Practitioner Brief Series

Disproportionate Representation of Culturally and Linguistically Diverse Students in Special Education: **Measuring the Problem**



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NATIONAL CENTER FOR Culturally Responsive Educational Systems

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This document is available in alternate formats upon request.

Funded by the U.S. Department of Education, Office of Special Education Programs. Award No. H326E020003.

The overrepresentation of culturally and linguistically diverse children in special education and the quality of their educational experiences have been regarded as among the most significant issues faced by the U.S. public school system in the past 30 years. The Individual with Disabilities Education Act (IDEA) entitles all individuals with disabilities to a free appropriate public education (FAPE) and mandates nondiscriminatory assessment, identification, and placement of children with disabilities. Children are not to be identified as disabled because of poor achievement due to environmental "disadvantage" or ethnic, linguistic, or racial difference. This is made clear by the prescribed evaluation procedures and the definitions of disability conditions in IDEA. However, nationally, some ethnic groups continue to be overrepresented as disabled, particularly as mildly mentally retarded (MMR) and seriously emotionally disturbed (SED). State and local representation rates vary widely but in many cases show even more marked patterns of overrepresentation (Oswald, 2001).

A History of Litigation

From a legal perspective, evidence of a pattern of disproportionate representation has been sufficient to initiate a legal or policy action to reduce disproportionality. Racial and ethnic minorities are protected from discrimination in The Equal Protection Clause of the 14th Amendment to the United States Constitution, Title VI of the Civil Rights Act of 1974, and Section 504 of the Rehabilitation Act of 1973. The overrepresentation of ethnic and linguistic minorities in special education has resulted in several well known court cases. However, findings have been mixed when allegations of discrimination were based on overrepresentation. In these cases the court did *not* find that reducing disproportionate representation per se was the appropriate remedy to assure equal educational opportunity and improve the educational success of culturally and linguistically diverse students.

English Language Learners

Overrepresentation of English Language Learners (ELL) in programs for students with MMR has been the basis for litigation in a number of cases. In Diana (1970) and Guadalupe (1972) the complaints were about the administration of English language IQ tests to students who were ELL, about due process procedural safeguards, and about the training of evaluators and special educators. Rulings in these cases required evaluators to test in the primary language, to use a variety of measures (including nonverbal and adaptive behavior instruments), and to implement additional due process procedural safeguards.

Larry P. v. Riles

The case of Larry P. v. Riles (1972, 1979, 1984, 1986) in California is probably the best known challenge to disproportionate representation. The outcome of this trial was to declare the disproportionate representation of African American students in programs for students with MMR discriminatory, ban the use of IQ tests with African American students, and order the elimination of overrepresentation of African American students in Educable Mental Retardation (EMR) programs (Reschly, 1988; MacMillan & Balow, 1991).

Other Cases

In 1980, courts ruled in PASE et al. v. Hannon that IQ test bias was not a significant issue in the assessment process and that the observed overrepresentation was not discriminatory (PASE, 1980; Reschly, 1991). In the Marshall et al. v. Georgia (1984, 1985) and the S-1 v. Turlington (1986) cases, overrepresentation of African American students in EMR programs was at issue, but overrepresentation per se was not found to be sufficient evidence of differential treatment of African Americans. While disproportionality may signal the need to investigate, features of educational programs and procedures were the focus of the rulings.

Regulations Regarding Disproportionate Representation

Throughout the 1980s and 1990s, federal policy treated the existence of disproportionality as evidence of potential discrimination. Through the U.S. Office for Civil Rights (OCR), the ethnic representation of students in special education at the state and local educational level has been monitored every two years. Where overrepresentation exists, OCR has required many systems to implement corrective plans to reduce that disproportionality.

1997 Amendments to IDEA

Federal concern about the educational experience of culturally and linguistically diverse students in special education was apparent when IDEA was amended in 1991 and 1997. In 1991, IDEA (P. L. 101-476) cited a compelling need to obtain greater success in the education of culturally and linguistically diverse children with disabilities. The most recent amendments to IDEA (P. L. 105-17) reiterate that concern:

(a) Greater efforts are needed to prevent the intensification of problems connected with mislabeling and high dropout rates among culturally and linguistically diverse children with disabilities. The drop-out rate is 68 percent higher for culturally and linguistically diverse students than for White students and more than 50 percent of culturally and linguistically diverse students in large cities drop out of school (Section 601 (c)(8).

(b) More culturally and linguistically diverse children continue to be served in special education than would be expected from the percentage of culturally and linguistically diverse students in the general school population. Although African Americans represent 16 percent of elementary and secondary enrollments, they constitute 21 percent of total enrollments in special education.

(c) African American children in poverty are 2.3 times more likely to be identified by their teacher as having mental retardation than their White counterparts.

The 1997 amendments to IDEA (P. L. 105-17) also added the requirement that states collect data for the purpose of monitoring and reducing disproportionality (Section 674). Congress found the need to be particularly urgent because the number of children from diverse backgrounds in the nation's schools was increasing steadily. As of 2000, one in three children was African American, Hispanic, Asian-American or American Indian. Children of color now comprise more than 75% of the enrollment in many large city schools, and White students have become a minority in many more.

Measuring the Problem

Given this renewed attention on the subject, policymakers were faced with an important problem: the research community had not reached a consensus on the preferred method for measuring the extent of disproportionality. However, there are several alternatives that have been explored in some depth.

Composition Index

Early researchers in the disproportionality literature used the composition index as the tool for measuring over (or under) representation (Chinn & Hughes, 1987). The composition index answers questions such as: What percent of students in special education are Black? The extent of disproportionality is determined by comparing the composition index to the percent of all students who are Black. A recent convention has evolved

suggesting that a difference of twenty percentage points constitutes significant disproportionality. Thus, if 50% of special education students in a district are Black but only 30% of all students in the district are Black, overrepresentation might be said to exist.

This approach was adopted by OSEP in their initial implementation of the IDEA 1997 mandate to monitor disproportionality. In the Annual Progress Report, states were asked to calculate disproportionality baseline/trend data using the composition index. The Annual Progress Report also adopted the conventional cut-point for what constitutes disproportionality, i.e., twenty percentage points difference. OSEP is currently re-examining the instructions for the Annual Progress Report and it is likely that an alternative method will be used for the 2005 data.

The most important issue related to the use of the composition index is that its interpretation is tied to the base rate in the population for the racial/ethnic group in question. Thus, the index, by itself, cannot be interpreted without comparing it to the population base rate; in the above example, knowing that the composition index for Black students is 50% is uninterpretable unless we also know that only 30% of all students in the district are Black. This complicates using the index to compare the performance of schools, districts, or states. Another concern is that there is no objective means of establishing a cutoff; the "twenty percent rule" is purely conventional and some other figure might be as easily chosen and justified.

Relative Risk Ratios

Other researchers have chosen to characterize disproportionality by the use of *Relative Risk Ratios* (or a similar statistic, an odds ratio). The *Relative Risk Ratio* is based on a comparison of *Risk Indexes* for racial/ethnic groups; a *Risk Index* is an expression of the rate at which a disability condition occurs in a group and can be expressed as a percent (e.g., X percent of Hispanic students are identified with Learning Disabilities). When *Risk Indexes* are placed in a ratio (i.e., one *Risk Index* divided by another *Risk Index*) the result is a single number that characterizes the extent of disproportionality and can be compared across groups. A *Relative Risk Ratio* value of 1.0 indicates equal representation, values between 0 and 1 indicate underrepresentation, and values greater than 1 indicate overrepresentation. For example, if 20 percent of all Black students are in special education and only 10 percent of students in the comparison group (e.g., White students) are in special education, the *Relative Risk Ratio* is 20/10 or 2.0, indicating that Black students are two times as likely as White students to be in special education. *Relative Risk Ratios* answer questions of the type: What percent of Black students are in special education, and how does that compare to the percent of White students in special education? *Relative Risk Ratios* have been viewed as both relatively easy to understand and statistically sound and have gained broad acceptance.

One of the issues in using the *Relative Risk Ratio* is that someone must determine the comparison group (i.e., the risk index in the denominator). Most of the researchers who have used *Relative Risk Ratios* to describe disproportionality have chosen to use White students as the comparison group. However, doing so means that a *Relative Risk Ratio* cannot be calculated for White students because the White *Relative Risk Ratio* is, by definition, equal to one. Also, there are situations in which other racial/ethnic groups constitute the majority of students in the district and questions have been raised as to the appropriateness of using White students as the comparison group in those situations.

Relative Risk Ratios take into account race/ethnicity base rates in the population. However, they do not adjust for differences in overall special education identification rates (Westat, 2003). For example, two districts might have identical *Relative Risk Ratios* of 2.0 for Black students, indicating that they are twice as likely as White students to be identified for special education. However, one district may identify only five percent of their White students (and 10% of their Black students) for special education while the second district identifies fifteen and thirty percent respectively. The second district might be appropriately targeted for overrepresentation of Black students. However, the lack of adjustment for overall rates means that districts with very low identification rates (like the first district in this example) might also be targeted for disproportionality intervention when, in reality, the major issue is that they may be overlooking the special educational needs of many students.

A final issue with the use of *Relative Risk Ratios* (as well as other methods of calculation) is that there is not a single, recognized approach for determining when disproportionality is large enough to be important. While there are methods for establishing statistical significance (i.e., is this *Relative Risk Ratio* significantly larger, or smaller, than 1.0?), these methods are somewhat complex, raise other calculation problems, and may yield different results depending on the size of the district. A more common approach has been to arbitrarily select a cutoff value at which disproportionality is viewed as socially significant (e.g., if students from a given racial/ethnic group are 1.5 times as likely as White students, disproportionality is judged to be significant).

A problem with all methods of calculating disproportionality is that they yield unstable figures in small districts and districts with a small number of students in any race/ethnicity category. Such districts' disproportionality data are excessively influenced by the movement of a small number of students into or out of a category (or into or out of the district). Guidelines have been suggested to address this problem. For example, if a district has fewer than ten students in any category (e.g., Asian/Pacific Islander students with mental retardation), risk ratios for that category are likely to be very unstable over time.

Re-Defining the Problem

A further complication is that legal opinion prevents defining disproportionality, itself, as a problem and, more specifically, disallows using any index of disproportionality as the means of setting goals and tracking progress in placement rates. The U.S. Department of Education has taken the position that the problem must be defined as *possible discrimination*, or other inappropriate behavior or attitudes, *which may be indicated by* disproportionate placement numbers. Thus, attention is being forced back to the policy, procedures, and practices that may result in unequal, unfair treatment of students from different racial/ethnic groups. This is an important perspective that aims to drive states and districts toward addressing fundamental inequities as opposed to taking steps that achieve proportional representation but further imperil the educational prospects of students of color. However, it does confine the way states are allowed to talk about what they are doing to address the IDEA 1997 requirement.

Nonetheless, the ultimate challenge for educators and policymakers is to address the real underlying problems that produce disproportionality (i.e., the unequal opportunities for many students of color because of the consquences of structural poverty and the discriminatory treatment of students of color in the general education system) as well as the referral, assessment, and identification process for special education. Disproportionality numbers are a proxy for the measurement of this real problem. They offer a convenient, but imperfect, means for characterizing the extent of the problem and identifying schools, districts, or states with the most striking differences.

Finally, all of the available methods for characterizing disproportionality share a common assumption, namely, that some racial and ethnic groups are being inappropriately over-identified for special education. Some scholars have proposed that the disproportionality problem in some cases may not be due to overrepresentation of culturally and linguistically diverse students but rather to under identification of White students. For example, data from some districts suggest that MR identification rates for White students are well below expected rates based on epidemiological data. Because of this issue of possible under identification, the overall identification rate for the district or state is an essential component in interpreting disproportionality.

Disproportionality and the "Least Restrictive Environment" (LRE)

In recent years, increased attention has been focused on racial/ethnic differences in the rate at which students are placed in relatively more restrictive settings. Measuring disproportionality in placement raises issues that are even more complex than those associated with disproportionality in identification. Similar methods to those used to determine disproportionality in identification are available to characterize disproportionate placement in restrictive programs. A

Relative Risk Ratio is, once again, a reasonable metric that allows comparison across districts or states. This approach yields findings such as: In district X, Black students with mental retardation are twice as likely as White students to be served in separate (special education) facilities.

In spite of the methodological challenges, there is an emerging appreciation among policymakers that culturally and linguistically diverse students are at increased risk for being educated in restrictive settings and a concern that such restrictive placement may not always be justified on the basis of student learning challenges and behavior. It is likely that the coming years will see improved, and more consistent, approaches to the measurement of disproportionality in placement and will allow policymakers and administrators to focus on the underlying inequities that such disproportionality indicates.

Is Disproportionality Significant?

Despite the general level of concern, educators and researchers have sometimes argued that disproportionality should not be the focus of discussion. The National Academy of Sciences panel of experts regarded disproportionality as harmful when it resulted from inadequate regular education programs, inappropriate assessment practices, or ineffective special education programs. High-quality, effective instruction for all students in both general and special education could diminish the significance of overrepresentation. In addition, increasing the appropriateness of assessment practices would lead to the same decisions at the referral, assessment, and placement steps regardless of the race or ethnicity of the student given the same behaviors or symptoms. Consequently, some would contend that if emphasis were placed on improving instruction and expanding opportunities for all students and on fair and equitable determination of eligibility for special education, a case could be made that disproportionality should not be perceived as a problem (Westat, 2003).

On the other hand, working from a different conceptual framework, Patton (1998) has maintained that disproportionality itself is always a significant problem, with deep sociopolitical and historical roots. From this perspective, factors that cause overrepresentation include the failures of the general education system, inequities in the referral, assessment and placement process, and the subjectivity of high-incidence disability categories. Similarly, Daniels (1998) has asserted that disproportionate representation is a significant problem, in and of itself, indicative of inherent inequities within our educational system that prejudice outcomes for culturally and linguistically diverse students.

A synthesis of these divergent viewpoints is not easily imagined. No amount of progress in the development of accurate and consistent methods for characterizing the extent of disproportionality can resolve this fundamental philosophical debate. The political, historical, and emotional roots of the conflict run deep and make compromise difficult. However, both viewpoints stress effective and ethical services for culturally and linguistically diverse students. Continued work in the area of approaches to measurement can offer tools by which to monitor disproportionality and can provide the basis for reform in educational policy and practice to better meet the needs of all students.

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