
Minority Representation in Special Education

A Persistent Challenge

DALUN ZHANG AND ANTONIS KATSIYANNIS

ABSTRACT

Overrepresentation of minority students in special education has been a concern for more than 3 decades. Such overrepresentation has triggered a number of legal challenges, educational reforms, and legislative actions. However, a question still remains in the field: Have there been any recent changes or improvements? We addressed this question by analyzing data published by the federal government. Racial representation along with regional variations and state poverty rates were examined. The results indicated that American Indian/Alaskan Native and African American students were overrepresented in high-incidence disabilities (i.e., emotional and behavioral disorders, learning disabilities, and mental retardation); that significant regional variations existed in minority representation, but that these variations were not correlated with state poverty rates; and that racial representation in certain disability categories was negatively correlated with state poverty rates for certain racial groups.

PROVIDING A FREE, APPROPRIATE PUBLIC EDUCATION to qualified students with disabilities has been a challenging and often controversial endeavor. Of particular concern has been the overrepresentation of minority students in special education, with continuing concentrations in particular regions and states and in programs for mental retardation (e.g., Artiles & Trent, 1994; Dunn, 1968; Gottlieb, Alter, Gottlieb, & Wishner, 1994; *Larry P. v. Riles*, 1986; Patton, 1998; Reschly, 1988). Overrepresentation occurs when the percentage of minority students in special education exceeds the per-

centage of these students in the total student population. For example, according to the U. S. Department of Education (1997), in 1992, African Americans accounted for 16% of the total student population, yet African Americans represented 32% of the students in programs for students with mild mental retardation, 29% of the students in programs for students with moderate mental retardation, 24% of the students in programs for students with serious emotional disturbance or behavioral disorders, and 18% of the students with specific learning disabilities (p. 1-42). The Office of Civil Rights (OCR) has investigated complaints associated with the placement of minority students for mental retardation and serious emotional disturbance, equal access of minority students to prereferral programs, lack of access of minority students to programs in general education settings, and issues associated with students with limited English proficiency (LEP; U. S. Department of Education, 1997). In fact, according to MacMillan and Reschly (1998), OCR data consistently reflect the overrepresentation of African Americans in mental retardation.

The controversy over minority overrepresentation has been a persistent concern for more than 30 years. Specifically, Dunn (1968) argued that the identification and placement in special education of socioculturally deprived children (often from minority backgrounds) with mild learning problems was of concern because of the placement of these children into segregated settings, the questionable benefits of these placements, and the detrimental effects of labeling. In examining trends in the representation of minorities in spe-

cial education classes between 1978 and 1984, Chinn and Hughes (1987) observed a decline of overrepresentation in some areas, such as of Hispanics for mental retardation, but a continued overrepresentation of African Americans for mental retardation and emotional-behavioral disorders. They argued that poverty, especially in extreme forms, may hinder the availability of environmental advantages (e.g., pre- and postnatal care and nutrition) and may place a child at greater risk of disabilities. Similarly, Artiles and Trent (1994) echoed the concerns expressed by Dunn (1968) and Chinn and Hughes (1987), especially with regard to the linkages between socioeconomic status and minority status, achievement, and disability. Furthermore, Artiles and Trent reemphasized that mental retardation and low socioeconomic status have been empirically linked (see also Gottlieb et al., 1994).

Providing explanations about the occurrence of minority overrepresentation is controversial (Patton, 1998). MacMillan and Reschly (1998) cautioned against drawing causal inferences from what are descriptive data relating "race/ethnicity" to "placement in disability category." Solutions to address this problem also have been generated. Patton (1998) noted that "qualitatively different knowledge producers, who are culturally and interculturally competent, are needed to bring resolution to this persistent challenge" (p. 25). Furthermore, effective instruction, whether in the general or the special education setting, has been generally endorsed as a crucial element in combating underachievement and subsequent potential eligibility for special education services (Artiles & Trent, 1994; Dunn, 1968; Lambert, 1988; Valles, 1998). Serna, Forness, and Nielsen (1998), for instance, proposed that experimentally validated interventions, such as early detection, primary interventions, and prereferral procedures, as well as academic and social competence, resiliency, and self-determination, be used. These interventions have been effective across cultures in addressing the issue of disproportionate representation. Finally, Lambert (1988) suggested that district-, state-, and national-level administrators should monitor special education placements and the nature of instructional services offered, with particular attention to racial concerns.

Seeing the overrepresentation of minority students in special education as problematic, however, warrants some consideration. As MacMillan and Reschly (1998) indicated, programs in special education involve numerous key attributes that should make placement in these programs desirable. These attributes include low student/teacher ratio, individualized programming, legislative mandates to protect student rights, and guaranteed funding for needed services. Despite these attributes, however, special education is often criticized as ineffective (e.g., students in special education experience poor outcomes; see Blackorby & Wagner, 1996), and the stigma associated with labeling and removing the student from the general education classroom outweighs these benefits (MacMillan & Reschly, 1998). Furthermore, regarding African Americans, Patton (1998) pointed out that many

students are inappropriately placed and, as a result, "fail to receive a quality and life-enhancing education" as they "miss essential general education academic and social curricula" (p. 25).

The requirements of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 regarding data collection on minority representation in special education are likely to expand our understanding of the breadth of this issue. Specifically, in the 2000 annual report to Congress on the implementation of the IDEA, data on minority representation are provided for all disabilities by disability and by state for the 1998–1999 school year (U. S. Department of Education, 2000a). The purpose of this study was twofold:

1. to examine minority representation (by minority group) across states and regions for all disabilities, along with high-incidence disabilities (learning disabilities, mental retardation, and emotional-behavioral disorders), and
2. to address such variability in light of minority representation in the total student population and state poverty rates.

METHOD

Data Source

Data in the present study were drawn from three publications of the federal government. These publications included the *22nd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (Annual Report; U.S. Department of Education, 2000a)*, *National Center for Education Statistics: Statistics in Brief (NCES Statistics; U.S. Department of Education, 2000b)*, and *Poverty in the United States (Poverty; U.S. Census Bureau, 1999)*. The *Annual Report* summarized the number and percentage of students in each racial group by disability in the 1998–1999 school year. For the purpose of our study, the following types of data were extracted from the *Annual Report*:

1. the number of students in each racial group for all disabilities by state,
2. the number of students with learning disabilities (LD) by racial group and state,
3. the number of students with mental retardation (MR) by racial group and state, and
4. the number of students with emotional-behavioral disorders (EBD) by racial group and state.

The racial groups included American Indian/Alaskan Native (AI/Alaskan), Asian/Pacific Islander (Asian/PI), African American, Hispanic, and White. All 50 states and the District

of Columbia are included in the study. Because our focus was on school-age children, the data were extracted from the age group of 6 to 21 years.

Data on public school membership by racial group and state for all students in 1998–1999 were extracted from *NCES Statistics*. The *NCES Statistics* publish data about student, staff, and graduate counts by state and by grade level. Average poverty rates by state for 1998–1999 were extracted from the *Poverty* data. The *Poverty* data report poverty rates by state, region, age, and ethnicity.

Data Entry and Transformation

The original data from the three publications were entered into an SPSS (SPSS, Inc. 1998) file. These data included 26 variables and 51 cases (50 states and the District of Columbia). For the purpose of comparing the representation by each racial group, two types of data transformations were performed. First, the *compute* procedure in SPSS was used to calculate the percentages of students represented by each group in each disability category. The results of these calculations were 20 new variables that indicated the percentage of students in each racial group that was represented in all disability, LD, EBD, and MR categories. Second, the *compute* procedure in SPSS was used to calculate the percentage differences between minority representation and White representation for all disability, EBD, LD, and MR categories. These calculations yielded 16 new variables.

For the purpose of examining regional differences, the 51 states were distributed across five regions according to a classification system established by the U.S. Department of Commerce, Bureau of the Census. The five regions were West (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY); West North Central (IA, KS, MN, MO, ND, NE, SD); East North Central (IL, IN, MI, OH, WI); North East (CT, MA, ME, NH, NJ, NY, PA, RI, VT); and South (AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV).

Data Analysis

Three types of data analyses were conducted. First, racial representation was graphed, and descriptive statistics were calculated. The purpose of this analysis was to examine the overall trends of the data and to determine which racial groups were over- or underrepresented. Second, correlation analyses were done to examine the relationship between racial representation and state poverty rates. Third, univariate analyses of variance (ANOVAS) were conducted to examine regional variations in racial representation, using state poverty rate as a covariate. If a statistically significant difference was found in any of the univariate analyses, a subsequent one-way ANOVA and a multiple comparison procedure were conducted to examine where the difference was (i.e., whether, and between which regions, the difference existed).

RESULTS

Overall Examination of Racial Representation

Figure 1 provides a graphic examination of nationwide racial representation in disability categories. The graph indicates that for all disabilities, White representation ranks third of all five racial groups; more African American and AI/Alaskan students are represented, and fewer Asian/PI and Hispanic students are represented. Similar to the trend for all disabilities, White representation in EBD ranks third of all five groups; African American and AI/Alaskan students are more heavily represented; Asian/PI and Hispanic students are less represented. In the LD category, African American representation is the highest among all racial groups. The second most represented group is AI/Alaskan, followed by White and Hispanic; Asian/PI representation is the lowest. In the MR category, the most represented group is also African American, followed by AI/Alaskan, White, Hispanic, and Asian/PI.

Comparisons Between White and Minority Representations

As indicated earlier, the percentage differences between minority representation and White representation for all disabilities, EBD, LD, and MR categories were calculated for all 50 states and the District of Columbia. Descriptive statistics of minimum, maximum, and mean differences are summarized in Table 1. A positive value indicates that in the given state, a specified minority group is overrepresented in the disability category, whereas a negative value indicates that the corresponding minority group is underrepresented. For instance, in the all disabilities category, the minimum difference in percentage points between African American and White representation was -7.97 , the maximum difference was 27.01 , and the mean difference was 2.73 . The mean difference in each category indicates the overall representation across all states. On the average, across all states, the same trend can be found for all disabilities, EBD, LD, and MR. These data show that African American and AI/Alaskan students were overrepresented in all categories, whereas Hispanic and Asian/PI students were underrepresented in these categories.

Regional Variation

To examine regional variations in minority representations, we conducted a series of univariate ANOVAs. The dependent variables for these analyses included each racial group's representation in each of the four focus disability categories. The independent variable for these analyses was region, with five levels. State poverty rate was used as a covariate. The results of these analyses revealed six statistically significant differences among the five regions. These regional variations occurred in Hispanic representation in all disabilities, $F = 3.30$,

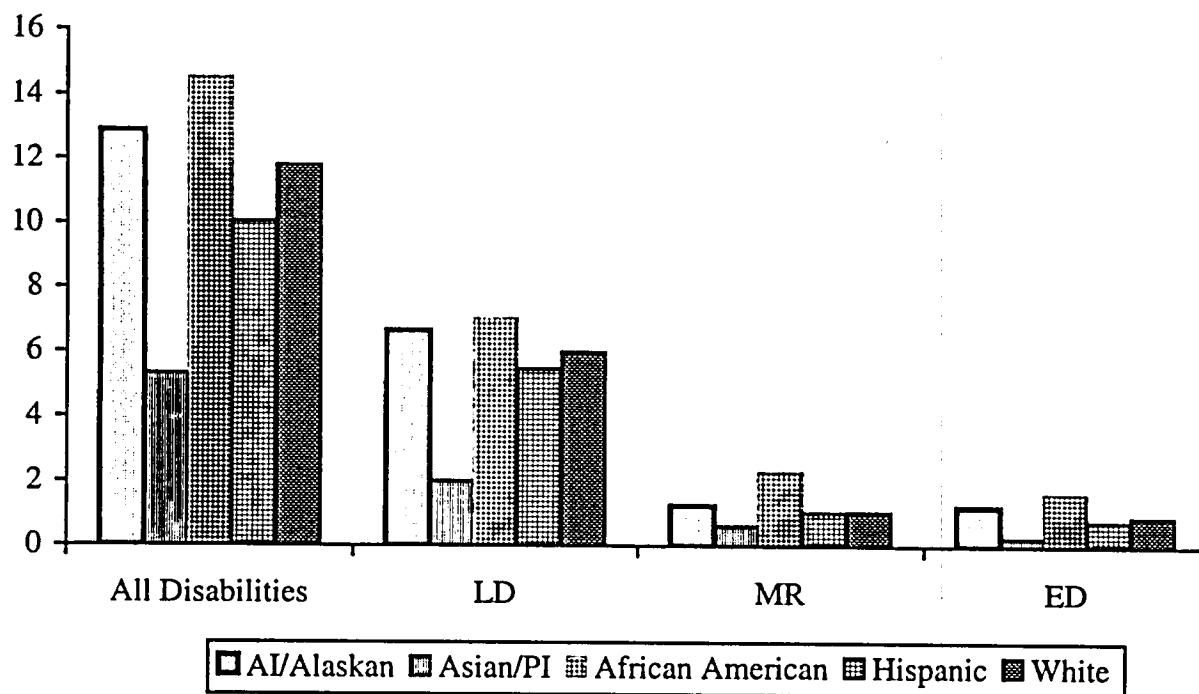


FIGURE 1. Percentage of students in each racial group classified as having a disability. LD = learning disabilities; MR = mental retardation; ED = emotional-behavioral disturbance.

TABLE 1. Descriptive Statistics for Percentage Differences Between Minority and White Representation by State

Category and comparison	Minimum	Maximum	<i>M</i>	<i>SD</i>
All disabilities	-9.87	25.69	1.07	5.65
AI/Alaskan-White	-12.20	1.32	-6.48	2.93
Asian/PI-White	-7.01	5.72	-1.75	2.90
Hispanic-White	-7.97	27.01	2.73	4.42
African American-White				
Emotional disturbance				
AI/Alaskan-White	-1.61	3.35	.31	.92
Asian/PI-White	-1.55	.23	-.65	.37
Hispanic-White	-1.12	2.08	-.15	.52
African American-White	-.17	3.41	.73	.73
Learning disabilities				
AI/Alaskan-White	-8.21	9.27	.66	2.92
Asian/PI-White	-7.50	.65	-3.99	1.55
Hispanic-White	-5.42	2.89	-.52	1.62
African American-White	-4.43	16.34	1.04	2.86
Mental retardation				
AI/Alaskan-White	-2.17	2.59	.19	.70
Asian/PI-White	-1.76	.93	-.43	.55
Hispanic-White	-2.35	.86	-.02	.56
African American-White	-.43	3.77	1.25	1.05

Note. *N* = 51. Minimum = the smallest difference between a specified minority group and White within the 50 states and the District of Columbia; Maximum = the largest difference between a specified minority group and White within the 50 states and the District of Columbia; *M* = mean difference between a specified minority group and White among all states; AI = American Indian; PI = Pacific Islander.

$p < .01$, Hispanic representation in LD, $F = 3.27$, $p < .01$, Hispanic representation in MR, $F = 3.117$, $p < .01$, Hispanic representation in EBD, $F = 5.951$, $p < .01$, African American representation in MR, $F = 8.894$, $p < .01$, and African American representation in EBD, $F = 5.95$, $p < .01$). Poverty rates did not have statistically significant effects on regional variations. Based on the results of these analyses, a subsequent one-way ANOVA and multiple comparison procedures examined where the differences existed. The Scheffe method was used as the post hoc test. The results of these multiple comparisons are summarized in Table 2. A significantly higher percentage of Hispanic students from the North East region than from the South region were identified for all disabilities, LD, and EBD. The percentage of Hispanic students in the North East region identified as having EBD was also significantly higher than the percentage in the West. African American student representation in MR varied greatly from region to region. The percentage of African Americans in MR in the West North Central and East North Central regions was significantly higher than the percentage in the West and North East regions, whereas the percentage of African Americans in MR in the South was significantly higher than the percentage in the North East and West regions. Furthermore, African American representation in EBD in the West North Central

region was significantly higher than the representation in the West and South regions.

Correlation Between Racial Representation and State Poverty Rate

Pearson correlation coefficients were calculated to examine the relationship between minority representation and state poverty rates. For the 20 group–category pairs, six statistically significant correlations emerged. These correlation coefficients, shown in Table 3, indicate that Hispanic representations for all disabilities and for the LD category had a negative correlation with state poverty rates, and AI/Alaskan, Asian/PI, African American, and White representations in EBD were all negatively correlated with state poverty rates. In other words, fewer Hispanic students are identified in poorer states than in richer states for all disabilities and for the LD category. In states with higher poverty rates (i.e., poorer states), fewer students from AI/Alaskan, Asian/PI, African American, and White groups are identified as having EBD.

DISCUSSION

Minority representation in special education has been a controversial issue for more than 3 decades. The issue of overrepresentation has been the subject of court cases (see *Larry P. v. Riles*, 1986), has prompted concerns among professionals (Artiles & Trent, 1994; Chinn & Hughes, 1987; Dunn, 1968; MacMillan & Reschly, 1998; Patton, 1998), and has served as the impetus for the Office of Civil Rights (OCR) to designate the status of minority students in special education as a priority enforcement issue. The U.S. Department of Education (2000a) published student data on minority representation in special education for the 1998–1999 school year as required by IDEA (20 U.S.C. § 1418).

The findings from the present study support the concerns voiced in the past regarding African Americans in special education, especially in the area of mental retardation (Patton, 1998). In fact, African Americans continue to have the highest representation of all groups. According to the U. S. Department of Education (1997), misclassification or inappropriate placement may result in significant consequences for students, especially when they are removed from the general education classroom and denied access to the general education curriculum. More restrictive placements often result in fewer opportunities for students to access post-secondary education and in fewer employment opportunities. Furthermore, in some districts, disproportionate representation results in racial segregation. Consequently, placement practices should be carefully monitored to prevent misclassification. Concurrently, educators must ensure that minority students who qualify have access to appropriate services despite calls to achieve proportionate representation. As

TABLE 2. Summary Results of Multiple Comparisons by Geographical Region

Group, category and regions compared ^a	Mean difference (%)
Hispanic, all disabilities North East–South	4.63*
Hispanic, LD North East–South	2.62*
Hispanic, EBD North East–West	1.07*
North East–South	1.19*
African American, MR West North Central–West	1.76*
West North Central–North East	1.80*
East North Central–West	2.41*
East North Central–North East	2.45*
South–North East	2.14*
South–West	2.10*
African American, EBD West North Central–West	1.16*
West North Central–South	1.42*

Note. LD = learning disabilities; EBD = emotional–behavioral disturbance; MR = mental retardation.

^aThe region mentioned first had significantly more representation for that category than the region mentioned last.

* $p < .05$.

MacMillan and Reschly (1998) argued, "denying services to qualified minority students because of quotas is equally repugnant and constitutes educational malpractice" (p. 23).

At least for one minority group—Hispanic Americans—representation in mental retardation and across all disabilities is consistent with earlier reports (see Chinn & Hughes, 1987). In contrast, the overrepresentation of the American Indian/Alaskan Native group in special education, the second highest after African Americans, presents an issue that has been minimally addressed in the literature. In fact, the overrepresentation of this minority group is often more dramatic than the overrepresentation of African Americans. Significant variations among states were also observed. For example, as many as 39% of American Indian/Alaskan Native students in Florida were identified as having some type of disability, whereas no students from this racial group in the District of Columbia were thus identified.

There were significant regional variations in the identification of Hispanic children for all disabilities and for learning disabilities. Higher percentages of Hispanic students were identified in the North East region than in the South region. Surprisingly, these variations did not coincide with poverty rates in those regions. Poverty—and its link to minorities and to achievement—was not a differentiating factor in these variations, although such a link has been supported by various researchers in the past (see Artiles & Trent, 1994; Chinn & Hughes, 1987; MacMillan & Reschly, 1998).

Of particular concern are the large regional variations in minority representation for EBD. For Hispanic students, the differences were between the North East region and the West and the South regions; higher percentages of Hispanic students were identified with EBD in the North East region. For African American students, the differences were between the West North Central region and the West and the South regions. In this case, more students were identified in the West North Central region. Students with EBD are often underidentified and have been reported to experience disturbing outcomes (Maag & Katsiyannis, 1998; Scott & Nelson, 1998). Specifically, students with EBD are more likely to drop out of school, with almost twice the drop-out rate of all students with disabilities (Marder, 1992); face dismal employment rates (D'Amico & Blackorby, 1992); and are disproportionately represented in correctional institutions (Doren, Bullis, & Benz, 1996).

One may speculate that a variety of factors accounts for such variation, including state expenditures on education, state-level regulations regarding verification processes, family structure (one-parent versus two-parent households), attitudes toward education, racial biases, and unemployment rates. There is a need for further analysis of district-level data in understanding minority representation. Analyses of district-level data have been advocated by other professionals in their efforts to understand variations across states (see Danielson & Bellamy, 1989; McLesky, Henry, & Axelrod, 1999). District-level data should be available in the future, as IDEA man-

TABLE 3. Correlation Coefficients Between Racial Group Representations and State Poverty Rates

Racial group, disability category	State poverty rate
Hispanic, all disabilities	-.324*
Hispanic, LD	-.280*
American Indian/Alaskan Natives, EBD	-.313*
Asian/Pacific Islander, EBD	-.338*
African American, EBD	-.291*
White, EBD	-.345*

Note. LD = learning disabilities; EBD = emotional-behavioral disturbance.

* $p < .05$.

dates that states should examine the data to determine if disproportionality based on race is occurring in the identification and placement process. If such a determination is made, states are required to develop corrective action to mitigate such discrepancies.

Further research is needed to understand the complex issue of overrepresentation. Such efforts should include the analysis of intra- and interstate minority data. District-level minority data should be examined in light of multiple factors, such as the nature of the district (urban vs. rural), the size of the district (student population), the percentage of teachers with advanced degrees, the wealth of the district, the district expenditures per student, the percentage of students receiving free lunch, the percentage of students receiving other supportive services (Title I services), and the local unemployment and poverty rates. The investigation of interstate minority data may include factors such as certification requirements, per-student expenditures, state special education regulations regarding the eligibility criteria for verifying students suspected of having a disability, state special education regulations regarding the sources of information needed for verification decisions and the requirements regarding participants in multidisciplinary teams, the nature and functioning of prereferral teams, the availability and nature of state-level technical assistance regarding the identification and placement of students in given disability categories, and poverty rates. Attention is also warranted in examining additional areas related to minority representation. As stated earlier, under IDEA, states must also report by race, ethnicity, and disability category the number of students with disabilities in interim alternative settings, subjected to long-term suspensions and expulsions, and, for ages 14 to 21, the number of students who stopped receiving services in special education. Such analyses will provide important insights about how minority students fare in disciplinary proceedings relative to nonminority students.

The overrepresentation data analyzed in this study are descriptive in nature and, as such, do not allow for causal inferences (see MacMillan & Reschly, 1998). Furthermore, there is the question of the relative accuracy of large national databases (see MacMillan et al., 1992). As Hodapp and Krasner (1995) pointed out, the use of large national databases is beneficial because broad observations may be made on a variety of issues that in turn may be the basis for further exploration (see also Danielson & Bellamy, 1989; Katsiyannis, Conderman, & Franks, 1995; McLesky et al., 1999).

Practical Implications

Despite an increased emphasis on curbing minority overrepresentation in special education, national data point to limited success (U. S. Department of Education, 1997, 2000a). The IDEA provisions require that states collect such data and monitor (and address, if necessary) any discrepancies in minority representation. Consequently, educational agencies must engage in schoolwide, validated instructional and behavioral interventions that address the needs of all students, including those from culturally diverse backgrounds. Such efforts are likely to result in the improved academic performance of students from minority groups in the general education classroom and in the reduction of special education referrals. Moreover, educational agencies must be vigilant in ensuring a nonbiased identification and placement process through the expanded use of prereferral teams; the improvement of prereferral, multidisciplinary, and placement team training; and the use of technically sound, norm-referenced instruments, along with the expanded use of curriculum-based measures.

Conclusions

The findings of the present study point to the disproportionate representation of minority students in special education—a persistent challenge that has faced special education for more than 3 decades. Under IDEA, states must report the number of students with disabilities by race, ethnicity, and disability category in special education, in general education classrooms, in interim alternative settings, and subjected to long-term suspensions and expulsions, and the number of students ages 14 to 21 who stopped receiving services in special education. The availability of minority data with regard to eligibility, placement, disciplinary exclusions, and exit data (i.e., students ages 14 to 21 no longer receiving special education services) will allow educational agencies to have a better understanding of practice, to closely monitor discrepancies, and to take steps to address representation-related issues in a proactive and comprehensive manner. ■

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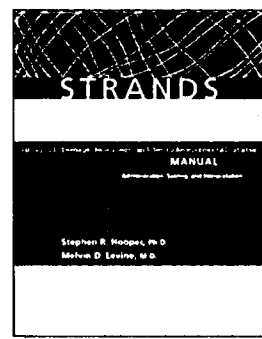
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