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The Effect of Racial Bias in Behavioral Assessment on the Disproportionate Representation of Racially and Ethnically Diverse Students in Special Education

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**The Effect of Racial Bias in Behavioral Assessment on the Disproportionate Representation
of Racially and Ethnically Diverse Students in Special Education**

by

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Chapter 1: Introduction

In special education evaluation and placement, it is crucial that a student's educational identification matches their specific needs. Identifications have a profound impact on special education students and the school system as a whole. These determinations influence what type of services students receive, the restrictiveness of their educational environments, and also their outcomes outside of school. Statistically, the representation of ethnic groups in special education should match the population parameters of a community at large. Within a special education population, it can be also assumed that the racial and ethnic compositions of each disability area should generally match that of the population at large. However, students of color are often disproportionately represented in certain special education categories compared to their white peers (de Valenzuela et al., 2006).

Assessments are an important tool in the special education referral and evaluation process to determine the nature and acuity of student needs. Many of the assessments used to measure behavioral needs can be used across a diverse population of students. They are designed to be unbiased and to ensure that students from different racial groups receive results that indicate their actual needs, not an error arising as epiphenomenon of racial or cultural background (Splett et al., 2020). When students are evaluated due to behavioral concerns, the assessments often rely on the perspective of the evaluator to rate the students behavior. The subjective nature of this assessment creates the opportunity for bias to influence the findings for students from ethnically and racially diverse backgrounds (Watkins & Kurtz, 2001).

In this paper, I will investigate the body of research related to racial bias in behavioral assessment during initial evaluations and universal screenings. This paper will examine whether

racial bias in behavioral assessment leads to mislabeling the function and severity of behaviors for students of color and thus impacts the educational placement they receive. This paper will also investigate the best practices for ameliorating the problem of disproportionate representation of students of color in certain special education categories as a function of bias in behavioral assessment.

Historical Overview

The overrepresentation and underrepresentation of social and cultural groups in special education settings has been widely investigated. Gottlieb (1964) was one of the first studies to examine whether teachers may have different expectations for students based on their race and ethnicity. Dunn (1968) analyzed the racial and socioeconomic status of students with mild mental retardation (MMR) in special education. He found that students of low socioeconomic status were overrepresented and suggested this disparity resulted from socioeconomic factors. His analysis suggested that minor educational challenges coupled with low socioeconomic status were being mistaken for disability, and argued this finding demonstrated that the system was fundamentally broken. Since the advent of these seminal studies, many studies have investigated the disproportionate representation of minority students in special education (e.g. Deno, 1970; Mercer, 1973).

The passing of the Education for all Handicapped Children Act (EHCA, P. L. 94-142, 1975) created a system of procedural safeguards and accountability within special education (Artiles & Trent, 1994). The accountability measures created data that could be analyzed to assess trends within special education. Researchers (e.g. Chinn & Hughes, 1987; Watkins & Kurtz, 2001) began to investigate these data and identify troubling trends in the special education

system. In 1994, Artiles and Trent conducted a thorough review of the research behind disproportionality in special education. Despite some modifications to special education programming that resulted from early research, they argued the presence of disproportionate representation continued. Their review suggested structural changes to address the problem of disproportionality. Among the approaches studied to diminish the effect of disproportionality in special education was the elimination of disability labels. This approach was deemed incompatible with the need for a targeted and responsive special education system (Hallahan & Kauffman, 1994). The problem of disproportionality in special education persisted without a clear systematic remedy.

In the past 30 years, research began analyzing the impact of racial bias in subjective assessments and how to remedy the behavioral concerns that cause overrepresentation in disability categories (e.g. de Valenzuela, Copeland, Huaqing, & Park, 2006; Bradley Williams et al., 2017). Studies (Splett, et al., 2020) analyzed teacher responses to behavior rating scales to determine how teacher bias affects the placement of students in special education programs. The identified disparity in outcomes for students of color who enter into special education evaluation has led to more consideration of pre-referral measures (Watkins & Kurtz, 2001). Most recently, studies have investigated the Functional Behavior Assessment (FBA) to determine the role of teacher bias in analyzing and characterizing the behavior of racially diverse students (Moreno, Wong-Lo, & Bullock, 2014).

Definition of Terms

Disproportionality. Generally, diverse groups in a population will be represented in smaller samples at rates which reflect population parameters. Disproportionality occurs when the

representation in a small group does not match the population at large. This can be an indicator that something is affecting the makeup of the smaller group. In special education this can mean there are a greater proportion of students of color in special education than there are in the population. Within a special education program, this can also mean that students of color receive different educational identifications at greater rate than white peers.

Rater Bias. Most behavioral assessments involve a teacher or other school professional rating the severity of different behaviors in the setting where they observe the student. Within the framework provided by the assessment, the rater provides their perceptions of student behavior. The subjective nature of the assessments can create variance between raters (De Los Reyes & Kazdin, 2005). These differences are attributed to a bias on the level of the rater who completes the assessment. There are many factors that contribute to rater bias and there have been studies to try to assess the causes and extent of rater bias. De Los Reyes and Kazdin (2005) argue that a common form of rater bias relates to misattributing the function of a behavior. Raters have preconceived notions about why behaviors happen, and they are more likely to remember instances that confirm their beliefs, and less likely to remember events that are counter to their beliefs.

Implicit Bias. Implicit bias occurs when people attribute certain characteristics or stereotypes to those from another social, ethnic, or socioeconomic group unconsciously. Implicit thoughts and associations occur without conscious thought and can occur even in people who would otherwise reject the stereotypes (Banks et al., 2006). In education, implicit bias can lead to teachers interacting with students of different ethnic groups in different ways. Even when a teacher has clearly articulated expectations and norms in their classroom, implicit bias can

influence how they use classroom management and assess student behavior (Watkins & Kurtz, 2001). Implicit bias can also minimize the accomplishments of certain groups while highlighting failures.

Systemic racism. Systemic racism occurs when practices that disadvantage marginalized populations are embedded in the policies and procedures of an institution (Young, 2011). In short, systemic racism occurs when individuals and their biases are removed from the equation and a system continues to disadvantage a marginalized population. In the realm of special education, systemic racism can affect the entirety of a student's experience. When the academic needs and behaviors of students of color are treated differently than behaviors of white students, it can lead to students of color being referred to special education more quickly (de Valenzuela, Copeland, Huaqing, & Park, 2006). Evaluations can include assessments that were normed on white students, which can lead to diminished accuracy for students of color. This can lead to students receiving educational identifications that do not accurately align with their needs and placement in settings that are more restrictive than necessary. For adults and guardians, systemic racism can affect their ability to advocate for their student's needs (Watkins & Kurtz, 2001).

Equity. Equity is the principal that individuals and specific groups receive resources that are tailored to meet their specific needs, with the goal that there is equality in outcomes across the population (Cruz & Stake, 2012). These needs can be generational in nature and an equitable approach can mean addressing a shortfall that has been accumulating for decades. This approach involves evaluating systems and approaches to make sure that those with the greatest need receive the greatest support.

Problem Statement

Statistically, the representation of ethnic groups in special education should match the population parameters of a community at large. Disproportionality occurs when an ethnic group is either overrepresented or underrepresented within an identification compared to their prevalence in the community. Students' special education identifications can determine their school setting, the services they receive, and the level of stigma associated with their disability. In this paper, I examine the role of social and cultural factors in the interpretation and evaluation of student behavior during the pre-referral and initial evaluation process. The special education initial evaluation process determines whether students qualify for service and what type of modifications or accommodations to general education curricula they require. Initial evaluation also assigns primary and secondary identifications under which students receive services. Once students are removed from the general education path for special education services, it can affect their ability to attain the same outcomes as their non-disabled peers. Some identifications such as Emotional/ Behavior Disorders (EBD) also carry stigma that can influence how they are treated within the school system and society.

The evaluation process has many procedural safeguards to ensure that students are properly evaluated and identified, but it can still be influenced by the biases of those conducting the assessments (Splett et al., 2020). If the interpretation of student behavior is skewed by cultural or social biases, it may prejudice an evaluator towards one identification over another (Watkins & Kurtz, 2001; de Valenzuela et al., 2006). The evaluators' impressions of a student's behavior in class can influence the results of observations as well as what kinds of formal assessments are included in the evaluation. This paper examines the question of how cultural and

social biases affect the assessment of student behavior and influence the identification categories of students across ethnic groups. I hypothesize that this research will show that behaviors of white students are more often ascribed to an unmet developmental need and can lead towards identifications such as Other Health Disabilities (OHD) or Autism Spectrum Disorders (ASD), while behaviors from students of color are pathologized and lead to identifications like EBD.

Practical Consequences

In this section, I address the potential applied outcomes of this paper. The findings from this paper may have implications for overall educational practice. These implications could also affect students, teachers, and administrators.

Impacts on Educational Practice

Addressing racial bias in behavior assessment for initial evaluations may affect educational practice as a whole. Diminishing educational misidentification would lead to more students being given services that actually match their educational needs. This kind of support would allow students to have greater success in less restrictive school settings with fewer deviations from general education curricula. Proper identification would also lead to social and cultural representation levels in special education categories that better match extant population parameters. A more representative special education system would help diminish the stigma of certain educational labels such as EBD. Taken together, this change could create an educational system that is more equitable and responsive to student needs, creating a system for greater student success.

Impacts on Students

The positive effects of addressing racial bias in behavior assessment may also impact the experiences of individual students. If a student is given an educational label that matches their actual needs, they are more likely to be placed in a setting that is supportive of their growth. They will receive specialized services that help them learn and feel more successful in school. The more effective support will decrease the anxiety they feel in school since their needs are being met. They will exit their school experience better equipped for success in the outside world.

Impacts on Teachers

These changes may also have benefits for classroom teachers. Better understanding of behavior and assessment would give teachers more effective skills to interpret and respond to student behavior in the classroom. This knowledge could lead to a different and more effective approach to classroom management. Special education teachers and specialists would have a new point of view on how to assess behavior and develop supports for a student that meet their actual needs. These changes and the creation of new proactive measures would reduce the amount of time that teachers spend on responding to disruptive behaviors and let them devote more time to instruction.

Impacts on Administration

An educational system where teachers are better able to support students may have benefits for administrators. If students are better matched to the programs and specialists they need, administrators may be able to streamline these support systems and redirect resources to other areas of the school. Increased success could also lead to fewer suspensions or disruptive

behaviors that need to be managed at the administrator level, creating time to be devoted to other needs.

Incorrect identification of special education category can have long lasting effects on both the individual student and the educational system as a whole. Addressing racial bias in behavioral assessment during initial referral and evaluation for special education will create positive effects across the entire school system. Individual students will benefit from services that better meet their needs. Teachers will be able to be more effective in their instruction, which will create benefits for the entire school system as it becomes more efficient.

Chapter 2: Review of the Literature

This review examines racial bias in behavioral assessment. In Chapter One, the research questions and the significance of the study were addressed. In Chapter Two, studies examining racial bias in behavioral assessment are presented and analyzed. In Chapter Three, the findings from the analysis will be presented, and the implications of the research will be addressed.

Introduction

Students of color are not always represented across disability areas at rates that match their proportion of a student body at large (Artiles & Trent, 1994). Categorical placements in special education can have a profound effect on what kinds of services students receive and what kinds of outcomes are likely after their school career (Coutinho & Oswald, 1996). This paper examines the role of racial bias in the interpretation and assessment of student behavior during the initial and the evaluation processes.

Structure of the Review

This review will examine these topics and present literature topically. An initial review of literature identified three important themes across studies. The first theme is the prevalence of racial disproportionality across special education categories and its effect on student outcomes. The second theme addresses the causes of bias in assessment and the prevalence of racial bias in behavioral assessment. The third theme addresses best practices to mitigate the effects of racial bias in behavioral assessment.

Scope of the Review

In conducting this preliminary identification of appropriate studies in the literature, I performed a computational search of the Academic Premier database, the ERIC database, and the

Teacher Reference Center database. During these initial searches, I did not delimit the year of publication as to have the widest scope of studies. Searches of the databases found many studies on the effects of race in school discipline and behavioral referrals. The effects of racial bias in school discipline has been widely studied and is outside of the scope of this review. Studies of school discipline were only included if they considered behavioral assessments or screenings. An initial search using the terms ‘special education’, AND ‘behavior assessment’, AND ‘bias’ returned 15 items. A search using the terms ‘special education’, AND ‘assessment’, AND ‘racial bias’ returned 19 results. A search using the terms ‘special education, AND ‘behavior’, AND ‘evaluation’, AND ‘bias’ returned 64 results. A final search using the terms ‘special education’, AND ‘behavior assessment’, AND ‘representation’ returned 8 results. After my initial searches, I used bibliographic branching to locate fugitive studies. A review of the initial set of studies led to the identification of 4 additional studies.

Major Researcher and Theorists

The results from the computational and manual searches for appropriate studies revealed a number of patterns within the authorship of the articles. The earliest researcher to consider racial disproportionality in special education was Dunn (1968). Dunn’s article noticed a pattern of overrepresentation in the MMR category. Artiles and Trent (1994) used the tenets of Dunn (1968) to examine other categories of disabilities. Their findings expanded the research to new disability areas. A number of authors have contributed to the literature on racial bias and disproportionality in special education. Coutinho and Oswald wrote 23 articles on the topic. Their research began appearing in 1995. More recently, Splett has emerged as an important

researcher on the topic of rater bias in behavioral assessment. Her first article on the topic was published in 2009.

Participants

Racial bias in behavioral assessment has broad implications for the field of special education for both students and teachers. The participants in the reviewed studies exhibited common characteristics. For all of the studies, the race or ethnicity of students was a relevant factor. In all studies, the social-behavioral skills of the students were relevant to the research.

Several of the studies (e.g. De Valenzuela et al., 2006; Sullivan & Bal, 2013) that focused on disproportionate representation in special education investigated state and district level data. These data included diverse students whose demographics matched the population parameters of the community at large. These students had placements across all disability labels and identifications in all areas.

Many of the studies (e.g. Mason et al., 2014; Shapiro et al., 2016; Smith-Millman et al., 2017) investigated universal behavioral assessments that were administered to students by classroom teachers. For these studies, the demographics of both the students and teachers were relevant factors. The studies of universal screeners all involved elementary school students in the general education setting. The demographic data for both students and teachers was compared to assessment scores to determine the amount of variance and propose attributions for the variance.

One study involved a case study of a single student, his father, and his teacher. In this study, the student was an African American elementary student. Concerns about the student's social-behavioral abilities were relevant factors.

Presentation of the Studies

The presence and consequences of racial bias in the interpretation and assessment of student behavior during the initial stages of referral and throughout evaluation processes have been widely investigated. Three themes recur across these studies. The first theme is the presence and effects of racial disproportionality in special education. The second theme is the presence and scope of racial bias in behavioral assessment. The third theme addresses best practices to reduce the effects of racial bias in behavioral assessment.

Disproportionality in Special Education.

In special education evaluation and placement, a student's educational identification must match their specific needs. The goal of special education is to have students in the least restrictive educational setting possible. The least restrictive environment for a student would be to remain in the general education setting. It can be assumed that the population of students that receive special education services would match the racial and ethnic compositions of the population at large. Within a special education population, it can also be assumed that the racial and ethnic compositions of each disability area should generally match that of the population at large. A significant overrepresentation or underrepresentation of a racial or ethnic group in special education can be indicative that the special education system is not equitably serving the student population. This section will examine five studies that address the topic of racial disproportionality in special education.

Artiles and Trent (1994) conducted a comprehensive review of the literature related to disproportionate representation in special education. Their review focused on analyzing and synthesizing the body of research completed since Dunn (1968). Their analysis found that the

overrepresentation of minority students has continued since the publication of Dunn and that patterns of overrepresentation exist in disability categories beyond MMR. Their paper describes lack of cohesive analyses into disproportionality as an impediment to proper policy and interventions and offers directions for future policy and research (Artiles & Trent, 1994).

Coutinho and Oswald (1996) examined patterns in the placements for students with serious emotional disturbance between 1988 and 1991. Their review highlighted the difference in reporting between various states. They examine the nuances of disproportionality data and how differences in counting and reporting can create data that are not comparable between areas. They found that demographic factors were significantly related to the placements for students with emotional disturbance, but that the relationship varied across the nation (Coutinho & Oswald, 1996).

De Valenzuela, Copeland, Huaqing, and Park (2006) investigated the special education referrals of a large metropolitan school district with between 85,000 and 87,000 students. The student body contained 37.8% students identified as white, 3.8% identified as African American, 50.5% identified as Hispanic, and 7.8% identified as other ethnicities. The researchers used data from the district's existing Student Information System (SIS) database. They identified the group of students receiving special education services ($n = 17,870$) and analyzed the data to determine what patterns existed in the population. The researchers used statistical analyses to determine the ways in which membership in a minority group or Low English Proficiency affected disability labels. They found that in this student population, African American students were disproportionately identified in the EBD category and that all minority students were disproportionately placed in more restrictive settings (De Valenzuela et al., 2006).

Sullivan and Bal (2013) investigated student data from a school district in the Midwest to determine the extent of racial disproportionality in its special education population. The study used data from students ($n = 17,837$) from 39 schools. The data included several measures of demographic information for the students as well as their educational placement. The study computed the risk index, a measure of likelihood of special education identification, for each demographic grouping and reported the finding as an odds ratio. The study found that Black students were much more likely to be identified for special education (OR=24.65) than white students (OR = 13.07). The study also found that Black students were over represented in the Emotionally Disturbed disability category (Sullivan & Bal, 2013).

Guzmán & Fernandez (2014) analyzed the representation of Culturally and Linguistically Diverse (CLD) students in special education settings. Four districts and 13 elementary schools in south Texas were purposefully identified. Each school and district had a majority minority student body. The study disaggregated state, district, and school level data to determine the rates of representation for students of different races and ethnicities across special education labels. Guzmán & Fernandez (2014) reported three of the four districts had a higher rate of students in special education than the state mean. Within these districts, African American and Latino/a students were most likely to be overrepresented in special education. African American students were more likely to be overrepresented in the EBD category than Latino/a students (Guzmán & Fernandez, 2014).

Bias in Assessment

Behavioral assessments are an important tool that can be used during the pre-referral, evaluation, and re-evaluation processes for special education qualification as well as for

universal screenings. These assessments are designed and normed to ensure that they provide the most objective measure of behavioral performance as possible. Within these assessments, rater bias can affect student scores. In this section, six studies that address the topic of racial rater bias in behavioral assessment are reviewed

Watkins and Kurtz (2001) critiqued the literature and completed a case study about overrepresentation of African American boys in special education. Their review examined studies dating back to 1977, and it revealed a pattern of assessments for black students being more likely to lead to a special education referral than white students. Their review investigated the role of racial bias in the referral process for African American boys. A case study of an 8-year-old black boy supplemented their critique. The boy's teacher and the boy's father each completed rating forms related to the boy's behavioral needs. The results found that the boy's teacher was less able to recognize internalizing behaviors and overrepresented disruptive behaviors. The paper argues for the use of solutions focused interventions to address the shortcomings of behavioral assessment (Watkins & Kurtz, 1994).

Neal, McCray, Webb-Johnson, and Bridgest (2003) examined teachers' perceptions of African American males and how it affected their decision-making for educational planning. The study involved middle school teachers ($n = 136$). They were shown a series of videos that demonstrated an African American student and a white student walking. Each student demonstrated two walks: one in a manner that demonstrated a stroll that would be typical of African American students, and one walk that would be typical of white students. Teachers then rated each student on a number of factors and completed a questionnaire based on the Adjective Checklist. The researchers then conducted a factorial ANOVA to analyze the variance. The study

found that teachers perceived the students who exhibited the stroll walk, regardless of actual ethnicity, as more aggressive and more in need of special education services (Neal et al., 2003).

Chang and Sue (2003) examined the effect of student race on the results of teacher behavioral evaluation. The authors presented teachers ($n = 197$) with vignettes of behavior (internalizing, externalizing, and typical) and paired the vignettes with photos of a male child (African American, Asian American, or Caucasian). The study did not find any evidence of racial bias in the ratings of African American or Caucasian. However, patterns of racial bias for the ratings of internalizing behavior for the Asian American group were extant. The study highlights the lack of bias in the African American group as notable (Chang & Sue, 2003).

Mason, Gunersel, and Ney (2014) completed a criterion-focused review on the topic of cultural and ethnic bias in teacher ratings of behavior. Their review of literature collected studies that involved teacher ratings of behavior that impacted a student's educational placement, included demographic data on the student and teacher, and had a "defensible criterion measure of behavior was used or collected in the study that allowed for comparison against teacher ratings" (Mason et al., 2014). Their review identified 13 studies that met their requirements. They found mixed evidence for bias due to student ethnicity, but strong evidence for bias related to teacher culture (Mason et al., 2014).

Shapiro, Kim, Accomazzon, and Roscoe (2016) investigated sources of rater bias in an assessment of social emotional competence. The participants were teachers ($n = 72$) in a racially diverse school district in California. The teachers administered the Devereux Student Strengths Assessment- Mini (DESSA-Mini) to elementary school students ($n = 1676$) as part of the implementation of a new social emotional learning (SEL) intervention. The researchers used

linear modeling to estimate the relationship between teachers' scores on the DESSA-Mini and various demographic data. The analysis found that 16% of variance in the scores could be attributed to rater bias. The analysis was able to account for most of the rater variance with measures related to teacher beliefs about SEL. Only 10% of the variance was left unexplained (Shapiro et al., 2016).

In 2017, researchers examined the role of teacher bias in universal screening scores (Smith-Millman et al., 2017). The study included elementary students ($n = 3063$) and teachers ($n = 151$) from three sample groups in Ohio, South Carolina, and Kentucky. The data for each sample came from social emotional screenings administered independently of this study. The screenings examined were the DESSA-Mini, the Strengths and Difficulties Questionnaire (SDQ), and the Behavioral and Emotional Screening System (BESS). The researchers used statistical analysis to determine the intra-class correlation coefficient (ICC), a measure of the amount of variance that can be attributed to between teacher differences. For the DESSA-Mini sample, the ICC was .205, meaning that 20.5% of the variance is attributable to differences between raters. The ICC for the SDQ sample was .077. The ICC of the BESS sample was .121 (Smith-Millman et al., 2017).

A 2020 study examined the presence of between-teacher variance in behavioral assessment (Splett et al., 2020). The study examined students ($n = 2450$) and teachers ($n = 160$) at elementary schools in a Southeastern US school district. The teachers completed the BESS for their students as well as a survey about their training and perspectives on common problem behaviors. The study found internalizing behaviors to have greater between teacher effects (ICC = .23) than externalizing behaviors (ICC = .12) or adaptive behaviors (ICC = .14). The study

found grade, gender, and race/ethnicity were statistically significant predictors of student score. The study found some effects of teacher-level variables on scores, but the authors argue that more research is needed on the topic (Splett et al., 2020).

Solutions for Racial Bias in Assessment

Systematic bias in the special education referral system can have a profound impact on outcomes for racially diverse students. Changes to the referral and behavioral assessment process can help mitigate the effect of racial bias. In this section, two papers that address solutions to racial bias in behavioral assessment are addressed.

Moreno, Wong-Lo, and Bullock (2014) considered solutions to address overrepresentation of culturally and linguistically diverse students in special education. Their research focused on interventions to address behavioral concerns. In their review, they argue for the inclusion of a wide variety of data for consideration in special education decision making. The authors propose the use of a ‘Culturally Attuned FBA’ to evaluate behavior and collect contextual information about the student. The writers establish that different cultural norms may create a misinterpretation of problem behaviors in a FBA. They argue that this process must include a family interview with proper cultural supports in order to better understand and evaluate student behavior (Moreno et al., 2014).

In a 2017 review, staff from the Washington D.C. Public schools outlined the steps the district took to address racial disproportionality in their special education programs (Bradley Williams et al., 2017). The district implemented a strong Response to Intervention (RTI) program as a step before students receive a special education referral. The goal of RTI is to provide interventions and supports to students while they are still in general education with the

hope of avoiding a special education referral. The district also developed a library of Evidence-Based Treatments (EBT) and Evidence-Based Interventions (EBI) to address socioemotional needs of the students. The team then created protocols to coordinate all of these systems to ensure students received comprehensive care (Bradley Williams et al., 2017).

Major Conclusions

This section will highlight the findings of the literature contained within this review. The findings will be presented by theme.

Disproportionality in Special Education

Artiles and Trent (1994) found that racial disproportionality was extant in many categorical identifications in special education. Rates of representation in special education varies across the nation, but demographic data are significantly related to special education identification rates and labels (Coutinho & Oswald, 1996). African American students are overrepresented under EBD labels compared to white students and other minority groups (De Valenzuela et al., 2006; Sullivan & Bal, 2013; Guzmán & Fernandez, 2014).

Bias in Assessment

Teachers are less likely to accurately rate internalized behaviors on behavioral assessments than externalized behaviors (Watkins & Kurtz, 1994). Teachers are more likely to label individuals displaying racialized movement and mannerisms as more aggressive and in need of special education (Neal et al., 2003). There is evidence of racial bias in assessments of internalizing behaviors in Asian American students (Chang & Sue, 2003). There is evidence of teacher-level rater bias in behavioral assessments. Much of the bias is attributable to demographic data about the raters (Shapiro et al., 2016; Smith-Millman et al., 2017; Splett et al.,

2020). A data-driven investigation of racial bias in behavioral assessment found mixed evidence to support the presence of bias (Mason et al., 2014).

Solutions for Racial Bias in Assessment

Including the input of family in the assessment process can add important information and context for assessing student behavior (Moreno et al.2014). Targeted interventions during the pre-referral process is a tool that can mitigate the effects of racial bias in the special education referral system (Bradley Williams et al., 2017).

Chapter 3: Summary and Discussion

Summary of Findings

A tenet of special education practice is that students are to be placed in the least restrictive environment possible given their specific educational, behavioral, and medical needs (Coutinho & Oswald, 1996). In any situation, the least restrictive environment available would be to not enter into the special education system altogether and remain in a general education setting (Coutinho & Oswald, 1996). Students of color are represented in special education at rates higher than their membership in the greater population (Artiles & Trent, 1994). Within special education, minority students are disproportionately represented in specific categorical identifications and educational settings. African American students are more likely to receive special education identifications related to EBD (Sullivan & Bal, 2013). African American students are more likely to be placed in more restrictive special education settings than their peers (De Valenzuela et al., 2006).

Referrals into special education follow a due process to ensure that student educational rights are protected (Artiles & Trent, 1995). Formal assessment has an important role in determining educational and behavioral needs before and during the special education referral process. Behavioral assessments administered by licensed teachers are used as a universal screening tool to identify at risk students. Assessments are also used to determine the nature of a student's needs during the initial evaluation process (Watkins & Kurtz, 2001). Behavior assessments are meant to be used across a diverse population of students. They are designed to be unbiased to ensure that students from different racial groups receive results that accurately indicate their needs (Splett et al., 2020). The responses to these assessments rely on the

perspective of the evaluator to assess the student's behavior. This creates the opportunity for racial rater bias to influence the findings for students from ethnically and racially diverse backgrounds (Watkins & Kurtz, 2001).

This review investigated the body of research related to racial bias in behavioral assessment used during the pre-referral and initial evaluation period. This paper examined whether racial bias affects assessments of the severity and function of student behavior and whether bias in behavioral assessment contributes to the disproportionate representation of minority students within special education. Finally, this review investigated what practices can be implemented to mitigate the effects of racial bias when assessing students with behavioral needs. This summary of the review's findings is presented topically by theme.

Disproportionality in Special Education

The five studies presented on the topic of disproportionality in special education contained similar conclusions about the prevalence of disproportionality in racial representation in special education.

Large scale studies of racial overrepresentation in special education are confounded by a lack of standardization in the data (Artiles & Trent, 1994). Individual states and districts collect and report demographic and special education data with different standards. These data are often aggregated into larger data sets, a practice that can obscure the data needed for research (Coutinho & Oswald, 1996). Within the literature on disproportionality in special education, there is no standardization of methodology in how the presence and extent of disproportionality is measured or reported (Coutinho & Oswald, 1996). This lack of standardization makes it

difficult to synthesize multiple studies of individual settings into a larger analysis of disproportionality.

Individual studies have shown that students in racial and ethnic minorities are disproportionately represented in special education. Studies that compared state and district wide special education data found that African American students were overrepresented in special education compared to population parameters of the community at large (De Valenzuela et al., 2006; Sullivan & Bal, 2013). African American students were overrepresented in certain categorical identifications. African American students were more likely to receive a categorical identification of Emotional/Behavioral Disabilities than other racial groups (De Valenzuela et al., 2006; Sullivan & Bal, 2013; Guzmán & Fernandez, 2014). Student racial identity also impacted the level of special education services received. Minority students were more likely to be placed in a more restrictive special education setting than their white peers (De Valenzuela et al., 2006).

Bias in Assessment

The six studies presented on the topic of racial bias in behavioral assessment demonstrate the presence of rater bias in assessments, but do not indicate a systemic pattern of racial bias in behavior assessment.

Studies have shown patterns of rater bias in behavioral assessment. Large scale studies that assessed teacher scores on standardized universal behavior assessments found as much as 20.5% of the variability in the scores could be attributed to rater level differences (Smith-Millman et al., 2017). The variance in teacher ratings on behavioral assessment has largely been attributed to teacher level variables. One study was able to attribute 90% of the rater level variance to variables such as years of experience, age, gender, and beliefs about Social

Emotional Learning (Shapiro et al., 2016). The visibility of assessed behaviors has an effect on the extent of rater bias in assessment data. Watkins and Kurtz's case study (2001) demonstrated that the student's teacher rated externalizing behaviors with a high acuity, but missed internalizing behaviors that his father noticed. This pattern was replicated in studies involving large bodies of students assessed with formal behavior assessments. A study found that higher rater bias in scores of internalizing behaviors ($ICC = .23$) than in scores of externalizing behavior ($ICC = .12$) (Splett et al., 2020).

Studies have found instances of racial rater bias in behavioral assessment in specific circumstances and involving specific populations. A study of racialized movement and mannerisms found that students displaying movement patterns that were stereotyped after African Americans were rated as more likely to be rated as aggressive and more in need of special education (Neal et al., 2003). A study pairing vignettes of behaviors with images of African American, Asian, and Caucasian students found no evidence of racial bias in the assessment of the African American students. However, the ratings of Asian American students found significant ($p < .001$) racial bias in the scores of internalizing behaviors (Chang & Sue, 2003).

Patterns of racial rater bias have not been found in any large scale studies of behavior assessment. A criterion-focused review found mixed evidence of bias due to student ethnicity (Mason et al., 2014). Most of the rater bias in behavioral assessment can be attributed to teacher demographics or other variables (Shapiro et al., 2016). Studies have found small portions of the identified rater bias that cannot be attributable to demographics or other variables, but more research is needed on the topic (Shapiro et al., 2016; Splett et al., 2020).

Solutions for Racial Bias in Assessment

The research has identified best practices for minimizing the effect of racial rater bias in behavioral assessment. These approaches involve proactive measures during the pre-referral intervention and evaluation processes. An RTI program that is targeted to specific student needs can provide support during the pre-referral process to address unmet needs and reduce the intrusiveness of a special education intervention. This program can include EBT and EBI that are designed to address systemic racial inequalities to provide comprehensive care (Bradley Williams et al., 2017). During the evaluation process, the individualized education program (IEP) team should consider a broad assortment of data to mitigate the effects of any racial bias in a specific assessment. These data should include measures that are designed to be culturally responsive. A Culturally Attuned FBA is a tool that can be used to receive input from a student's family. Family input can highlight the role of cultural factors in the function of a student's behavior (Moreno et al., 2014).

Discussion of Findings

This section will discuss the findings of the review of the literature about racial bias in behavioral assessment. The findings will be organized by theme and there will be a final section outlining implications for future educational practice.

Disproportionality in Special Education

There is clear evidence in the literature for the presence of racial disproportionality in special education. The studies reviewed in this paper found racial disparity in special education referrals (Artiles & Trent, 1994), in categorical definition (de Valenzuela et al., 2006), and in special education setting (Coutinho & Oswald, 1996). Black students are overrepresented in

special education compared to the population at large (Coutinho & Oswald, 1996). Within special education, black students are overrepresented in disability categories related to emotional and behavioral disabilities (Sullivan & Bal, 2013). Black students are also more likely to receive a larger number of identification labels and are more likely to be placed in a more restrictive setting (Coutinho & Oswald, 1996).

The presence of racially disproportionate special education populations has been proven by studies at the school, district, and state level (Artiles & Trent, 1994). Depending on the intended audience, the findings of these studies are reported using different measures. The lack of standardization of methods in the study of racial disproportionality has made it difficult to synthesize these data into an overall assessment of racial representation nationwide. The relationship between demographic factors and special education placements also varies regionally (Coutinho & Oswald, 1996). More research is needed using standardized measures to establish large scale patterns in racial disproportionality.

Despite the lack of large scale standardized data, the research shows that the overrepresentation of racial minorities in special education is worthy of investigation. The regional variance in disproportionality data indicates that there may be multiple causal factors that lead to disproportionate representation. In the absence of large scale study into disproportionality, investigating potential causes remains a worthwhile endeavor.

Bias in Assessment

The extant research of racial bias in behavioral assessment does not support the conclusion that there is widespread racial bias in behavioral assessment. Mason, Gunersel, and Ney's criterion focused review (2014) found mixed evidence about the presence of ethnic and

cultural bias in teacher ratings of student behavior. In their paper, the studies that suggested ethnic bias found the bias as a result of narrow experimental focus. Chang and Sue (2003) found ethnic bias by pairing vignettes of behaviors with images of children from different ethnic backgrounds and having teachers complete behavior rating forms. Neal, McCray, Webb-Johnson, and Bridgest (2003) found ethnic bias by displaying vignettes of racially stereotyped walks and asking teachers to assess the children on a number of factors.

Studies of rater bias in behavioral assessment used in a school environment did not find evidence of systematic racial bias. The studies in this review used universal screening data to provide a large sample size (e.g. Shapiro et al., 2016; Smith-Millman et al., 2017). Using statistical analysis, the studies were able to determine how much variance in the scores was due to rater-level characteristics. These studies found levels of rater bias between 16% and 20.5% (Shapiro et al., 2016; Smith-Millman et al., 2017). The majority of the rater bias was attributable to demographic and teacher belief data (Shapiro et al., 2016). The studies did not address whether racial bias may account for some of the variance.

Two studies addressed the types of behaviors that teachers may over and under rate in behavioral assessment. Watkins and Kurtz (1994) reviewed a case study of an 8 year old black boy. They compared ratings completed by his classroom teacher and by his father. Their review found that the classroom teacher was less able to recognize signs of depression and withdrawal and overstated disruptive behaviors (Watkins & Kurtz, 1994). On a larger scale, a study of between teacher effects in behavioral assessment found that there is much more variance in scores of internalizing behaviors than externalizing behaviors. The externalized behavior that are more often noticed by teachers are likelier to lead to an EBD identification than internalized

behaviors (Splett et al., 2020). Neither study directly investigated the role of racial bias in these discrepancies.

Solutions for Racial Bias in Assessment

There are best practices to mitigate the effect of racial bias in behavior assessment. These practices focus on meeting the specific needs of diverse students and including more diverse voices in the assessment process. The review of practices used in the Washington D.C. Public schools outlines an approach that considers the social, economic, and emotional inequities that exist for students from racial and ethnic minorities. They created a comprehensive system of interventions to support students and increased the collaboration between different teams to ensure well rounded care (Bradley Williams et al., 2017). These changes were made to prevent students from entering in to the special education referral system in the first place. Moreno, Wong-Lo, and Bullock (2014) argue for more family inclusion in the assessment process for racially and ethnically diverse students. They outline a procedure to receive family input in the FBA process. This process must be done thoughtfully in order to be accessible to diverse families. They argue that different cultural norms could cause a misinterpretation of the function of behaviors (Moreno et al. 2014).

Despite the inconclusive evidence for widespread racial bias in behavioral assessment, the use of these practices will be helpful to better support diverse students. These interventions and assessments provide additional support for diverse students and give families more input in the special education evaluation process. They may be an important component of overall changes to address racially disproportionate representation in special education.

Implications for Schools and Teachers

The findings of this review have implications for how schools and teachers use assessment in their decision making. The findings do not support the presences of widespread racial bias in behavioral assessment, but they do provide examples of rater bias in universal behavior assessment (Shapiro et al., 2016; Smith-Millman et al., 2017) and racial bias in experimental settings (Chang & Sue, 2003; Neal et al., 2003).

The use of behavior assessment as universal screening has a clear benefit as part of the school's duty to identify students who may need special education services, despite the possibility for bias. Once students are identified, schools and teachers must be mindful of racial bias as they make decisions on how to support the student. A strong RTI program that uses targeted EBT and EBI can address the widespread inequities that affect racially and ethnically diverse students (Bradley Williams et al., 2017). This approach may provide the support needed to prevent a student from entering into the special education system.

During an initial special education evaluation, the IEP team must be mindful of patterns of misrepresenting student behavior. They should include data from many sources to best understand the functions of student behavior and the supports needed. It is crucial that a source of data comes from families of diverse students. Tools such as the Culturally Attuned FBA provide important context in understanding what cultural factors may affect behavior (Moreno et al. 2014). Teachers can better understand student needs by including families in the evaluation process. Families can also highlight behaviors that may go unnoticed in the classroom (Watkins & Kurtz, 1994).

Implications for Students and Families

The findings of this review have implications for students and families who navigate the special education referral and evaluation process. This review highlights the importance of adding the input of families in the decision making process. Behavioral assessments have patterns of rater bias which can affect how student behavior is assessed. Even though this bias may not be racial in nature, families should be mindful that ratings may not be representative of their student (Watkins & Kurtz, 1994). Families must do their best to understand their rights during the referral and evaluation process. They can request documentation related the interventions used in the RTI process to make sure that substantive EBP are used to support their child (Bradley Williams et al., 2017). Families can also provide input and context about their student. They can highlight any needs that they believe were missed during assessment. They can also provide background information to address any cultural differences that may impact how behavior is interpreted.

Implications for Future Research

The findings of this review have implications for future research on racial bias in behavioral assessment. It is clear that more research is needed on the subject. Additional research must directly consider whether racial bias is present in behavioral assessment, including in reviews of universal screenings. The extant research investigates sources of rater bias in universal assessment, but does not directly address the presence of racial bias. There must be studies that address whether the racial bias seen in experimental settings (e.g. Chang & Sue, 2003; Neal et al., 2003) has a widespread presences in behavioral assessment in the school setting.

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