with a risk ratio of 2.0 and 2.2, respectively (the Department of Education defines a risk ratio of 2.0 more to be two times more likely than expected). Native Americans, African Americans, and Hispanic Americans qualified for services relating to Specific Learning Disabilities 15% more often compared to white students (NEA & NASP, 2007).

According to the U.S. Department of Education's (2018) 39<sup>th</sup> Annual Report, 65.5% of white students with disabilities spent 80% or more of the day in a general education classroom, while 58% of African American students with disabilities spent 80% or more of the day in a resource classroom. Only 10.7% of white students with disabilities spent less than 40% of the day inside a general education classroom, while 21.3% of African American students spent less than 40% of the day inside a general education classroom.

NEA and NASP (2007) reported that in 2006, around 13.5% of students overall qualified for special education services. However, more than 13.5% of Culturally Linguistic and Diverse (CLD) students received special education services (NEA & NASP, 2007). Overrepresentation of CLD students showed in the special education categories of intellectual disabilities and emotional disturbance. Additionally, CLD students received special education services in more limited programs or isolated classrooms. Finally, CLD students experienced more frequent occurrences, lengths, and types of disciplinary actions compared to other subgroups of the student population. English Language Learners (ELL) tended to be over-represented in special education in districts with a small ELL population, while under-represented in districts with a large ELL population.

The overrepresentation of minority students receiving stricter discipline during school compared to white students still exists in schools nationwide. The U.S. Department of Education (2016) reported that African Americans with disabilities received school suspensions two times more often than white students. African Americans with disabilities received more severe punishments and discipline compared to their white counterparts (NEA & NASP, 2007). This causes a problem when schools deny students the special education services they need while suspended.

Although the U.S. Department of Education (2016) identified a disproportionality of minority students qualifying for special education services, the Department of Education also noticed that some districts around the country had listed disparities in their reporting numbers of minority students receiving special education services. For instance, 876 school districts disciplined African American students with disabilities with short term school suspensions two

times more often than white students with disabilities, but fewer than 500 hundred school districts reported a high disproportionality of minority students to the U.S. Department of Education in 2013 (U.S. Department of Education, 2016). Although the number of minority students receiving special education is disproportionately large, less than 3% of school districts report the overrepresentation of minority students who received special education services each year (U.S. Department of Education, 2016). This number of the 3% who report disproportionality, lower than the actual number of minority students receiving special education services, harms students that do not receive the appropriate education guaranteed to them.

### **Stereotypes, Prejudice, and Discrimination**

People interchangeably use the words stereotypes, prejudice, and discrimination, without knowing their precise meanings. Although society tends to lump these terms together, often one term can stand without the others. Psychologists define stereotypes as beliefs that a person has about a set of characteristics attached to and generalized about members of a group (Aronson, Wilson, & Akert, 2010). These beliefs can snowball into thoughts of prejudice when a person believes the stereotypes to be true. Prejudice, based on affect, or feelings, create a specific attitude toward certain individuals that is solely centered on their group membership (Aronson et al., 2010). Discrimination is defined as harmful actions taken against individuals belonging to a specific group that can create tension and violence (Aronson et al., 2010). For the purpose of this paper, the focus is mainly centered on stereotypes and prejudice.

### **Implicit and Explicit Biases**

A bias originates from the tendency of people to classify information they receive using schemas. Schemas, which are cognitive frameworks, that allow one to process the information

easily and make sense of the world (Cherry & Gans, 2019). Blair, Steiner, and Havranek (2011) defined bias as a negative assessment of a member of a group whose characteristics are related to one another. A biased person utilizes stereotypes to organize people into groups based on their appearances. A bias, the immediate tendency to prefer one group or person over another, stems from learned associations and social conditioning. Families, culture, and media teach people to endorse these beliefs.

Two types of bias exist: explicit bias, which results from conscious thoughts, and implicit bias, which unconsciously affects our thinking. Psychologists define explicit bias as perceptions, thoughts, and beliefs that a person utilizes consciously with awareness to evaluate a member of a particular group (Blair et al., 2011). An individual utilizing explicit bias is consciously aware and can control his/her thought processes about a member of a group (Golbeck et al., 2016).

Implicit bias is an unconscious thought process that affects how a person understands, behaves and makes decisions about another person (Golbeck et al., 2016). Until the 1990s, researchers thought biases and attitudes stemmed from the conscious level of thinking. Greenwald and Banaji (1995) introduced the term implicit bias when they found that attitudes and stereotypes functioned through unconscious and indirect thinking. Although previous experiences form implicit biases, many of the experiences remain hidden in the memory or cannot be consciously recalled (Greenwald & Banji, 1995).

Greenwald and Banaji (1995) found that most social cognition transpires unconsciously or implicitly. They found that attitudes activate more quickly through unconscious thought rather than through conscious thought. The authors found that subconscious and hidden stimuli triggered implicit attitudes through repeated exposure, instant attitudes, and context exposure

(Greenwald & Banaji, 1995). First, a person is exposed to subliminal stimuli and forms an attitude and opinion without any awareness of where the attitude derives. Second, repeated exposure to the same stimuli allows a person to continue to build upon that unconscious belief or attitude, which helps cement it subconsciously in the brain. Third, an instant attitude, or an immediate partiality or disliking toward a thought or object, shapes the person's attitudes unconsciously. Finally, outside stimuli, during the formation of the belief, influence the unconscious attitude thought process allowing the implicit attitude to firmly embed in the subconscious part of the brain and create the construct.

An automatic reaction stems from insentient notions that centralize the thoughts of an individual's beliefs (Golbeck et al., 2016). An individual unknowingly initiates the unconscious thoughts that transpire into implicit attitudes that form from unidentified portions of an individual's experiences and eventually brings forth favorable or unfavorable feelings or thoughts toward people. According to the Ohio State University Kirwan Institute (2015), implicit bias kindles negative attitudes toward other people in certain stereotypical groups. These negative attitudes, although unintentional in an individual's cognitive thought, occurring outside of his/her control, create and cement the belief in the individual's mind.

### **The Implicit Association Test**

After Greenwald, McGhee, and Schwartz (1998) defined the term implicit bias, the researchers designed a computer procedure they named the Implicit Association Test (IAT) to measure automatic, implicit evaluations. The researchers used the IAT to assess the relationship between a target concept and an associated attribute dimension (Greenwald et al., 1998). The researchers conducted the IAT test in five different steps. For example, in the first step, the test

evaluated the initial target concept discrimination. A person categorized first names as African American names or White names. Second, the computer program presented a variety of pleasant and unpleasant words and linked the words to an evaluative attribute dimension example of good or bad. Third, the computer linked the names of both ethnic groups together with the pleasant or unpleasant words called the initial combined task. In the fourth stage, the program reversed the names so that left clicks represented white names and right clicks represented African American names. Finally, the reversed combined task allowed the participants to pair pleasant words with African American names and unpleasant words with white names. The research stated that a faster click time demonstrated a stronger cognitive association and a slower click time associated with a weaker association of the positive characteristic of the name. There are many IAT tests that can assess for implicit bias. African American vs. White is just one example.

Greenwald and Banaji (1995) at Harvard University created an online version of the IAT and the university collected over three million scores from December, 2007, through December, 2015. The results displayed in Figure 1, indicated a preference for Whites over African Americans, with the highest percentage measuring moderate automatic preference for Whites over African Americans at 27% (Harvard University, n.d.),

Although many people taking this test show an indication of implicit bias toward White people, limitations surround the IAT. First, the relationship between IAT Scores and actual discrimination is weak (Rezaei, 2011). The weak relationship means that this measure does not accurately predict what an individual may do. Rezaei also argued that the test exposes a low consistency rate. If an individual takes the test within a few weeks, the scores may differ.

**Research Question**

What factors regarding student behaviors and attributes guide a teacher's judgment when referring a student for special education services and does a teacher's bias influence the disproportional assignment of minority students to qualify for special education services?

**Focus of Paper**

The focus of this paper was to research the overrepresentation of minority students, among those who receive special education services. This paper concentrates on studies that focus on bias as a factor and investigate reasons why the disproportionality of minority students who receive special education services exists.

**Importance of Topic**

When the number of minority students who receive special education services exceeds the proportion of total minority students enrolled in the school, it raises the question if these students actually qualify for special education services. Overrepresentation of minority students receiving special education services asks the question if school personnel have incorrectly identified these students. According to the NEA and NASP (2007), a student, misidentified as disabled, is denied an appropriate education and this prevents the student from reaching his/her real potential. Once students start receiving services in a special education classroom, it becomes much harder for them to join a general education classroom and gain contact with general education peers. Receiving special education services may result in lower expectations for the student, starting a tipping effect of a less challenging curriculum and limited academic opportunities (NEA & NASP, 2007). This, in turn, creates negative stereotypes that leave minorities at a disadvantage while creating subjective profiling of minorities. The

overrepresentation of minority students in special education prevents schools from creating a curriculum that represents diverse cultures.

Implicit bias influences how teachers interact with students in the classroom. African American boys tend to be suspended or receive harsher punishments due to perceived challenging behavior (NEA & NASP, 2007). Implicit bias affects how minority students have access to Free and Appropriate Education (FAPE).

Implicit bias creates an effect called stereotype threat. This phenomenon occurs when individuals fear that the negative stereotypes of groups which they belong could be confirmed. Desombre, Aneymar, and Delelis (2017) reported a study in which participants in the stereotype threat condition participated in a test in which the researchers told the group their skills would be tested on a standardized test. The researchers told the control group that the task related to other things rather than ability. The African Americans who participated in the stereotype threat condition performed worse than their white peers in the same condition. The study showed no difference between the African Americans and Whites in the control condition in which the test was not associated with aptitude (Desombre et al., 2017).

Stereotype threat negatively affect females' math scores. The higher the grade level of math, the girls tend to struggle with math concepts and terms (Desombre et al., 2017). Fewer women tend to pursue STEM careers.

Understanding implicit bias can help us to answer the hard questions of why minority students are overrepresented in the area of special education. It helps to understand the decisions teachers make when referring students for special educations services while looking at what factors prevail in the judgment of qualification.

**Definitions**

Disproportionality—the ratio between minorities in special education in the school compared to the total number of minorities in the school.

Overrepresentation—students represented in a proportion higher than the average.

Underrepresentation—students represented in a proportion lower than the average number of students in the total population.

Bias—an inclination to favor or be against something or someone that may be unfair.

Explicit bias—the attitudes or stereotypes that an individual is aware of that affect the behavior and understanding of an individual.

Implicit bias—the attitudes or stereotypes that unconsciously affect the behavior, judgments, and understanding of an individual.

Stereotype—thoughts that a person has about a set of characteristics attached and generalized about members of a group.

Stereotype threat—when an individual worries about fulfilling a stereotypical expectation of the group they belong to and it affects his/her performance.

**Acronyms**

ADHD—Attention Deficit Hyperactive Disorder

ASD—Autism Spectrum Disorder

DCD—Developmentally cognitively Delayed

DD—Developmentally Delayed

EBD—Emotional Behavioral Disorder

ELL—English Language Learner

ID–Intellectual Disability

LD–Learning Disability

OHD–Other Health Disorder

SLD–Specific Learning Disability

SLI–Specific Language Impairment

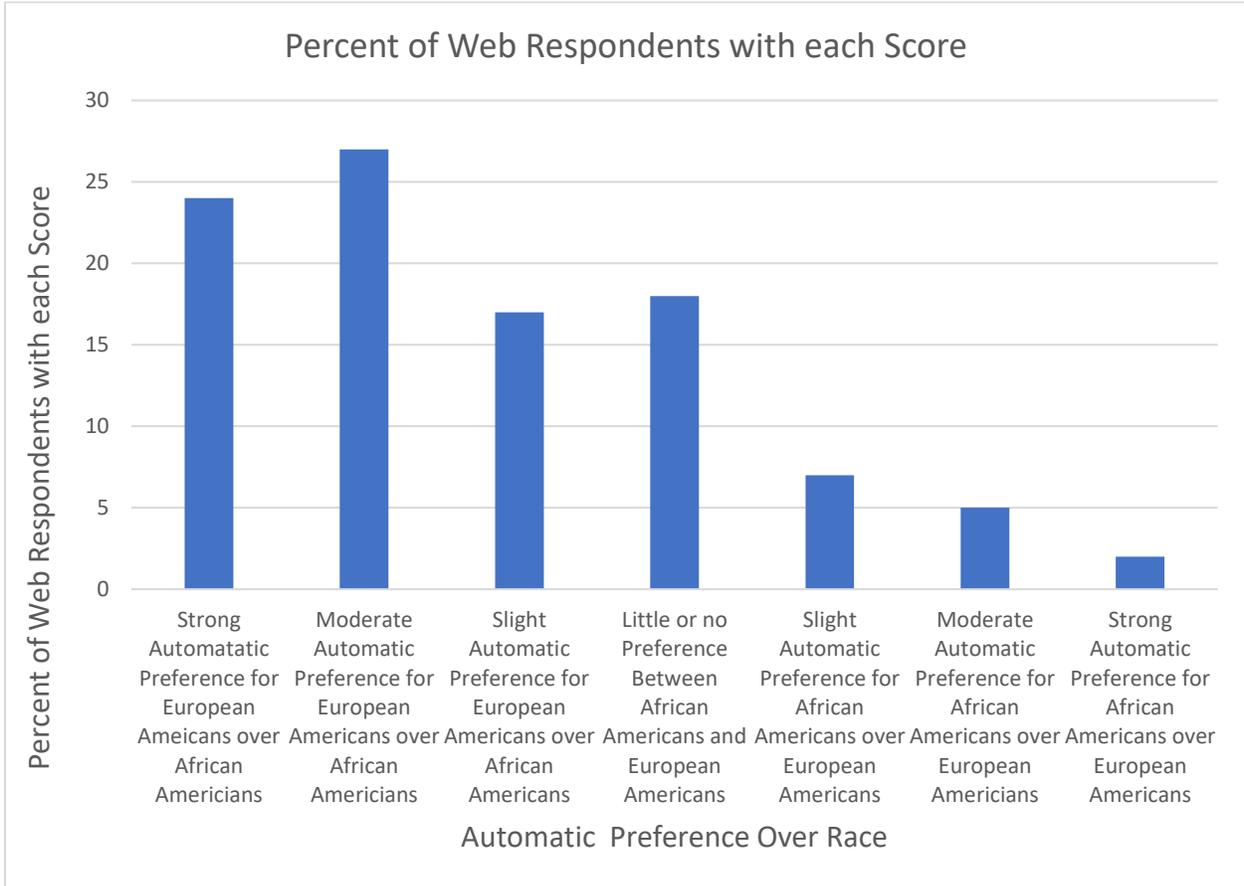


Figure 1. Percent of Web Respondents on Automatic Preference Over Race

## **Chapter 2: Review of the Literature**

The purpose of this literature review was to examine the relationship between the overrepresentation of minority students who are referred and receive special education services, along with bias as a factor for reasons why the disproportionality exists. This paper splits the studies into two parts. Part 1 summarized six studies that investigate the overrepresentation of minority students in special education. Part 2 summarizes six studies that examine if explicit and implicit racial attitudes are a factor in the overrepresentation of minority groups receiving special education service.

### **Literature Review: Part 1**

Rocque (2010) examined the relationship between the disproportionality of African American elementary students and office referrals. The study examined behavior and discipline, along with evaluating the students within their school. Rocque hypothesized that besides the teacher's behavioral ratings and the school's set policies, office referrals would increase in number due to a student's race. The study's participants included 28,634 elementary students in 45 schools located in Virginia. Two percent of the participants were excluded from the analysis because they were over the age of 11. The researcher recorded whether a student had received an office referral or not in the 2005–2006 school year. Along with race listed as an independent variable, Rocque also added covariates that could correlate with student office referrals. The covariates included age, special education, SES (socioeconomic status), gender, and academic performance.

Teachers answered questionnaires and rated how much each of the students misbehaved, ignored rules, and displayed disorderly behavior on a scale ranging from 0, in which the student

did not show disorderly behavior to 3, in which the student did display disorderly behavior. Teachers completed the questionnaires in the middle of the school year. The researchers assumed that the teachers would rate the students without bias. However, the researchers did not assume that teachers gave discipline in an unbiased manner. If the results showed that teachers were biased in behavior ratings and punishment, the result would show that African Americans would receive punishment more often than any other race. The study compared the behavior ratings against office discipline results.

The researcher found that office referrals were given out to African American students 2.47 times more than other students of other races. When comparing other the other factors in the study (SES, age, gender, academic performance, and enrolled in special education services), along with controlling for school policies, African American students were still 2.27 more times referred to the office compared to the other students of other races. When controlling for individual factors, school policies, and behavior, African Americans received office referrals 1.58 times more often than any other race. Although behavior was an indicator for some referrals, due to the decrease in office referrals, it still showed that African American students still received more office referrals than Hispanic, Native American, Pacific American, American Asian, and White students.

The author concluded that through teacher-reported behavioral data, there is a bias when referring to African American students for office referrals. Discipline can lead to further disciplines such as suspensions and expulsions, dropouts and the school to prison pipeline. However, the findings are limited due to subjective teacher ratings on behavior. The type of behavior was unknown during the office referral. It should be also known that the teacher that

rated the behavior could discipline the student as well which could skew the results. One should consider these facts when interpreting the results.

Sullivan (2011) investigated the overrepresentation of English Language Learner (ELL) students in special education referrals and placement. The researcher studied previous data over 8 years on 1.1 million students attending a school in an unnamed southern state. The author compared data of ELL students over White students on referrals and identification of special education service needs. Out of the 1.1 million students, 16% of students identified as ELL students and 55% of the student population identified as a racial minority. To find out if ELL students were overrepresented in special education services compared to white students, the researcher utilized the relative risk ratio (RRR). A negative relative risk ratio suggested that ELL students were less likely to be referred or placed in special education services, and a positive relative risk ratio suggested that ELL students were more likely to be referred or placed in special education services.

According to correlational analysis and multiple linear regression data, ELL students were overrepresented referral and placement of special education services in the categories of Specific Learning Disabilities (SLD), Specific Language Impairments (SLI), and Intellectual Disabilities (ID) ( $RRR = 1.37$ ,  $RRR = 0.96$ ,  $RRR = 1.32$ ) on the state level. Between the 8 years, there were huge jumps in ELL students receiving services. In 1999 ELL students were 30% less likely to receive SLI services and 8 years later, they were 30% more likely to receive SLI services. In the SLD category in 1999, ELL students were 24% more likely to identify with SLD. Eight years later, the percentage rose to 82%. However, ELL students did not obtain overrepresentation of special education services for the category of EBD. On the district level,

ELL students were overrepresented in the categories of SLD and SLI. The author found that ELL students were less likely to be removed from their general education classroom to receive special education services than white students that receive special education services. The schools supported the students with assistance and services within the general education classroom.

Although the researchers found overrepresentation with ELL students in referrals and placements in special education services, the disparity does not show if the overrepresentation is due to ELL students needing the extra assistance in education, or if it due to inconsistent reporting of data throughout the state. The author indicated that the districts across the state might vary in the degree in which the risk ratios were reported. Also, data is limited to one state, and state policies might influence the reporting should also be considered when deciphering the outcomes of the study.

Morgan, Hillemeier, Farkas, and Maczuga (2014) investigated if any minority inequalities existed in the diagnoses of Attention Deficit Hyperactivity Disorder (ADHD) in children younger than 5 years old. They wanted to find out what risk factors were used to identify and diagnose children with ADHD. They explored whether minority groups who received an ADHD diagnosis were more or less likely to show inattention or impulsivity compared to their White peers. The researchers' sample included 6,550 children at 60 months old who had either received or not received an ADHD diagnosis. Parents of the children filled out questionnaires about: (a) ADHD diagnosis, (b) race, (c) SES, (d) pregnancy, labor and birth characteristics, (e) parental mental illness, and (f) primary language when their child was 9

months, 2 years, 4 years, and 5 years of age. Children participated in assessments of vocabulary and cognitive function, and ADHD behaviors.

Descriptive statistics disclose that 2.4% of the children obtained an ADHD identification by the time they reached 5 years of age. Of those 2.4%, more White children received the diagnosis than African Americans, Hispanics, or other ethnicities ( $M = 53.7\%$ ,  $M = 13.9\%$ ,  $M = 25.1\%$ , and  $M = 7.2\%$ ). In logistic regression models [odd's ratios (OR)] and without adjusting for ADHD behaviors or socio-demographics, African Americans and Hispanic children were less likely to be diagnosed with ADHD before attending school ( $OR = 0.72$  and  $OR = 0.58$ ). When examining behavior functions such as attentiveness, persistence, and cooperation, African American and Hispanic children had a significantly lower chance of being diagnosed with ADHD ( $OR = 0.50$  and  $OR = 0.43$ ). When the researchers controlled for: (a) SES, (b) pregnancy, labor and birth characteristics, (c) parental mental status, and (d) primary language, the odds for being diagnosed with ADHD lowered even more ( $OR = 0.3$  and  $OR = 0.58$ ). The researchers found that even though African American children were less likely to be diagnosed with ADHD, they were more likely to exhibit behaviors of ADHD indicators.

The researchers concluded that African American and Hispanic children were less likely to be diagnosed with ADHD before attending kindergarten, but more likely to suffer from ADHD symptoms compared to their White peers. ADHD diagnoses positively associated with behaviors such as inattentiveness and impulsivity. The researchers suggested that the reasons why the disparity of diagnoses exists, were because minority parents were less willing to see a doctor for ADHD indicators. Minority families place a stigma on an ADHD diagnosis and refuse to seek help. The researchers suggested that these findings could contribute to a later

racial achievement gap which could contribute to an overrepresentation of minority groups referred for special education services.

Zhang, Katsiyannis, Ju, and Roberts (2014) examined 5 years of data to find out how many students from each minority group were receiving special education services. They also wanted to know how many schools placed students from each group in the categories of Learning Disabilities (LD), Intellectual Disabilities (ID), and Emotional/Behavioral Disabilities (EBD), along with finding out the growth trends of race and placement in special education categories. The researchers gathered data of 2004 poverty rates of each of the 50 states in the U.S and the demographic data of the students who were enrolled in special education services in the U.S. from 2004–2008. The researchers compared the race of the students, the special education disability category, poverty rate, and growth trends.

The researchers found that African American and Native Americans were overrepresented in special education services. In LD services, the average percentages of African American ( $M = 6.6$ ,  $SD = 1.85$ ) and Native American ( $M = 6.58$ ,  $SD = 2.13$ ) students receiving special education services were higher than White students ( $M = 5.14$ ,  $SD = 1.22$ ) that received special education services. In ID services, the percentages of African Americans ( $M = 1.59$ ,  $SD = 1.01$ ) and Native Americans ( $M = 1.19$ ,  $SD = 0.77$ ) receiving special education services were also higher than White students ( $M = 0.92$ ,  $SD = 0.57$ ) receiving special education services. Finally, in the EBD category, higher percentages of African American ( $M = 1.63$ ,  $SD = 1.01$ ) and Native American ( $M = 1.47$ ,  $SD = 0.91$ ) students received special education services compared to White students ( $M = 0.91$ ,  $SD = 0.41$ ) receiving special education services. Poverty rates indicated inclinations of overrepresentation of minority groups receiving special

education services or states with higher poverty rates had higher percentages of students who qualified for special education services. The researchers indicated a decrease in percentages for all students' groups qualifying for special education services except for Native American students. This group saw a slight rise in students who were receiving special education services. The results uncovered a big decrease in percentages of African American students who had received special education services from 2.3% to 1.8%.

The researchers' results indicated that minority groups are overrepresented in students receiving services for special education. However, due to the decrease in students receiving services over the years, it seems as if schools are changing policies to reflect the way students are qualifying for special education services. Because the data was retrieved from a database and created from state reports, it may be compromised. The data used in the study only reflected information about the race of the student. More research with culture, language and SES should be done. These limitations should be considered when reading these results.

Morgan et al. (2015) questioned the overrepresentation of minority children in special education. They hypothesized that particular child and family variables would turn the tables and indicate that minority children are instead under identified as having a disability that would qualify them for special education services. Around 20,100 children all over the U.S. who entered kindergarten in the 1998–1999 school year participated in the study. The study collected data from the teachers and parents of the children and the children themselves in kindergarten, 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, and 8<sup>th</sup> grades. The researchers distinguished students who were receiving special education services under the categories of LD, SLI, ID, OHD, and EBD and their special education teachers in the grades listed above answered a questionnaire about the child's

disability. Parents of all students in the study were contacted and filled out questionnaires about: (a) race (African American, Hispanic, white, and other ethnicities), (b) mother's marital status and age, (c) child's birth weight, and (d) SES. The general education teachers rated the student's external and self-regulating behaviors in kindergarten, 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> grade with the Social Rating Schedule (SRS) which is an adapted scale of the Social Skills Rating System (Gresham & Elliot, 1990). The researchers calculated the students reading and math achievement levels by using general informal assessments in kindergarten, 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, and 8<sup>th</sup> grade.

In the discrete-time logit regression analysis of Model 1, the researchers compared race and time with the five special education disability categories. These results suggested that there was no evidence of minority students as over-identified as having one of the five special education disabilities. The results showed that minority students were underrepresented in the categories of SLI and OHD. The discrete-time logit regression analysis of Model 2 adjusted for the other variables listed above in the parent's questionnaire. African American students were less likely to be identified as having LD (58%, Covariate-Adjusted Odd Ratio (CAOR) = 0.42), SLI (63%, CAOR = 0.37), ID (57%, CAOR = 0.43) and OHD (77%, CAOR = 0.23) than White students. Hispanic students were less likely to be identified as having LD (29%, CAOR=0.71), SLI (33%, CAOR = 0.67), and OHD 73% (CAOR = 0.27) than White students. The researchers found that students that did not have health insurance were less likely to be identified as having an SLI.

Because the data set ended in eighth grade, the researchers were unable to see if this trend continued through high school. Other factors such as the child's IQ, home environment, and parenting style were not controlled during the study and could have impacted the results. The

independent factors could also be associated with special education identification. These variables could have impacted the study and should be taken into consideration when interpreting the results.

Banks (2017) explored the overrepresentation of African Americans in special education services. She stated that 17.3% of African Americans are enrolled in public schools nationwide. However, 26% of African Americans are receiving special education services. Banks interviewed seven African American males identified as having at least one learning disability while enrolled in elementary and high school but now attended a 4-year college. The researcher interviewed the seven men in three 90-minute interviews. The students answered questions about when they started receiving special education services, and if they perceived their disability label as correct, and to reflect on their school experiences as an African American with a disability. The researcher analyzed the qualitative phenomenological interviews information and discovered three recurring themes throughout the conducted interviews.

Issues with special education placement. Some students believed receiving services, which included accommodations and modifications to the general education curriculum in a special education resource room aided them in understanding the course work content. Other students expressed concerns over receiving their academic learning in a self-contained resource room, and thought it limited their education and caused stigmatization. The students conveyed it was not the location of where they received the services, but instead the success of the students depended on the quality of the instruction. The students felt success in the classroom varied on the implementation of various strategies to help access academic content.

Racial identity as a barrier. Six of the students stated that they experienced racial oppression which led to lowered teacher expectations. The lowered teacher expectations would prevent the students from actively connecting to the academic content. The students said their classmates noticed oppression and they experienced belittling characterizations that they needed to fight to prove they could measure up academically to other students. Students had to overcome stereotypical false characterizations to prove themselves educationally competent.

Self-advocacy and race. Perceived problematic depictions towards the students' race prevented them from speaking up and getting help in special education services and the general education classroom. The students who attempted to self-advocate were misunderstood as threatening and oppositional based on African American racial stereotypes. The participating students stated that they received harsher penalties and punishments for minor infractions, when instead. The students were trying to advocate for help. The students thought the teachers had labeled them and no matter what they did the teachers' perceptions of the students were unchangeable.

Banks (2017) concluded through the interviews that the race and disability of the students contributed to lower teacher expectations, barriers to learning the general education curriculum, misperceptions from teachers and peers, along with the African American students' self-advocacy attempts seen as hostile and threatening. The researcher suggested that because minority students with disabilities are more often given more restrictive placements outside the general education classroom, the teachers need more diversity and cultural training to teach differentiated academic content or adapting instruction to meet all student's needs.

## Part 1 Summary

Part one of the literature review evaluated the disproportionality of minority students that are receiving special education services. Table 1 summarizes the findings of these studies which are presented in chronological order as in Part 1 in the chapter.

Table 1

### *Summary of Part 1 Findings*

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Rocque (2010)	Quantitative. -Descriptive -Random effects regression controlling for school effects -Between subject design	28,634 students enrolled in 45 elementary schools	Data were collected from teacher and school records Dependent variable - Office referrals  Independent variables. -Race -Age -Special Education -SES - Gender -Academic performance - Student Behavior The dependent variable was measured against the independent variables to see if there was a relationship between them	There was a positive relationship between African Americans and office referrals  Even when the other independent variables were controlled, the relationship between African Americans and office referrals was higher than any other race (White, American Asian, Hawaiian, Hispanics, and Native Americans).

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Sullivan (2011)	Quantitative -Descriptive -Regression Analysis -Statewide and District	1.1 million students in a southern state -16% were ELL students. - 55% identified as minorities	Data were collected and analyzed through state records of student enrollment. -The researcher looked for disproportionality for ELL students at the state and district level over a period of 8 years. -researched patterns of LRE placement of ELL students -looked at relative risk ratio to predict the eligibility of ELL Students according to disproportionality	At the state level, ELL students were overrepresented in special education in SLD, SLI, MIMR at the state level -At the district level, ELL students were overrepresented in the categories of SLD and SLI, in special education -ELL students more likely to place in LRE
Morgan, Hillemeier, Farkas, & Maczuga (2014)	Quantitative - Longitude Cohort Study -Multiple Regression Analysis -Descriptive Statistics	6550 children who had or had not been diagnosed with ADHD All participants were born in 2001	Parents of the participants were interviewed when the child was 9 mo., 24 mo., 48 mo., and 60 mo. of age -ADHD diagnosis -race -SES -Pregnancy, labor and birth characteristics -Parental mental illness -Primary Language -Children were tested on vocabulary and cognitive function, ADHD behaviors	Descriptive statistics show that African American Children were diagnosed with ADHD much less than White Children. -Multiple regression suggests that African American children have lower odds in being diagnosed with ADHD. However, African American children are more likely to suffer from more severe ADHD symptoms, compared to White children

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Zhang, Katsiyannis, Ju, & Roberts (2014)	Quantitative -Descriptive statistics for the 5-year results -Data analysis (SPSS) for growth model estimates	-Data collected on state poverty rates -Data collected for years 2004- 2008 on students' racial identity and special education identity	-Data were collected and recorded in Excel. -Data calculated and graphed and transferred over to SPSS to examine the percentages of each minority group in each disability category: -Learning Disabilities -Intellectual Disabilities -Emotional/Behavioral Disabilities SPSS examined the growth trends for each minority group and special education disability category	Native Americans and African American were the most represented receiving special education services. Native Americans and African Americans were the highest groups represented for LD. African Americans were heavily represented in ID. EBD students with the highest group representation were African Americans, followed by Native Americans, and then Whites following close behind.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Morgan, Farkas, Hillemeier, Mattison, Maczuga, Li, & Cook (2015)	<ul style="list-style-type: none"> <li>-Longitudinal</li> <li>-Discrete-time logit regression models for event history analysis</li> <li>-separate regression models for each of the five disabilities</li> </ul>	20,100 kindergarten students in 1998 from all over the U.S.	<ul style="list-style-type: none"> <li>-Researchers identified students who received special education services under one of the five special education disability categories. Special education teachers of the children filled out questionnaires in Kindergarten, 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, and 8<sup>th</sup> grades about disability</li> <li>- Parents of all participants filled out questionnaires on gender, race, mother's marital status, mothers age, child's birthweight, parent's language, and SES.</li> <li>-SRS measured external and self- regulating behaviors in Kindergarten, 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> grade.</li> <li>-Students achievement in math and reading</li> </ul>	<ul style="list-style-type: none"> <li>Model 1's results indicated that minority students were under identified having speech and language impairments and other health impairments.</li> <li>When adjusting for SES, academic achievement, and behaviors, minority children are less likely to be identified as having a disability.</li> <li>Children without health insurance are more likely to be identified with speech and language impairment.</li> </ul>
Banks (2017)	Qualitative Phenomenological interviews-	Seven African American male students. All qualified for special education with at least one disability -In college, having finished one semester	<ul style="list-style-type: none"> <li>Three one-to-one 90-minute interviews.</li> <li>-Students were asked to reflect on school experiences</li> </ul>	<ul style="list-style-type: none"> <li>African American students felt that their race led to lowered teacher expectations and the evaluation for special education services</li> <li>-Students had to overcome stereotypical false characterizations to prove themselves educationally competent.</li> <li>-Students thought the label and stereotypes caused by harsher discipline for minor offenses</li> </ul>

## Literature Review: Part 2

Abidin and Robinson (2002) wanted to find out if teachers referred students to special education services due to academics, behavior, SES, or the teacher's biases toward a specific student. In most cases, teachers refer students to special education services due to academic and behavioral problems. The study sample consisted of 30 teachers, located in three elementary schools, in a rural county in Virginia. The teachers were equally dispersed in grades Kindergarten – 5<sup>th</sup> grade. Each teacher selected three students to participate in the study: one student who often displays emotional behaviors, one student who occasionally displays emotional behaviors, and one student who rarely displays emotional behaviors. The study consisted of three phases. In the first phase, the teachers filled out questionnaires that requested demographic information, the Social Skills Rating System (SSRS -T), and the Achenbach Teacher Report Form (TRF). The TRF is a behavior checklist that determines a student's adaptive functioning and emotional behaviors. The SSRS-T assesses social skills, behavior problems, and academic competence. The second phase consisted of the researchers observing the students. The researchers documented passive off-task behavior and actual disruptive behavior. The observations took place during two separate 30-minute intervals. In the third phase of the study, the teachers filled out the Index of Teacher Stress (ITS). The questionnaire was a self-report measure of stress caused by an individual student.

The correlation between the TRF and SSRS-T scores and observations of off-task and disruptive behavior suggest that teacher's perception of his/her student were based on observed behavior and not the subjective judgment of the student ( $r = 0.57$  and  $r = 0.58$ ,  $p \leq 0.01$ ). Negative correlations were found between total off-task behavior and SSRS-T scores in social

skills and academic competence ( $r = -0.52$  and  $r = -0.46$ ,  $p \leq 0.01$ ). The results indicate that teachers made discernments by observed behavior and not by subjective opinions. This study also suggested that teachers can make fair judgments about a student that are not related to a student's demographics or the amount of stress that a teacher feels about specific students.

The researchers noted that teachers, who participated in the study, only represented 75% of the total population of teachers. Teachers' perceptions of behavioral attitudes, referral decisions, stereotype biases, and stress differ from one teacher to another. The researchers contemplated that judgments about students could be based on those teacher's perceptions. The reader should consider these factors when interpreting the results.

Neal, McCray, Webb-Johnson, and Bridgest (2003) examined whether or not African American students' cultural walk affected teachers' attitudes toward the students' aggression, achievement, and special education needs. The researcher chose 136 teachers from three middle schools in a southwestern state in the U.S. The researchers hid the purpose of the study from the teacher participants. The participants were only given the information that they were participating in a study about middle-school students and teachers. The 136 middle school teachers were randomly placed in one of four conditions, an African American standard walk, a White standard walk, an African American stroll, and a White stroll (walking movement associated with African American culture). The students in each video condition wore the same thing: jeans, a white t-shirt with a sports team basketball jersey, and athletic shoes. Participants in each of the four conditions watched a video of a middle school either standard walking or stroll. After watching the video, the teachers filled out the *Active Checklist* (Gough & Heilbrun,

1983) that rated aggression and achievement. They also filled out a questionnaire that identified demographic information and if they would refer the student for special education services.

The researchers studied the interaction between movement style and race with student achievement as the dependent variable. ANOVA with two levels of race, African American and White, and two levels of the student movement, standard, and stroll, determined that the interaction between the two independent variables, race and movement, was not significant ( $F = 0.52, df = 1, p = 0.47$ ). However, the researchers found significant main effects were found for movement style ( $F = 17.8, p < 0.01$ ) and race ( $F = 4.83, p < 0.05$ ). When comparing movement and teacher's perception of achievement, teachers rated White students in the stroll condition ( $M = -2.76, SD = 4.91$ ) lower in achievement than African American students ( $M = -1.26, SD = 5.00$ ) in the stroll condition. For the standard walk conditions, teachers rated African American students ( $M = 2.62, SD = 4.87$ ) higher in achievement than white students ( $M = 0.29, SD = 4.16$ ) in the standard walk condition.

When aggression was the dependent variable, the authors found no significant interaction between movement style and race. The researchers tested and found a significant difference for movement style ( $F = 31.32, df = 1, p = 0.001$ ). There was no significant difference for race ( $F = 0.63, p = 0.43$ ). Teachers rated students, African American and White, in the stroll condition ( $M = -0.57, SD = 6.43$ ) to be more aggressive than in the standard walk condition ( $M = -6.16, SD = 5.12$ ).

When the authors examined the teacher's perceptions of the students need for special education services, they found no significant difference between movement style and race. They examined the main effect for movement style and significant difference was found ( $F = 14.35,$

$df=1$ ,  $p = 0.001$ ). No significant difference was found for race ( $F= 0.37$ ,  $p = 0.54$ ). Teachers rated students in the stroll condition ( $M= 2.26$ ,  $SD = 0.64$ ) to be more likely to be referred for special education services than the students in the standard walk condition ( $M = 1.87$ ,  $SD = 0.49$ ).

The researchers' findings suggest that teachers could perceive cultural differences as a cognitive or behavioral disability and refer children for special education placement who are not eligible. Because this study was an experiment, it is unknown if these results would be the same in real-world scenarios. As the teachers in the study identified as white, a study that has a more diverse teacher participant pool might change the results.

Markova, Cate, Krolak-Schwerdt, and Glock (2016) explored student teachers' attitudes about students from different races who were receiving special education services and inclusion. Inclusion or the ability of students to be included in general education classes allows students, who are receiving special services in math or reading, to spend most of their day with their peers. Forty-six German student teachers who had student teaching experience an average of 1.18 months participated in the study. The student teachers filled out a questionnaire about the teachers' demographics. The questionnaire also asked about teaching experience, attitudes toward inclusion, and if they had close contact with someone who had a disability. The study measured implicit attitudes with a priming task. Pictures of eight immigrant students and eight non-immigrant students were used to trigger stereotypical attitudes. The pictures were linked with either the neutral prime "BBBBBBBBBBBBBBBBB," the prime "LEARNING DIFFICULTIES," and the prime "BEHAVIORAL PROBLEMS." The pictures were then linked with positive or negative adjectives. The student teachers then filled out a self-report

questionnaire on the teacher's explicit attitudes toward minority students and students with behavioral issues and learning problems.

The results indicated that teaching experience or involvement with family and friends with disabilities altered feelings of bias toward students with disabilities. A 2X2 repeated measures ANOVA, implicit biases and the dependent variables of immigrant students vs. non-immigrant students and learning problems vs. behavioral issues, indicated that implicit attitudes toward non-immigrant students were significantly more positive than implicit attitudes toward immigrant students,  $F(1,45) = 9.32, p < .001$ . When it came to implicit attitudes toward students with learning problems or students with behavioral issues, no main effect was found,  $F(1, 45) = 0.84, p < 0.36$ . There was no interaction between implicit attitudes toward immigrant status and implicit attitudes towards students with special needs,  $F(1, 45) = 0.25, p < 0.62$ . Explicit attitude questionnaires indicated a neutral attitude towards inclusion for students with learning problems. However, higher scores on the questionnaires indicated negative attitudes toward students with behavioral issues and inclusion. There was no correlation between student teachers' implicit attitudes toward students with disabilities and inclusion.

Overall, the student teachers did not show any discrimination toward minority students. However, student teachers held negative explicit attitudes toward students with special needs joining the mainstream classroom. The student teachers lacked experience with students of different cultural backgrounds which could have limited the effectiveness of the study. The participants came from one university in Germany and these findings may not generalize to the United States. However, they could help in understanding how implicit biases impact teachers' education judgments.

Jacoby-Senghor, Sinclair, and Shelton (2016) conducted two studies in which the researchers explored if teachers' implicit racial bias would increase teaching anxiety, lower the lesson quality for African Americans and affect African American test performance. Research suggests that implicit racial bias amid whites can create anxiety during interracial interactions (Godsil & Richardson, 2017). The researchers thought that apart from the teachers' explicit attitudes on racial bias, the implicit racial bias would influence lesson performance when teaching African American students. The second study was conducted to assess whether the low-test performance was due to the performance level of the African Americans themselves and not the instruction.

Study 1: The researchers recruited 210 Princeton undergrads. The researcher paired the participants in 51 cross-race pairs and 54 same-race pairs. The pedagogical pairs did not meet before the study. The researchers always assigned the white participant the teacher role, and the White instructors were given an implicit priming task. The second participant, either African American or White was assigned the student role. The teachers were given instructional material and told they had 18 minutes to prepare their lesson. After lesson preparation, the learners came in, and the teachers started the lesson. Lessons were videotaped and lasted 7 minutes. After the lesson, the learners left and were given a task performance test and teachers were given a measure of explicit bias. Videotapes of the instructors were viewed with the learner hidden from view to measure instructor anxiety.

Linear regression analysis indicated that implicit bias, measured by a priming task, predicted more anxiety and lower lesson instruction quality in the cross-race pairs. The higher the score on the implicit bias test the more anxiety the teacher showed. The more anxiety the

teacher showed, the more the researchers noticed that lesson quality was less effective. The higher the score on the implicit bias priming task, the lower the performance score for the African American learner. There was no significant difference for the same race pairs.

Study 2: The researchers recruited 165 college students that were separated into groups of three to view one of 50 videos of the cross-race lesson with the learner blocked out of the video. After the video, the participants partook in the same task performance test the participants performed in the first study. Two raters who were not aware of the teachers' implicit and explicit bias scores, evaluated the performance of the participants. The researchers utilized a linear regression analysis using the videotaped teachers' implicit racial bias score to compare the participants' performance score. Like the results in the first study, the higher the implicit racial bias score, the lower the participants' performance score.

Both studies indicated that White teachers were more anxious when teaching African Americans which led to inferior lesson quality, and finally created low task performance. Because the effect generalized to White learners, we can conclude that the results from the first study were not due to stereotype threat or other psychological reasons. Anxiety could affect the teacher's judgment when referring and qualifying students for special need services. This study was done in a research lab and not in the general classroom and should be taken into consideration when deciphering these results.

Peterson, Rubie-Davies, Osborne, and Sibley (2016) examined teachers' explicit expectations and implicit biases and the independent variable effect on minority students' achievement. They examined explicit expectations and implicit biases separately on achievement throughout the year and then combined both biases to determine the end-of-year

achievement. The teachers recruited 38 New Zealand teachers from 11 schools, and the teachers had an average of 16 years of teaching experience. The researchers split the teachers into two groups. Eighteen teachers participated in the intervention group, and 20 teachers participated in the control group. Teachers in the intervention group participated in a four-part training session that taught instructional strategies that promote high expectations for students. The control group participated in normal professional development offered at their school. The researchers obtained data about the students' race from 1060 students who were in the participants' classrooms. The researchers collected student achievement data three times during the school year through assessments given by the teachers. The teachers were not aware of the students' achievement during the study. Teachers filled out clear academic expectations at the beginning of the year, and the study obtained implicit prejudiced attitudes at the end of the year through a priming task assessment given on laptops.

ANOVA results indicate a main effect for ethnicity and achievement in reading and math [Reading  $F(1527) = 26.53, p < .001$ ; Math  $F(1532) = 14.18, p < .001$ ]. Teachers who had higher expectations for student achievement produced students with higher achievement scores in reading but not in math at the end of the year. However, Asian students and White students had higher achievement scores than minority students. Also, when adjusting for the beginning of the year achievement scores, no main effects were found. When tested on implicit biases by using a modified Implicit Association Test, results indicated that teachers favored White names paired with achievement symbols. Teachers were quicker to pair minority names with symbols of failure. Implicit prejudice attitudes favoring White names and higher achievement were associated with White students receiving higher math achievement scores at the end of the year.

The researchers found that if teachers had high explicit expectations and implicit bias in favor of the student's race, the student's achievement scores were higher at the end of the year.

At the beginning of the study, the teachers filled out students' explicit questionnaires before the intervention training had begun. Because of this, the beginning achievement data might be skewed. Also, the study did not control for factors such as SES and other environmental factors. These also could have influenced the results.

Morgan et al. (2018) compared and investigated 22 studies to see if racial bias was a factor in the overrepresentation of minority students enrolled in special education services. The researchers included Native Americans, Hispanic, Asian American and ELL students in the study. The researchers included studies that were published between 1998–2015 because they were published after the amendment to IDEA in 1997. They used studies that had:

(a) overrepresentation of two or more children for one or more racial groups, (b) published in peer review journals, (c) used an empirical design, (d) took place in a school setting, and (e) had at least one covariate.

Morgan et al. (2018) created 504 regression models that integrated the 22 studies. The researchers found that only 29 out of the 504 models (5.8%) suggested that minority students were overrepresented in special education services. Seven out of 168 models (4.2%), 14 out of 208 models (6.7%), 2 out of 37 models (5.4%) and 6 out of 91 models (6.6%) showed a significant overrepresentation of minority students. None of the studies indicated that racial bias was the factor in the overrepresentation of minority students in special education. In the studies that the student's language use was a factor for overrepresentation of ELL students qualifying for special education services, only three (16.7%) confirmed that language use was a factor. For

Native Americans students' only two of the estimated indicated Native American minority groups were overrepresented in special education. One of the 26 regression models (3.8%) indicated the overrepresentation of Hispanic students in special education services. No overrepresentation was found for students who were Asian. The researchers found that the studies consistently indicated that minority students were under identified as having a disability.

The researchers only included articles of students who have already enrolled in special education services and not studies that examined racial bias in teacher referral. This could cause misidentification in disabilities. The researchers did not include the location of the studies as a factor for including a study into the research. They suggested that some locations in the U.S. could be more racially biased than other parts and one should consider that when interpreting the results.

## **Part 2 Summary**

Six studies evaluated if racial attitudes were a factor in determining the overrepresentation of minority students enrolled in special education services. Either explicit bias, which consciously influences thought and behavior, and implicit bias, which unconsciously influences thought and behavior, or both were considered in all of the studies. The studies are summarized and arranged in the same chronological order as presented in Part 2 of the literature review.

Table 2

*Summary of Part 2 Findings*

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Abidin & Robinson (2002)	Quantitative -Pearson Correlation for the standard scores of the SSRS -T, TRF, Total of Task Behavior, and teacher perceptions -Independent T Tests on demographics and teacher perceptions -Independent T Test on Student behavior and demographic -Multiple Regression Analysis	Study took place in three phases 1. teachers filled out demographic/referral questionnaire, TRF, SSRT 2. Classroom observations of student's behavior 3. Teachers answered ITS Questionnaire	90 elementary students from three Virginian schools. -22% African American and remainder were white	Teachers perceptions of students were based on observations on student behavior and academics and not on subjective attitudes - Student demographics and teacher perceptions of students were not related. -no biases found
Neal, McCray, Webb-Johnson, & Bridgest (2003)	Quantitative -2 X 2 (African American and white standard, and African American and white stroll) -ANOVA -Descriptive	136 middle school teachers who taught in a southwestern school located in the suburb of a city.	136 middle school teachers were randomly placed in one of the four conditions (African American standard, white standard, African American stroll, and white stroll). -Each of the four conditions watched a video of a middle school either standard walking or stroll (walking movement associated with African American culture) -Teachers then filled a questionnaire that rated aggression, achievement and if they would refer the student for Special Education Services	The teachers were more likely to associate low achievements and high aggression on the African American and whites who walked with a stroll. -The teachers were more likely to refer students who walked with a stroll to special education services.

Table 2 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Markova, Cate, Krolak-Schwerdt, & Glock (2016)	Quantitative -independent t tests -2x2 repeated measure ANOVA	46 preservice German teachers who had student teaching experience an average of 1.18 months	The preservice teachers participated in a priming task that evaluated implicit bias of minority and nonminority students with special needs -the student practiced for 15 trials before recording the final 15 responses of 12 combinations (positive vs negative words and minority vs nonminority student and behavioral difficulties vs learning difficulties vs neutral letter strings -Participants filled out a demographic questionnaire and two explicit attitude questionnaires	The teachers had implicit positive attitudes toward non-minority students and neutral implicit attitudes toward minority students -No significant effect for Students with special needs between minority and nonminority students. -Negative biases were found toward the inclusion of students with special education services.

Table 2 (continued)

<p>Jacoby-Senghor, Sinclair, &amp; Shelton (2016)</p>	<p>Quantitative -linear regression analysis with instructors' implicit bias, learners' race, and interactions of implicit bias and race as the dependent variable and learner's performance as the independent variable. -</p>	<p>1st study-210 Princeton undergrads were paired in 51 cross race pairs and 54 same race pairs  2nd Study-165 white Princeton undergrads</p>	<p>1st study-the pedagogical pairs did not meet prior. White instructors were given an implicit priming task. Teachers given material and 18 min to prepare. Learners came in and lesson was started. Learners then left and were given a task performance test and teachers were given a measure of explicit bias  2nd study-participants watched a video from a cross-race lesson videotaped from study 1 that was edited so that the original learner could not be seen. The participant then took the same task performance test as in Study 1</p>	<p>Teacher implicit bias predicted lower task performance on minority learners -Greater implicit bias produces anxiety and lower lesson instruction quality. There was more anxiety and poor lesson instruction in the cross race pairs compared to same-race pairs -The second study suggested poor learner performance of tasks when watching the cross race video.</p>
<p>Peterson, Rubie-Davies, Osborne, &amp; Sibley (2016)</p>	<p>Quantitative -t-tests differences between students with missing end-of-year achievement data and no missing end-of-year achievement data -Multivariate analysis of covariance -descriptive</p>	<p>38 New Zealand teachers from 11 schools. Teachers had an average of 16 years of teaching experience</p>	<p>18 teachers were in the experimental group and 20 were in the control group -teachers filled out an explicit expectation in academic achievements measure -Teachers participated in a priming implicit attitude on academic achievements and race at the beginning and middle of year -Students were measured through math and reading assessments at the beginning, middle, and end of year</p>	<p>Teachers' explicit expectations did not correlate with the ethnic achievement gap -The teachers' implicit racial bias did affect the minority student's academic achievement -</p>

Table 2 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Morgan, Farkas, Cook, Strassfeld, Hillemeier, Hung Pun, Wang, & Schussler (2018)	Quantitative. -Regression Analysis -synthesis of 22 prior studies =	22 studies were used that were published before 1997 (the amendment of IDEA)	researchers looked through 4 electronic databases for articles that discussed racial bias and special education -Studies were included if they had the following criteria: - one representation of racial groups of 2 or more children - peer-reviewed -quantitative or mixed research design -Study took place in a school. -Used at least on covariable-	When comparing the studies, only a small percentage supported the hypothesis that minority students were overrepresented in special education because of racial bias. -Suggested that minority students are not being identified as needing special education services as much as are needed

### **Chapter 3: Conclusions and Recommendations**

The purpose of this research paper was to investigate if minority students were overrepresented in being referred to and receiving special education services. This paper examined if explicit and implicit biases factored into the overrepresentation of minority students being referred to and receiving special education services. Chapter 1 presented the definition of overrepresentation and analytic information on the disproportionality of minority students in special education. Chapter 1 also described biases and defined the difference between explicit and implicit bias. Chapter 2 reviewed the literature that investigated the overrepresentation of minority students in special education, along with literature that examined bias and attitudes as a factor in the determination of minority students receiving special education services. In this chapter, the findings are compared and recommendations for future research and implications are discussed.

#### **Conclusions**

In Part 1, the researchers in the literature examined if minority students were overrepresented in special education. According to the research, four out of the six studies indicated there was disproportionality of schools referring minority students to or receiving special education services (Banks, 2017; Rocque, 2011; Sullivan, 2011; Zhang et al., 2014). Zhang et al. indicated that African Americans and Native Americans were disproportionality overrepresented for special education services in LD, ID, and EBD. Along with minority students, minority students who also identified as ELL students also were more likely to receive services under the LD and ID umbrella. ELL students were also more likely to receive services for speech and language impairment (Sullivan, 2011). Rocque (2010) conferred higher

representation of minority students receiving EBD services, along with minority students were more likely to receive office referrals and harsher discipline. Banks (2017) conducted a qualitative study through interviews and found that race and disability contributed to more restrictive environments, lower teacher expectations, self-advocacy seen as threatening to result in office referrals and difficulties in the general education classroom which led to minority students receiving a Free and Appropriate Public Education (FAPE).

Two out of six articles concluded that minority students were underrepresented in disability categories that qualified for receiving special education services compared to White children. Both studies are written by the same authors, with one of the studies that included the same researchers as the first study along with two added researchers (Morgan et al., 2014; Morgan et al., 2015). Morgan et al. (2014) indicated that even though African American children are more likely to suffer from ADHD symptoms than white children, they are less likely to be diagnosed with ADHD.

Morgan et al. (2015) concluded that minority students were under identified as having speech and language impairments and other health disabilities which would not qualify them for special education services. However, this study has been refuted by a couple of peer researchers, Collins, Connor, Ferri, Gallagher, and Samson (2016) and Ford and Russo (2016). The study by Morgan et al. (2015) was examined by Collins et al. Collins et al. indicated that Morgan et al. (2015) based their findings that African American children are under-represented in special education on inadequate perspectives. Morgan et al. (2015) indicated that the students were labeled at risk due to ethnicity, socioeconomic status, and family's culture. Collins et al. also noticed errors in the research method of the research of Morgan et al. (2015). Morgan et al.'s

data came from unreliable survey data instead of national established data. Their regression analysis left out the gender and used small sample sizes in the research design. Morgan et al. (2015) developed models and manipulated data that compared hypothetical children who were only different because of race. Collins et al. indicated that because of racial discrimination, income disparity, and living conditions, it would be impossible to find white or black students who are different due to race. Collins et al.'s final argument stated that Morgan et al. (2015) omitted the data that showed each race category and the percentage of students in those categories. According to Collins et al.'s, African Americans represent 14% of the total population and 20% of African American's are partaking in special education services. Researcher's define over-representation as the ratio of the percentage of students represented in special education to the ratio of the percentage of students represented in the total population.

Due to the arguments from Collins et al. (2016) and Ford and Russo (2016) refuting Morgan et al.'s (2015), it brings into question the validity of any other Morgan et al.'s research. Because of this and the other four articles that supported the disproportionality of minority students receiving special education services, the studies indicated a positive relationship between minority students and overrepresentation in special education.

In Part 2, the researchers in the literature studies examined if racial biases were influential during decisions whether or not, minority students were disproportionality overrepresented in special education services. Racial attitudes were considered either explicit and implicit biases or both. One out of the six articles did not differentiate between explicit or implicit bias. Morgan et al. (2018) compared 22 studies and determined that only a small percentage of those studies supported the hypothesis that minority students are overrepresented

in special education services due to racial attitudes. Morgan et al. (2018) also continued to say that minority students are under-identified in needing special education services.

Three out of the six articles measured explicit bias and the relationship with overrepresentation of minority students in referrals, receiving special education services, and the special education achievement gap (Abidin & Robinson, 2002; Neal et al., 2003; Peterson et al., 2016). Two out of three articles that measured explicit bias did not find explicit bias as a determining factor for the disproportionality of minority students and special education. Abidin and Robinson found that academic reports and behavior observations, rather than subjective biases were the determining factors for referring students for special education services. Peterson et al., like Abidin and Robinson, did not find any explicit bias as the determining factor in overrepresentation of minority students receiving special education services. They also did not find explicit attitudes as a factor in the achievement gap between minority students and the total student population.

One out of the three articles that measured explicit racial attitudes found that racial attitudes could be a factor in referring minority students for special education services (Neal et al., 2003). Neal et al. indicated that teachers were more likely to refer students who walked with an ethnic, cultural walk to special education services. The teachers were also more likely to associate low achievements and high aggression on African American and Whites who walked with an African American cultural walk.

Three out of the six articles measured implicit bias as a determining factor of the overrepresentation of minority students being referred and receiving special education services, along with academic achievement (Jacoby-Senghor et al., 2016; Markova et al., 2016; Peterson

et al., 2016). One out of the three studies found no significant effect between minority and non-minority students being referred to or receiving special education services (Markova et al., 2016). Additionally, the authors found negative biases towards the inclusion of students with special education services. Markova et al. also found positive implicit attitudes towards non-minority students and neutral implicit attitudes toward minority students in general education.

Two out of the three articles that measured implicit bias found that implicit racial bias affected academic achievement which could affect more students being referred for special education services (Jacoby-Senghor et al., 2016; Peterson et al., 2016). Jacoby et al. conducted two studies that measured implicit racial bias and task performance. Implicit bias produced anxiety and lower lesson instruction quality of the teacher, more anxiety and poor lesson instruction in the cross-race pairs compared to same-race pairs. Jacoby et al.'s second study suggested poor learner performance of tasks when watching the cross-race videos of the first study. Peterson et al. found that teachers implicit racial bias did affect the minority student's academic achievement. Lower academic achievement is associated with more special education referrals.

The research indicated a trend on the over-representation of minority students being referred to or receiving special education services. This matches with national education data retrieved from the U.S Department of Education as mentioned in Chapter 1. However, the research on biases as a factor in determining overrepresentation of minority students in special education services remains mixed.

## **Recommendations of Future Research**

Overrepresentation of minority students persists as an essential area for school districts across the nation to research and examine for explanations and ways to irradiate the issue. When searching for research that encompasses the realm of bias and the decision-making process in special education referrals, a deficit of quality research exists. Besides, the literature that was presented in this paper, there is an inconsistency of information regarding if bias, explicit or implicit, determines whether a student is referred to or qualifies for special education.

Racial attitudes are a current worldwide issue that surrounds this country daily. African Americans overrepresent the number of arrests when compared to Whites in the criminal justice system. According to Warde (2013), it appears to be an issue worldwide. In the United States, African Americans men represent 6% of the population but represent 40% of men held in prison (Warde, 2013). In Canada and Great Britain, African American males represent 1.25% and 1.1% of the population, respectively (Warde, 2013). However, the black male prison population accounts for 9.2% and 15%, correspondingly (Warde, 2013). Research has determined that implicit bias is a factor in police shootings (Correll, Park, Judd, Sadler, & Keesee, 2007; Price & Payton, 2017). Extensive research has determined that implicit racial bias is a factor in police shootings, but limited research has been conducted for determining if implicit bias is a factor identification, qualification, and referrals of minority students in special education. More research should be done in this area.

Most of the research studies in this paper included small sample sizes. Future research should include a larger sample of participants to examine whether bias, especially implicit bias influences and governs a teacher's decision-making process of referrals and qualification of

special education services—a few of the studies in this paper used teacher candidates in colleges. Future research should use a diverse population of teachers. Future research also should study implicit bias and teacher ethnicity and the relationship of determining a student's qualification for special education services.

Another limitation that was found in some of the literature research is that many of the studies were conducted in the southern part of the United States. Racial bias can be more prominent in some areas more than in other areas. Future research should incorporate variable parts of the country to get more accurate results. In fact, the research could be done in each area of the country, and be assessable to those in that area, to look at and design training for best evidence practices.

### **Implications for Practice**

The importance of meeting all students' needs is imperative for every student to reach their full potential. Villegas and Lucas (2007) acknowledged that the demographics of minority students keep on increasing. Analysis of enrollment data in special education can help pinpoint problematic trends of disproportionality in special education. Referral and qualification data for special education should be routinely examined to identify any problems within general and special education. Disproportionality data can give baselines and allow for policies to monitor progress to reduce inequality in education.

As the research has shown in this paper, bias, explicit or implicit, can affect minority students in education. Teachers were more likely to associate minority students as low achievers (Jacoby-Senghor et al., 2016; Neal et al., 2003; Peterson et al., 2016). Racial bias not only affects teachers' perceptions, but also their delivery of instruction and expectations. If not

exposed, obstacles of racial bias will continue to seep into and impair young minds from learning.

How do we, as a society fight the effects of racial bias? The first step is to recognize that racial bias is an issue. Education in the nation will not be able to move forward unless we admit the problem of racial bias. The next step is to educate others on biases and how it affects all parts of society. Looking at racial bias helps teachers and schools to inspect and observe their teaching policies and practices and develop a culturally responsive pedagogy. Culturally responsive pedagogy is defined as the learning, understanding, integrating, and combining a student's culture into the school classroom (Larson, Pas, Bradshaw, Rosenberg, Day-Vines, & Gregory, 2018). It takes more than just utilizing unique teaching strategies. Culture responsive teaching uses the student's prior knowledge to help them understand new concepts. Teachers need to know the culture in which their students identify. It is more than the general awareness of the culture, but instead the understanding of the student's family structure and immigration history and pulling this information into classroom learning (Villegas & Lucas, 2007). Culturally responsive pedagogy uses instructional resources that support all cultures of students in the classroom.

Moreover, another way to minimize racial bias is to train teachers to become sociocultural conscious. For a teacher to be sociocultural conscious, a teacher must understand that a student's perspective is influenced by their life experiences as seen through a race, gender, and ethnicity (Villegas & Lucas, 2007). Teachers who do not possess a sociocultural consciousness will unintentionally use their own experience to try to understand a student and

misread a student's views and intentions which can lead to miscommunication and possible lead to unintentional referral and misplacement in special education.

Training teachers in multicultural perspectives can help minimize stereotypes about other cultures. A teacher who respects and understands other cultures will trust that students from other cultures are competent and ready to learn. Teachers that hold positive and knowledgeable opinions of diversity will have higher expectations of all their students and will hold their students accountable to the expectations, and lead to higher achievement.

### **Summary**

The disproportionality of minority students referred to or qualifying for special education exceeds the number of minority students in the total school population. Many minority students will receive special education services in a secluded program or classroom. It can prevent students from receiving the appropriate education guaranteed to them. A teacher's explicit or implicit bias could be a factor in determining the reason why disproportionality of minority students is referred to or qualify for special education services. The research indicated a trend on the over-representation of minority students being referred to or receiving special education services. However, the research on biases as a factor in determining overrepresentation of minority students in special education services remains mixed due to the limited amount of research. Because racial bias is the current problem surrounding this country, further research should be done to learn more. Culturally responsive pedagogy should be used to train a teacher to become more multicultural in different perspectives and sociocultural conscious. Teachers have the power to engage all students in learning, and instead of accentuating deficits, they

should be stressing a student's instruction culturally and responsively, together in school and out of school.

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