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A STUDY OF OVERREPRESENTATION OF MINORITIES IN SPECIAL
EDUCATION IN SOUTHERN NEW JERSEY PUBLIC SCHOOLS

By
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A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
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at
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Approved by _____
Professor

Date Approved 5/19/04

ABSTRACT

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A STUDY OF OVERREPRESENTATION OF MINORITIES IN SPECIAL EDUCATION IN SOUTHERN NEW JERSEY PUBLIC SCHOOLS

2003/04

Dr. Steven Crites

Master of Arts in Special Education

The purpose of this study was to determine if there is an overrepresentation of minority students in special education in southern New Jersey Public Schools. Data was disaggregated to the district level for 25 randomly chosen public school districts in southern New Jersey. Data were reported on the total school population and the total number of students classified as eligible for special education. These data were further broken down in both categories (i.e. total school population and special education) by race/ethnicity and by gender. In addition, special education data were also reported by specific disability category. These data were presented using three different indices: composition index, risk index, and odds ratio. The New Jersey District Factor Group (DFG) indices were used to determine the effect of socioeconomic status (SES) on overrepresentation. SES did appear to have a correlation with the overrepresentation of minority students in the category of Learning Disabilities. Overrepresentation of minority students in special education was documented in many of southern New Jersey's Public School Districts.

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Chapter 1: Introduction

Overrepresentation in special education is defined as a significant discrepancy in the number of classified students in a certain ethnic or racial group, usually African American students, disproportionate to the population. Artiles and Trent (2000) define overrepresentation as “unequal proportions of culturally diverse students in special education programs” (p. 514). Representation is based on the assumption that the percentage of “x” children in any subgroup (e.g., African American students) identified as exceptional should be in direct proportion to the percentage of “x” children within the general school population (MacMillan & Rechsly, 1998).

The research of relevant literature that follows shows that there is definite overrepresentation of minority students in special education. The overrepresentation occurs in special education classification as a whole and in the specific disability categories of mildly mentally retarded (MMR) and seriously emotionally disturbed (SED) (Oswald, Coutinho, Best, & Singh, 1999). There has also been a rise in the number of African American students classified as having a learning disability (LD) as noted by Artiles (2003), who also mentions that emotionally disturbed (ED), MMR, and LD are the high incidence disabilities.

Overrepresentation is viewed as a serious national problem as is evidenced by its inclusion in both the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1997 and the No Child Left Behind Act (NCLB) of 2001. Both pieces of legislation strengthen the nondiscriminatory aspects of educational law. IDEA 1997 mandates reporting data concerning overrepresentation. It also mandates having a plan

for the remediation of minority overrepresentation. NCLB mandates the results of the state achievement tests be disaggregated within each state, local educational agency (LEA), and school by gender, by each major racial and ethnic group, by English proficiency status, by students with disabilities as compared to nondisabled students, and by economically disadvantaged students as compared to students who are not economically disadvantaged. It also has a provision for annual state report cards. Each state must include in its annual report card information on student achievement on the state assessments at each proficiency level. This data must be disaggregated by race, ethnicity, gender, disability status, migrant status, English proficiency, and status as economically disadvantaged.

Overrepresentation is also included in the current reauthorization of IDEA, which is before Congress. Section 202 of the proposed revised reauthorization revises state eligibility requirements for reimbursement of funds. One of the proposed changes for funding eligibility is state policies and procedures to prevent overrepresentation or disproportionate representation by race and ethnicity of children as children with disabilities, including identification of children as children with a particular impairment, must be provided to the Secretary of Education. Section 401 authorizes the secretary to give priority to state professional development grants applications that provide for establishing professional development programs regarding methods of early and appropriate identification of children with disabilities. Also, there have been extensive national studies done by both the National Research Council (NRC) and the Office of Civil Rights (OCR) as reported by Skiba, Chung, Wu, Simmons, and St. John (2000).

Although those who have researched the issue agree there is overrepresentation and a need to study this issue further, there is a wide disagreement on the causal factors of overrepresentation. The underlying factors of the problem need to be identified by methodical intensive research if any meaningful change is to take place. Identifying that the problem exists is only the beginning step in undertaking the solution to “improving our success with children who represent the increasing cultural and linguistic diversity of America” (Oswald, et al., 1999, p. 205). Further research needs to focus not only on whether overrepresentation exists, but also on the underlying causes of overrepresentation. The literature review will raise the question is it race or some factors of socioeconomic status (SES), such as poor nutrition and poor pre-natal care, that effect the classification rate (Oswald et al.).

The purpose of this research study is to aggregate data on a district level on overrepresentation of minorities in special education. The results of this study will be compared to the findings of a national study by the NRC (2002). Hosp and Rechsly (2003) suggested disaggregating data on overrepresentation to the district level. They also said more studies needed to be done comparing referral rates to classification rates for the different racial and ethnic groups. The next step, according to Hosp and Rechsly, would be compiling a large national database on both referral rates and eligibility data, which is beyond the scope of this study.

This study is guided by the following questions:

1. Is there an overrepresentation of minority students in special education in southern New Jersey Public Schools?

2. Are some districts more likely than others to have an overrepresentaion of minority students in special education?
3. What are the apparent risk factors for being labeled eligible for special education?
4. Does the data on classified students in southern New jersey correspond with the data on classified students in the national NRC (2002) study?
5. Does race or SES cause overrepresentaion?

Chapter 2: Review of Relevant Literature

“The overrepresentation of minorities in certain special education programs has been a persistent problem negatively affecting African-Americans and their families for years”, according to Patton (1998, p.25). According to an editor’s review in *The Harvard Law Journal* (2003), overrepresentation dates back to the 1954 *Brown v. Board of Education* decision. When desegregation became law, segregating minority students from the general education population by classifying them for special education became the practice. Patten declares the historical roots for overrepresentation of African-Americans can be traced back as early as 1619 and to the arrival of Africans in America. He contends that slavery and then the “Jim Crow” laws of the South were the precursors to today’s overrepresentation of minority students in special education. He sees the overrepresentation issue as an extension of segregation. Dooley and Voltz (as cited in Dooley and Dooley, 2002) concur with Patton’s theory that disproportionate representation of African Americans in special education is an extension of segregation.

Fierros and Conroy (2002) say that there are still hundreds of school districts that remain under court supervision based on agreements to desegregate made with the U. S. Department of Education. The plaintiffs have won lawsuits claiming that overrepresentation of minority students in special education is linked to a former policy of segregation by that school district if the school system was still under a desegregation order. However, the plaintiffs must provide strong evidence establishing the link between segregation and the overrepresentaion of minority students in special education in that particular school district.

We know overrepresentation is present in many of our schools from the data that have been collected and reported. Knowing that fact, we still might query why is overrepresentation a problem? Patton (1998) states overrepresentation raises concerns about racial discrimination and violations of civil rights laws. While many question whether overrepresentation is a problem, he says that he never heard an African-American ask if overrepresentation is a problem. He maintains African Americans know the answer and it is yes, overrepresentation is definitely a problem.

MacMillan and Rechsly (1998) say the problem is twofold. First, identification of a large percentage of minority students, especially African Americans, might reinforce negative stereotypes. Some people see it as proof that minorities are less intelligent than Caucasians. Second, the effectiveness of special education programs is often questioned, suggesting that a large number of African American students are receiving a substandard education as a result of being classified as eligible for special education.

Zhang and Katsiyannis (2002) state that students classified as eligible for special education services are often denied access to the general education curriculum. They note that “More restrictive placements often result in fewer opportunities for students to access post-secondary education and in fewer job opportunities” (p. 184). Arnold and Lassman (2003, p. 231) refer to athletes who graduate from high school not knowing how to read. They place the blame on their having been “...placed in special education where they had poor instruction and suffered from low expectations.”

The findings of the NRC (2002) are not in agreement with MacMillan and Rechsly (1998) or Arnold and Lassman (2003). The council found there have been interventions for special education students that are effective and improve the outcomes

for students in special education, especially those students classified as LD. The following principles of instruction were found to be effective with students classified as LD:

1. Explicit instruction is an effective intervention. In fact, direct instruction has been found to be effective for students with ED.
2. Interactive dialogues between teacher and student and between students is effective in reading and writing programs.
3. Basic elements of reading and writing such as sounding out words are essential for students with LD.
4. Utilizing small group instruction in reading and writing improved the students' outcomes. Peer tutoring was also effective for students classified as ED and behavioral disorder (BD).
5. "Time on task" is an important factor in producing positive student outcomes. Students are more motivated to work on tasks that are challenging, meaningful, and within their capabilities (NRC).

Patton (1998) theorizes a solution to the problem can only come from a large number of African American knowledge producers being involved in all aspects of the educational system. Daniels (1998) adds that Euro-American knowledge producers must join these African American knowledge producers.

It is Valles' (1998) view that most teachers are not prepared to teach students from varied ethnic and cultural backgrounds. This can result in more referrals for assessment or intervention for minority students. Pre-referral interventions need to be tried before contemplating starting the referral process. A student's teachers fill out a

referral form when a student is perceived as not being academically or behaviorally successful in the general education setting. The pupil assistance committee (PAC) then meets to discuss the situation and makes recommendations for intervention. Referrals often lead to testing for special education eligibility and placement.

Zhang and Katsiyannis (2002) place emphasis on the prereferral and referral processes as integral components in solving the overidentification problem. They state that there should be greater utilization of prereferral teams, in-depth training for the members of prereferral, multidisciplinary, and placement teams. Trying effective prereferral interventions are paramount before assessing students for eligibility in special education programs. These interventions should include "...embedding the students' culture and language into the curriculum, establishing collaborative school and community relationships, employing effective and culturally relevant instructional and classroom management practices, and involving families in school and classroom activities." (Salend, Garrick Duhaney, & Montgomery, 2002)

Williams, Frederick-Stanley, and Fair (2002) say principals and administrators need to show culturally responsive leadership at these meetings. Principals and administrators should make sure meetings are scheduled at convenient times for parents, provide transportation to the school if necessary, and arrange accommodations for child care to ensure parents have the opportunity to attend meetings concerning their child and possible classification. It is the administrators' responsibility according to Williams, Frederick-Stanley and Fair, to ensure information is given in a way that the parents can understand.

According to Rong (as cited in Hosp & Rechsly, 2003), teachers' perceptions of appropriate behaviors and deviant behaviors are culturally defined. Teachers often perceive the same behaviors differently in students from different ethnic backgrounds than themselves (Carlson & Stephens as cited in Hosp & Rechsly, 2003). "African American students who are seen as fun loving, happy, cooperative, energetic and ambitious by their African American teachers are viewed as talkative, lazy, fun loving high strung, and frivolous by their European American teachers" wrote Grossman (2002, p. 6). Teachers' cultural misunderstandings may affect the referral rates of minority students.

According to Valles (1998), multicultural and bilingual education is needed in teacher training to overcome this problem. He says we need to use this information to help train teachers so they can become thoughtful and sensitive practitioners. Undergraduate course work and teacher in-service workshops on teaching in a multicultural, diverse society are needed. The NRC (2002) study recommends that, "...teachers should be familiar with the beliefs, values, cultural practices, discourse styles, and other features of students' lives that may have an impact on classroom participation and success and be prepared to use this information in designing instruction" (p. 373) in order to qualify for state certification or licensure. Valles writes that teachers must be trained in this way and they must practice in diverse settings or the debate on overrepresentation will continue for another 30 years.

Cooper (2003) agrees teacher education programs are paramount for enabling Caucasian teachers to effectively teach African American children. This is important because as Gursky (as cited in Hunter & Donahoo, 2003) reported, many African

Americans became teachers during the Civil Rights Era, but few are coming forward to replace them. According to the National Council for Educational Statistics (NCES, as cited in Rushton, 2003), 17.2% of the children enrolled in public schools are African American, while 7.3% of the public school teachers are African American. Rushton (2001, as cited in Rushton, 2003) found that many middle and upper class African American parents discouraged their children from becoming teachers, especially in the inner city, because of the various dangers that existed.

Grossman (1998) places some of the blame for the lack of minority teachers on college professors of education. He states they must be more active in recruiting "...non-European American, poor, migrant, immigrant, and rural students as well as middle-class European American students" (p. 62). Grossman says there is also a need for professors of education to recruit bilingual students into their education programs.

Cooper (2003) finds that teacher training needs to include coursework on the "history of Black education in America" (p. 425). As Valles (1998) writes, "What is clear is that the number of culturally and linguistically diverse students in the public schools will increase" (p. 53). The University of Tennessee has attempted to address this issue by implementing a 5 year master's program in urban/multicultural education (Rushton, 2003).

One solution offered by Serna and Nielson (1998) is utilizing teacher interventions that can address the overrepresentation problem through systematic change in our schools. Examples of such interventions are early detection and primary prevention. Through early detection, efforts can be made to apply primary prevention techniques before children are identified as having behavior and/or emotional problems.

The authors mention that overrepresentation of minority students is only a problem if it can be demonstrated that any child, regardless of color, is referred for special education services when the child doesn't need them, or when a child who does need them is denied. Serna and Nielson note that early interventions should be tried before any child is referred.

MacMillan and Reschly (1998) strongly state that socioeconomic status rather than ethnicity is the risk factor for children encountering severe and persistent academic problems in our public schools. They say the data from the Office of Civil Rights (OCR) point to MMR as the one primary disability category for overrepresentation of minority students in special education. MacMillan and Reschly say that MMR and low socioeconomic factors have been linked for decades. They write that further research should focus attention on discovering how much of an influence ethnicity is in overrepresentation after those explained by the factors of SES have been taken out.

Wilson and Martin (2000) found a high correlation between per capita annual income and low test scores. Their results offer some support to the idea that teachers with less experience and with less than a master's degree are more likely to work in low income area. They also found that teachers with more experience are likely to avoid working in low income areas, especially if primarily African American students attend the school. The authors summarized their report by declaring the race factor washes out when poverty is taken into consideration as a control.

In a second study by the NRC (2002), researchers also found a correlation between low income and rates of classification for special education. The Committee on Minority Representation in Special Education reported that many poor children are

disproportionately minority. According to Shaffer, Ortman, and Denbo, 32.7% of African American families with children younger than 18 had incomes below the poverty level. Only 8.8% of Caucasian families with children younger than 18 had incomes below the poverty level. The NRC report stated that frequent exposure to toxins such as lead, alcohol and tobacco is more prevalent in low- income families. There is a higher prevalence of low birth weight among poor families. Inadequate nutrition is another risk factor for these children.

The educational level achieved by their parents is yet another indicator of poverty and may effect the students' performance in school. The Committee on Minority Representation in Special Education identified knowing that print reads from right to left, knowing where to go when a line of print ends, and knowing when a story ends as prerequisite skills for reading. They found that among a group of kindergartners, 47% of Caucasian children with mothers who graduated from high school had all three prerequisites. Only 11% of African American students with mothers who didn't graduate from high school displayed all three skills (NRC, 2002).

The committee also reported that schools in predominately disadvantaged urban areas were less likely to have highly trained teachers, another possible factor in the disproportionality. The report mentioned that financial resources available to the schools are usually lower in the high poverty areas (NRC, 2002).

A study by Oswald, et al. (1999) stated that as poverty increased more minority students were identified as MMR and fewer students were identified as SED. It was suggested this was because wealthier districts are less tolerant of behavioral diversity

than of learning and cognitive differences. If we eliminate teacher prejudice, Grossman (2002) states that disciplinary problems would be lessened to a great extent.

Overall, it was found that African-American students are 2 1/2 times more likely to be identified as MMR and about 1 1/2 times more likely to be identified as SED. The poverty rate for African American families is about 3 times as high as the poverty rate for all families according to Oswald, et al. (1999). He notes the positive correlation between the poverty rate and identification as MMR and SED.

Artiles, (1998), states that a critical aspect underlying the disproportionate representation debate is the dilemma of human difference. He says that being different has been viewed as a deficit and that too much emphasis has been put on the belief that minority students' lack of educational success has been produced by poverty. In another study, Artiles (2003) states the research mentioning poverty as a primary cause of overrepresentation fails to put emphasis on the fact that schools that serve poor students have fewer material and financial resources. They often have lower teacher and instructional quality. Artiles (1998) says we need to look at the researchers', and our own, perspectives.

According to Denbo (2002), high stakes tests are one of the problems causing overrepresentation of minority students in special education. She says the tests do not accurately measure the students' knowledge and abilities. Many researchers have said standardized tests have cultural, class, and racial biases (Salend, Garrick Dunhaney, and Montgomery, 2000; Townsend, 2002) and Denbo concurs. She states "Inaccurate assessment and scoring results in disproportionately high placement of African American students in special education..." (p. 14).

Townsend (2002) takes the discussion of high stakes testing further. She states that the emphasis placed on national accountability in NCLB is part of the problem, not a solution. Townsend says that, “With high stakes testing as its cornerstone, it will guarantee that the very child who gets left behind is African American” (p. 224). An outcome of high stakes testing, according to Townsend, is that it has a negative impact on African American students’ racial identities, self-concepts, and orientation toward achievement.

High stakes testing promotes a cycle in which low achievement scores on standardized tests help create a poor perception of their racial group, which in turn helps to foster underachievement (Townsend, 2002). There is a practice of labeling schools that fail to achieve minimal competency on state tests as low-performing schools. According to Townsend, this practice also affects African American and other minority students’ racial identities as these students are enrolled in the majority of schools labeled as “low-performing”. She states that among the consequences for students who fail these tests are possible placement in special education and remedial programs.

Findings from the data provided by the OCR survey (1992), led to the discovery that states with fewer African-American students display a higher disproportionate representation of these students than states with higher proportions of African-American students (US Department of Education, 1996; Oswald, et al., 1999). Oswald et al. also reported that the U. S. Department of Education saw the problem as both the overidentification of minority students as eligible for special education and the classified minority students being placed in more restrictive settings than their white counterparts.

According to Fierros and Conroy (2002), data collected by the OSEP from the 1999-2000 school year show a significant disparity in placement for students of different racial backgrounds. The data are from nearly every public school district in the country and are based on an actual child count. For this study, inclusive education was defined as the student being out of the general education classroom for less than 21% of the school day. It was found that 37% of African American students, 43% of Hispanic students, and 55% of Caucasian students classified as eligible for special education were in an inclusive setting. Resource room placement was defined as being out of the general education classroom for between 21 and 60 % of the school day. Placement was almost equal with 30% of the African American students, 30 % of the Hispanic students, and 29% of the Caucasian students identified as special education students placed in that setting. Substantially separate placement was defined as being out of the general education classroom for more than 60% of the school day. Again there was a significant disparity according to the students' race in this setting. 33% of the African American students, 28% of the Hispanic students, and 16% of the Caucasian students in special education programs were placed in this restrictive environment.

According to Losen and Orfield (2002) at Harvard, the problem of overrepresentation of minority students in special education is found all across the United States. They found that African-American students in Connecticut, Mississippi, South Carolina, North Carolina, and Nebraska are more than 4 times as likely to be classified as mentally retarded than white students in those states. African American students in Florida, Alabama, Delaware, New Jersey and Colorado are more than 3 times as likely as their white counterparts to be classified as mentally retarded.

Overrepresentation of African American students as emotionally disturbed (ED) was also found by this Harvard study. In Nebraska, African American students were 6 times more likely to be identified as ED; and in Iowa, 4 times as likely. In Kentucky, Utah, Montana and Minnesota, black students were 3 times as likely to be identified as ED, while in Louisiana, Washington, Oregon, West Virginia, and North Carolina blacks were more than 2 times as likely to have the ED classification (Losen & Orfield 2002).

While the Harvard study, like the others, clearly shows the disproportionate number of minority students in special education, it gave no explanation for the possible cause or causes. The study also offered no guidelines on how to work on reversing this trend.

There was a call for more research on overrepresentation from nearly every researcher (Oswald, et. al 1999; Patton, 1998; Serna & Nielson, 1998; Zhang & Katsiyannis, 2002; Hosp & Rechsly, 2004)). Oswald, et al., say the research on overrepresentation needs to be more focused. They maintain that additional studies must be undertaken that identify the disproportionate representation of African American and other minorities in the specific disability categories of LD, SED, and MMR. They also suggest data compiled from research be broken down by the influence of variables such as poverty and ethnicity for the various ethnic groups and disability classifications. Oswald, et al. advocate studies employing multiple methodologies that are disaggregated to the level of the community, school building, and classroom. It was stated that only by the careful analysis of data collected from extensive research would more conclusive reasons for the overrepresentation of minorities in special education be found. Only with those answers can a true reversal of the trend occur.

Artiles (1998) states that too few studies have been completed assessing teacher variables and the part they play in the overrepresentation of minority students in special education. He also concurs with Patton's (1998) theory that qualitative research involving philosophical and ethical discourses involving African American knowledge producers is critical in solving the disproportionality problem. Serna and Nielson (1998) disagree. They see the need for larger quantitative studies rather than qualitative. These two researchers theorize that the findings from quantitative research can be generalized to a greater degree and are more effective in influencing program and policy changes.

Zhang and Katsiyannis (2002) agree that further research is needed and should include data disaggregated to the district level. They say district-level minority data should include multiple factors, such as the nature of the district (urban versus rural); the total student population; the percentage of teachers in the district with advanced degrees; the SES of the district, including percentage of students receiving free lunch and the local unemployment and poverty rates; the district expenditures per student; and the percentage of students receiving Title I services (p. 185).

While Hosp and Rechsly (2004), agree that aggregating data to the district level is still necessary, they want future studies to also examine data on overrepresentation at the individual level. They know that more complex analysis methods will be needed and suggest using either hierarchical linear modeling (HLM) or Classification and Regression Tree Analysis (CART) (p. 196).

Spencer, Seaton, & Harlapani (as cited in Shaffer, Ortman, & Denbo, 2002), point out that there has been insufficient research on the minority students that do succeed in school despite adversity. They state that qualitative research needs to be done looking at

these students' reasons for success, rather than more research on their reasons for failure. If all minority students had access to an education stressing these criteria for success, fewer would be classified as eligible for special education services.

Coutinho and Oswald (as cited in Meyer and Patton, 2001) offered a few suggestions for further research: (a) research that determines whether ethnic groups are "susceptible" to a particular disability; (b) longitudinal analysis to discern changes over time on the overrepresentation of minority students in each district; (c) studies that deal with observer bias; (d) analyzing the process that guides the identification of students with disabilities.

A recommendation for further research was made by the Committee on Minority representation in Special Education (NRC, 2002). The committee recommended that a national advisory panel be formed. This panel would collect nationally representative data that would make it possible to do more informed studies on minority overrepresentation in special education. That data collected should include race, gender, SES and social background and other antecedents to being classified as eligible for special education services. The committee stated the data should also include school factors such as school and classroom resources, class size, teacher experience, and instructional strategies used (NRC).

Artiles, Harry, Rechsly, & Chinn (2002) say future research must focus on the following questions relative to the issues of difference:

What are the assumptions about difference that inform decisions to place students in special education? What functions are served by the maintenance of a rigid demarcation between general and special education? When (under what

circumstances) is overrepresentation a problem? What are the consequences of overrepresentation? For whom? and What is the function of special education in an increasingly diverse society? (p. 7)

The literature reviewed above clearly reveals the need to do more research on the representation of minority students in special education. As Hosp and Rechsly (2003) stated, this research is most clearly needed on the district and school level, as state data results may be affected and masked by large or small districts in their state. As shown by Patton (1998) and others, this is a very emotional and controversial issue, especially to African-Americans. The statistical data showing African American students being classified for special education services as much as 6 times greater than Caucasian students in certain categories indicates high priority needs to be placed on gathering, analyzing, and utilizing the data on representation to effect change so that minority students are properly served in all our nation's schools.

Chapter 3: Methodology

This is a study of overrepresentation of minority students in special education in 25 southern New Jersey Public School Districts. Again, this study is guided by the following questions:

1. Is there an overrepresentation of minority students in special education in southern New Jersey Public Schools?
2. Are some districts more likely than others to have an overrepresentation of minority students in special education?
3. What are the apparent risk factors for being labeled eligible for special education?
4. Does the data on classified students in southern New Jersey correspond with the data on classified students in the national NRC (2002) study?
5. Does race or SES cause overrepresentation?

Research Design

Many of the researchers referred to in the literature review of this paper suggested disaggregating data on overrepresentation of minority students in special education to the district level to discover if minority students are overrepresented in special education. This study utilizes data taken on the district level. It is a quantitative study using a descriptive design.

Subject and Setting

This study is based on data collected on 25 public school districts in southern New Jersey. The districts were selected randomly and are not necessarily reflective of all of the school districts in southern New Jersey.

The New Jersey Department of Education, Office of Special Education Programs (OSEP) provided the data used in this study. The data are from the 2002 Fall Survey and December 1st count. Data were reported on the total school population and the total number of students classified as eligible for special education. These data were further broken down in both categories (i.e. total school population and special education) by race/ethnicity and by gender. In addition, special education data were also reported by specific disability category.

Data Analysis

Only the data for the high incidence disabilities of LD, MR, and ED were utilized. For this study and the OSEP study, minority students were compared to white students. In the results and discussion section of this report, the OSEP data and the data aggregated in this study were reported and compared.

These data were presented using three different indices: composition index, risk index, and odds ratio. These indices and how to compute them were found in the NRC (2002) study.

The composition index is computed by dividing the number of students of a given racial/ethnic group in a particular disability category by the total number of students in that disability category. It gives the proportion of all children in a particular disability category by race/ethnicity. The sum of composition indices is always 100%.

The risk index is computed by dividing the number of students in a given racial/ethnic group in a particular disability category by the total number of students in that racial/ethnic group in the total school population. It gives the percentage of each racial/ethnic group classified in a particular disability category.

The odds ratio is computed by dividing the risk index of one racial/ethnic group by the risk index of another. It shows whether students in a given racial/ethnic group are at a greater or lesser risk for identification in a particular disability category than the students in the racial/ethnic group they are being compared to.

The District Factor Grouping (DFG) index is also given for each district. The DFG is an index of SES used by the state of New Jersey. It uses a composite of seven indices which produces a rating of A, B, CD, DE, FG, GH, I, or J to rank the districts by SES. “A” is the lowest score, which shows the poorest districts and “J” is the highest score, which denotes the wealthiest districts. The seven indices used to decide the DFG are:

1. Percent of population with no high school diploma
2. Percent with some college
3. Occupation
4. Population density
5. Income
6. Unemployment
7. Poverty

The findings from this study are compared to the national data compiled by the OSEP in the discussion section of this study. Data from the public schools in southern New Jersey used in this study are also compared to findings discussed in the literature review chapter of this report.

Chapter 4: Results

The data shown are from public school districts in southern New Jersey. The data was disaggregated to the district level. The data are given for the total number of students in all disability categories, LD, MR, and ED, the three high frequency disabilities. The odds ratio data are comparing the other race/ethnicity groups (American Indian/Alaskan Native, Asian/Pacific Islander, African American, and Hispanic) to the White students, therefore the odds ratio isn't given for the White students in any of the districts, as it is always 1.00. This data was however included in the tables in the appendices.

The DFG index is also given for each district. The DFG is an index of SES as discussed in the methodology section of this study. In southern New Jersey none of the school districts received the highest score of "J", which is given to the wealthiest districts in the state.

In the Absecon School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disabilities broken down by race/ethnicity were as follows: Asian/Pacific Islander, .36; African American, 1.68; and Hispanic, .86. The odds ratios for students classified as MR were: Asian/Pacific Islander, 1.78; African American, 2.00; and Hispanic, .00. The odds ratios for students classified as LD were: Asian/Pacific Islander, .09; African American, 1.38; and Hispanic, .68. For students classified as ED the odds ratios were: Asian/Pacific Islander, .00; African American, 2.00; and Hispanic, 3.18. The DFG for Absecon is DE.

In the Atlantic City School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of

students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .80; African American, 2.85; and Hispanic, 2.13. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .58; African American, 4.65; and Hispanic, 1.35. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .66; African American, 3.22; and Hispanic, 2.84. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 6.54; and Hispanic, 2.69. The DFG for Atlantic City is A.

In the Bridgeton School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .95; Asian/Pacific Islander, .35; African American, 1.45; and Hispanic, .60. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 3.55; and Hispanic, 1.53. The odds ratios for students classified as LD were: American Indian/Alaskan Native, 1.77; Asian/Pacific Islander, .66; African American, 1.49; and Hispanic, .64. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.52; and Hispanic, .24. The DFG for Bridgeton is A.

In the Brigantine School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: Asian/Pacific Islander, .34; African American, 1.22;

and Hispanic, 1.17. The odds ratios for students classified as MR were: Asian/Pacific Islander, .00; African American, .00; and Hispanic, 7.83. The odds ratios for students classified as LD were: Asian/Pacific Islander, .24; African American, 1.97; and Hispanic, 1.51. For students classified as ED the odds ratios were: Asian/Pacific Islander, .00; African American, 4.20; and Hispanic, .00. The DFG for Brigantine is DE

In the Buena Regional School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .63; African American, 2.66; and Hispanic, 1.79. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, 3.67. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 2.70; and Hispanic, 2.07. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 8.41; and Hispanic, 5.28. The DFG for Buena Regional is A.

In the Cherry Hill School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .39; African American, 1.35; and Hispanic, 1.31. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .87; African American, 6.87; and Hispanic, 5.13. The odds ratios for students classified as LD were: American Indian/

Alaskan Native, .00; Asian/Pacific Islander, .21; African American, 1.36; and Hispanic, 1.59. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .31; African American, 1.80; and Hispanic, 1.43. The DFG for Cherry Hill is I.

In the Egg Harbor City School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: Asian/Pacific Islander, 1.09; African American, .06; and Hispanic, .74. The odds ratios for students classified as MR were: Asian/Pacific Islander, .00; African American, 3.48; and Hispanic, 2.09. The odds ratios for students classified as LD were: Asian/Pacific Islander, 2.10; African American, .42; and Hispanic, .58. For students classified as ED the odds ratios were: Asian/Pacific Islander, .00; African American, .00; and Hispanic, .52. The DFG for Egg Harbor City is B.

In the Egg Harbor Township School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, 1.21; Asian/Pacific Islander, .44; African American, 1.68; and Hispanic, 1.07. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, 2.48; African American, 2.24; and Hispanic, .45. The odds ratios for students classified as LD were: American Indian/Alaskan Native, 2.21; Asian/Pacific Islander, .30; African American, 1.85; and Hispanic, 1.23. For students classified as ED the odds ratios were: American Indian/Alaskan

Native, .00; Asian/Pacific Islander, .00; African American, 2.96; and Hispanic, .28. The DFG for Egg Harbor Township is CD.

In the Estell Manor School District there were no Asian/Pacific Islander or African American students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, 4.91; and Hispanic, 9.82. There was just one White student classified as MR in this district. The odds ratios for students classified as LD were: American Indian/Alaskan native, 5.40; and Hispanic, 21.56. There were no students classified as ED in Estell Manor. The DFG for Folsom Borough is DE.

In the Folsom Borough School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: Asian/Pacific Islander, .00; African American, 1.17; and Hispanic, 1.42. There were no students classified as MR in this district. The odds ratios for students classified as LD were: Asian/Pacific Islander, .00; African American, .71; and Hispanic, .00. For students classified as ED the odds ratios were: Asian/Pacific Islander, .00; African American, 16.80; and Hispanic, 40.83. The DFG for Folsom Borough is CD.

In the Galloway Township School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .50; African American, 1.66; and Hispanic, 1.00. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, 5.0; African American, 21.00; and

Hispanic, 7.50. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .50; African American, 1.93; and Hispanic, 1.15. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .19; African American, 2.39; and Hispanic, .85. The DFG for Galloway Township is DE.

In the Greater Egg Harbor School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .147; Asian/Pacific Islander, .33; African American, 1.45; and Hispanic, 1.70. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .89; and Hispanic, .50. The odds ratios for students classified as LD were: American Indian/Alaskan Native, 1.61; Asian/Pacific Islander, .39; African American, 1.56; and Hispanic, 1.94. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.53; and Hispanic, 8.65. The DFG for Greater Egg Harbor is CD.

In the Haddonfield Borough School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .70; and Hispanic, .25. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The odds ratios for students classified as LD were: American Indian/

Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .83; and Hispanic, .29. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The DFG for Haddonfield Borough is I.

In the Hamilton Township School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, 1.85; Asian/Pacific Islander, .24; African American, 1.54; and Hispanic, 1.13. The odds ratios for students classified as MR were: American Indian/Alaskan Native, 108.70; Asian/Pacific Islander, .00; African American, 1.87; and Hispanic, 2.48. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .47; African American, 1.47; and Hispanic, 1.60. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 2.47; and Hispanic, .40. The DFG for Hamilton Township is DE.

In the Hammonton school district, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 3.25; and Hispanic, 2.24. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, 5.88. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 3.81; and Hispanic,

2.01. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 4.98; and Hispanic, 1.20. The DFG for Hammonton is B.

In the Linwood School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: Asian/Pacific Islander, .31; African American, 2.76; and Hispanic, 2.21. The odds ratios for students classified as MR were: Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The odds ratios for students classified as LD were: Asian/Pacific Islander, .00; African American, 1.30; and Hispanic, .87. There were no students classified as ED in this district. The DFG for Linwood is GH.

In the Mainland Regional School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .31; African American, 1.93; and Hispanic, 1.93. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 4.40; and Hispanic, .00. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .25; African American, 1.97; and Hispanic, 1.34. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.68; and Hispanic, .80. The DFG for Mainland Regional is FG.

In the Margate School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories

broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .30; African American, .00; and Hispanic, .63. There were no students classified as MR in this district. The odds ratios for students classified as LD were: American Indian/ Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .60. There was only one white student classified as Ed in this district. The DFG for Margate is FG.

In the Mullica Township School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.58; and Hispanic, .98. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The odds ratios for students classified as LD were: American Indian/ Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.10; and Hispanic, .00. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 5.21; and Hispanic, .00. The DFG for Mullica Township is B.

In the Northfield School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .90; African American, 1.32; and Hispanic, .87. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The odds ratios for students classified as LD were: American Indian/ Alaskan Native, .00; Asian/Pacific Islander, .42; African

American, 2.49; and Hispanic, 1.53. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 7.93; and Hispanic, .00. The DFG for Northfield is FG.

In the Pleasantville School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .30; African American, .74; and Hispanic, .72. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .47; and Hispanic, .25. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .15; African American, .70; and Hispanic, .59. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .76; African American, 1.01; and Hispanic, .19. The DFG for Pleasantville is A.

In the Port Republic School District there were no American Indian/Alaskan Native, Asian/Pacific Islander or Hispanic students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: African American, .00. There were no students classified as MR in this district. The odds ratios for students classified as LD were: African American .00. There were no students classified as ED in Port Republic. The DFG for Port Republic is FG.

In the Somers Point School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American

Indian/Alaskan Native, 4.22; Asian/Pacific Islander, .77; African American, 2.49; and Hispanic, 1.92. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 3.75; and Hispanic, .00. The odds ratios for students classified as LD were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .60; African American, 2.87; and Hispanic, 2.20. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 7.83; and Hispanic, .00. The DFG for Somers Point is CD.

In the Ventnor School District, all five major racial/ethnic groups were represented in the total school population. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, 8.58; Asian/Pacific Islander, .27; African American, 1.38; and Hispanic, .90. The odds ratios for students classified as MR were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, 1.42. The odds ratios for students classified as LD were: American Indian/Alaskan Native, 10.64; Asian/Pacific Islander, .11; African American, 2.06; and Hispanic, 1.42. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, .00; and Hispanic, .00. The DFG for Ventnor is CD.

In the Weymouth Township School District there were no American Indian/Alaskan Native students. The odds ratios for the total number of students in all disability categories broken down by race/ethnicity were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, 1.45; African American, 3.02; and Hispanic, 1.24.

There were no students classified as MR in Weymouth Township. The odds ratios for students classified as LD were: American Indian/ Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 1.89; and Hispanic, 4.13. For students classified as ED the odds ratios were: American Indian/Alaskan Native, .00; Asian/Pacific Islander, .00; African American, 18.91; and Hispanic, .00. The DFG for Weymouth Township is CD.

The findings reported in this chapter of the study and found in the tables in the appendices, will be discussed in the next chapter of this report. They will be compared to the findings by the OSEP. The data from the OSEP study are listed in Appendix AA.

Chapter 5: Discussion

This study examined the total school population, the total number of classified students in students all disability categories, the composition index, the risk index, and the odds ratios broken down by race/ethnicity (Native American/Alaskan Native, Asian/Pacific Islander, African American, Hispanic, and White) of students in 25 southern New Jersey Public School Districts. The data were also given for these categories for the three high-incidence disabilities: MR, LD, and ED. These data (see Appendices B-Z) were compared to the 1998 OSEP data and the findings of researchers mentioned previously in the literature review section of this report (see Appendix AA). The data for each subheading: all disabilities, MR, LD, and ED were discussed separately.

The effect SES has on classification as eligible for special education services was also examined using New Jersey's DFG index for each of the 25 districts. Although the DFG index is for the district as a whole, and not individual students, it lends some validity in seeing trends that may occur.

All Disabilities

The 1998 OSEP data (NRC, 2002) for all disabilities does not show any alarming trends of overrepresentation. The odds ratios for American Indian/Alaskan Native, African American, Hispanic and White students are all within less than 0.20 of 1.00. African American students were 18% more likely than White students to be classified as having a disability, but the only large disproportionate representation occurs with the Asian/Pacific Islander students who are 1 ½ times less likely to be classified as eligible

for special education according to the national data.

Not all of the districts in southern New Jersey followed the trend noted above. In Estell Manor, American Indian/Alaskan Native students were almost 5 times as likely to be identified as having a disability. This is probably because there were only two American Indian/Alaskan Native students in the total school population. In Hamilton Township they were almost 2 times as likely; in Somers Point they were more than 4 times as likely; and in Ventnor, American Indian/Alaskan Native students were nearly 9 times as likely to be identified as having a disability. In Ventnor, the odds ratio for identification of any disability for American Indian/Alaskan Native students was probably so high because there were only four American Indian/Alaskan Native students in the district and all four were identified as disabled.

African American students were identified as having a disability almost 3 times as frequently as White students were in Atlantic City where they make up the majority of the school population. In Buena Regional and Somers Point, African American students were about than 2 ½ times as likely; in Hammonton, they were more than 3 times as likely, in Linwood and Weymouth Township, they were about 3 times as likely; at Mainland Regional about 2 times as likely as White students were to be identified as having a disability.

In Estell Manor, the data were confusing for Hispanic students. The district was listed as having only one Hispanic student in the total school population, but two Hispanic students were identified as having a disability. This data had Hispanic students in Estell Manor as being almost 10 times as likely as White students were to be identified

as having a disability. In Atlantic City, Hispanic students were identified as having a disability about 2 times more frequently than White students were.

Egg Harbor City was the only district that didn't follow the national trend in the total disability category concerning Asian/Pacific Islander students. In Egg Harbor City, Asian/Pacific Islander students had about the same chance as White students had of being found to have a disability. Egg Harbor City and Margate were the only districts in this study where African American students were significantly less likely than White students were of being found to have a disability. It should be noted that there were only three African American students in the total school population in Margate.

Mental Retardation

The 1998 OSEP (NRC, 2002) data showed that African American students were over 2 times as likely as White students to be identified as having MR. In the category of MR, as in most of the disability categories, Asian /Pacific Islander students were underrepresented, having only half the chance White students had of being identified. American Indian/Alaskan Native and Hispanic students had about the same chance as White students had of being labeled as MR. According to Oswald, et al (1999) African American students were 2 ½ times more likely to be identified as MMR. Losen and Orfield (2002) in their study for Harvard, found that in New Jersey, African American students are 3 times as likely as their White counterparts to be classified as having MR.

In Folsom Borough, Margate, Port Republic, and Weymouth Township in southern New Jersey, there were no students identified as MR. In Estell Manor, Linwood, and Mullica Township there was only one White student identified as MR. The other Racial/ethnic groups had an odds ratio of 0.00. In Northfield, there were only two

students identified as MR and both of those students were White. In Haddonfield Borough, there were only three students identified as MR. All three students were White. In Pleasantville, African American and Hispanic students were at significantly less risk of being labeled as MR than White students were. The odds ratios for American Indian/Alaskan Native and Asian/Pacific Islander were 0.00.

American Indian/Alaskan Native students in Hamilton Township were almost 109 times more likely to be identified as MR than White students were. It should be noted that this represents only one American Indian/Alaskan Native student out of a total population of four.

Unlike the national trend shown in the NRC (2002) study, Galloway Township Asian/Pacific Islander students were 5 times as likely to be identified as MR as White were. In Absecon Asian/Pacific Islander students were about $1\frac{3}{4}$ times as likely to be identified as MR and in Egg Harbor Township they were almost $2\frac{1}{2}$ times as likely to be identified as MR than White students were.

There were seven districts in southern New Jersey out of the 25 surveyed that had representations of African American students greater than those listed in the 1998 OSEP (NRC, 2002) and the results found by Oswald, et al (1999). The results listed in the 1998 OSEP data (NRC) and Oswald, et al. were discouraging enough, indicating that African American students were more than $2\frac{1}{4}$ times as likely as White students were to be identified as having MR, obvious overrepresentation. African American students in Bridgeton and Egg Harbor City were about $3\frac{1}{2}$ times more likely to be identified as MR than White students were. In Somers Point they were $3\frac{3}{4}$ times more likely; in Atlantic City and Mainland Regional, they were $4\frac{1}{2}$ times more likely than White students were

to be found to have MR. In Cherry Hill, African American Students were almost 9 times as likely; and in Galloway Township African Americans were 21 times as likely as White students to be identified as having MR than White students were.

In the national 1998 OSEP data (NRC, 2002) Hispanic students had about an equal chance with White students of being identified as having MR. There were nine districts in southern New Jersey, of the 25 districts surveyed, which had a greater disproportionate representation of Hispanic students as having MR. In Brigantine and Galloway Township, Hispanic students were more than 7 times as likely to be identified as having MR. In Cherry Hill and Hammonton, Hispanic students were more likely to be classified with MR more than 5 times as frequently as White students were. Hispanic students were more than 3 ½ times as likely to be classified with MR in Buena Regional. In Hamilton Township Hispanic students were about 2 ½ times more likely; in Egg Harbor City, about twice as likely; and in Bridgeton, about 1 ½ times more likely than White students were of being identified as having MR.

Learning Disabilities

In the National OSEP Data American Indian/ Alaskan Native students had slightly more than an equal chance (about 1 ¼) of being classified as having a LD than White students did. None of the schools in this study followed that trend. Out of the 25 southern New Jersey Public School Districts studied, nine districts didn't have any American Indian/Alaskan Native students registered in their schools. There were 11 districts that didn't have any American Indian/Alaskan Native students classified as having a LD. The other five districts had an overrepresentation of American Indian/Alaskan Native students in their schools.

In Ventnor, American Indian/Alaskan Native students were more than 10 ½ times as likely as White students were to be labeled with a LD. In Estell Manor they were more than 5 times as likely; in Egg Harbor Township, about 2 ¼ times as likely; and in Bridgeton and Greater Egg Harbor, more than 1 ½ times as likely to be identified as having a LD than the White students were. These numbers could be misleading however, as there were only 4, 2, 11, 6, and 12 American Indian /Alaskan Native students respectively in the total student populations in these districts.

There was only one school district in southern New Jersey that was well above the national odds ratio of .37 (NRC, 2002), less than a 50% chance of being classified as having a LD as White students were, for representation of Asian/Pacific Islander students as having a LD. In Egg Harbor City, Asian/Pacific Islander students had about twice the likelihood of being labeled as having a LD as White students were. In every other school district in southern New Jersey, Asian/Pacific Islander students had two-thirds or less a probability of being identified as having a LD as White students were. This shows an underrepresentation of Asian/Pacific Islander students.

The odds ratios comparing African American students to White students in southern New Jersey for being classified as having a LD were alarming. Out of the 25 districts surveyed, 17 had an odds ratio greater than the national average of 1.08, showing that nationally African American students were at an 8% greater risk of being labeled as having a LD than White students were, an almost equal chance. Of those 17 districts, 14 showed African American students being about 1 ½ times or greater as likely to be classified as LD than White students were.

In both Hammonton and Atlantic City, African American students were more than 3 times more likely to be classified as LD than White students were. In Somers Point and Buena Regional, African American students were close to 3 times as likely to be identified as having a LD than White students were. They were 2 ½ times more likely to be identified as having a LD in Northfield. In Ventnor, Brigantine, Mainland Regional, Galloway Township, Weymouth Township, and Egg Harbor Township, African American students were about twice as likely to be classified as LD than White students were. Finally, in Greater Egg Harbor, Bridgeton, and Hamilton Township, African American students were about 1 ½ times as likely to be identified as having a LD than White students were. These data show a clear trend toward overrepresentation of African American students in the districts discussed in the category of LD.

Artiles (2003) noted the rise in African Americans being identified as having a LD without citing data. Oswald, et al. (1999) called for additional studies being undertaken to identify the disproportionate representation of African Americans in the specific category of LD, also without citing data. While there is no data from Artiles and Oswald, et al. to compare the data in this study to, it is apparent their concerns are well founded.

According to the OSEP data (NRC, 2002) Hispanic students, like African American students were only slightly more likely (12%) to be identified as having a LD as White students were. Again, the local data was quite different and alarming. The local data show a definite overrepresentation of Hispanic students classified as having a LD in 11 out of the 25 districts studied. Another four districts had an odds ratio greater than the national average as indicated by the OSEP data (NRC).

In Weymouth Township, Hispanic students were more than 4 times as likely to be identified as having a LD as White students were. In Atlantic City, they were almost 3 times as likely as White students were to be labeled as LD. In Somers Point, Buena Regional, Hammonton, and Greater Egg Harbor, Hispanic students were about 2 times as likely; and in Hamilton Township, Northfield, Brigantine, and Ventnor, Hispanic students were about 1 ½ times as likely as their White counterparts to be classified as having a LD.

In Estell Manor, Hispanic students were 21 ½ times as likely as their White counterparts to be identified as having a LD. As was mentioned before, this data is confusing because Estell Manor is listed as having only one Hispanic student in the student body, but two Hispanic students are listed as being identified as having a LD.

Emotionally Disturbed

The 1998 OSEP data (NRC, 2002) shows that nationally American Indian/Alaskan Native students have about an equal chance of being identified as ED as White students. There were no American Indian/Alaskan Native students classified as ED in the southern New Jersey Public Schools studied. This indicates that these students are underrepresented in the category of ED in the schools examined.

Asian/ Pacific Islander students are underrepresented in the category of ED according to the 1998 national data (NRC, 2002). They were the only group listed as being underrepresented in all categories of special education. There was only one Asian/Pacific Islander student identified as ED according to the local data. That student was in Galloway Township. Galloway still had an odds ratio below the national average,

with Asian/ Pacific Islander students being less than a fifth as likely as White students of being identified as ED.

Hispanic students in Mainland Regional, Greater Egg Harbor Township, and Bridgeton were about 1 ½ times more likely to be identified as ED than their White counterparts were, the same as the national average. With these students having a 50% greater likelihood of being identified as ED, the data shows a trend toward overrepresentation of African American students as ED.

The data on southern New Jersey Public Schools indicate that few students were classified as ED, in most districts less than 1% of the students were classified in this category, which is less than the national average of 1.01% (NRC, 2002). The problem is that African American students were much more likely to be identified as ED than White students were.

In Weymouth Township, African American students were almost 19 times as likely to be identified as ED than the White students were. In Folsom Borough, the data indicates that African American students were more almost 17 times as likely as their White counterparts were to be classified as ED. In Buena Regional, Northfield, and Somers Point, they were about 8 times more likely to be labeled as ED than the White students were. African American students were 6½ times more likely to be identified as ED than their White counterparts were in Atlantic City. They were about 5 times more likely to be classified as ED in Mullica Township and Hammonton. In Brigantine, African American students were more than 4 times as likely; in Egg Harbor Township, 3 times as likely to be labeled ED than the White students were. African American students were about 2 ½ times as likely to be identified as ED in Hamilton and Galloway

Townships as White students were. In Absecon and Cherry Hill they were 2 times more likely than White students were to be classified as ED.

Six districts; Weymouth Township, Folsom Borough, Buena Regional, Northfield, Somers Point, and Atlantic City had overrepresentation of African American students greater than the data found by Losen and Orfield (2002) in their Harvard study. Losen and Orfield found rates of a 2 to 6 times greater chance of African American students being identified as ED than their White counterparts.

The 1998 OSEP (NRC, 2002) data shows that Hispanic students were less likely to be identified than White students were as ED. While the data on the majority of the school districts studied in southern New Jersey were in line with the 1998 OSEP data (NRC), there were some exceptions.

The data on Folsom Borough showed that Hispanic students were over 40 times more likely to be identified as ED than the White students were. In Greater Egg Harbor, Hispanic students were more than 8 ½ times as likely; in Buena Regional, more than 5 times as likely; in Absecon, 3 times as likely; and in Atlantic City, more than 2 ½ times as likely as their White counterparts to be classified as ED. In both Cherry Hill and Hammonton, Hispanic students were slightly less than 1 ½ times as likely as White students were for being classified as ED. This was about twice the national average, however.

Socioeconomic Status

Oswald, et al. (1999) stated that, as poverty increased, more minority students were identified as having MMR. In this study no correlation appeared to exist between poverty rate and classification as having MMR. Overrepresentation of minority students

as having ED was fairly low in the southern New Jersey Districts in all the DFG index categories except DE. DE was the median SES indicator in the southern New Jersey Districts studied according to the DFG indexes. The DE districts had the greatest concentration of minority students overrepresented in the MR category.

Oswald, et al., Also stated that as poverty increased fewer students were identified as SED. He suggested that this was because wealthier districts were less tolerant of behavioral diversity. In this study the wealthier districts, those with a DFG index of DE and above were less likely to have an overrepresentation of minority students identified as ED than the poorer districts with a DFG index of A through CD.

No data were given in the literature on the correlation between poverty and the risk of being identified as having a LD. In the poorer districts, as indicated by the DFG indices, the RI for minority students being identified as having a LD was greater than the RI for minority students classified as having a LD in the wealthier districts.

Implications to Field

Overrepresentation of minority students in special education is an important issue. Students should only be placed in special education only if they need those services, not because of race or ethnicity. It is the law.

Professionals in the field of education can use the findings of this and similar studies to address any disproportionate representation that is shown in the individual districts. They may take a look at the criteria for special education eligibility and perhaps revise the referral process or the assessment process. Teachers can explore the biases they possess that they may not be aware of. Administrators may look and see the need for more professional development training in the area of diversity. Districts may perhaps try

to attract more minority applicants to work in their schools as teachers, examiners and administrators.

Limitations of Study

This study includes the data for just 25 of the public school districts in southern New Jersey. The districts were selected randomly; therefore they may not be reflective of all the public school districts in Southern New Jersey, New Jersey, or the country.

There were some districts with very few minority students and having one or two students classified as disabled gave that racial/ethnic group a high-risk index and disproportionate odds ratios as discussed earlier in this chapter.

The only SES data available to this researcher was the DFG index. It may be of some use in indicating trends, but is too vague to base a definitive conclusion on. SES information such as the free/reduced lunch status for each individual student would have been helpful.

Suggestions for Future Research

This researcher agrees with Oswald, et. al (1999) that studies are needed that disaggregate data to the community, school building, and classroom levels. Hosp and Rechsly (2004) advocate disaggregating data down to the individual level. That may be the only way to get a true picture of what the causes of overrepresentation are so that solutions can be applied.

Spencer, Seaton, and Harlapani (as cited in Shaffer, Ortman, & Denbo, 2002) champion doing research on the reasons students do succeed despite adversity, so that these strategies can be used with all minority students.

This researcher and others see the need for more intense studies on the pre-referral and referral processes on the district and school building level (e.g. Valles, 1998; Zhang & Katsiyannis, 2002). A study should also be undertaken that focuses on the pre-referral and referral practices of individual teachers.

As was stated previously, more research is needed disaggregating data on all levels of the spectrum, from the national level, to the state level, to the district level, to the school building level, and down to individual students. It is only by constant vigilance and the interchange of studies and ideas by committed education professionals, including African American and other minority knowledge producers (Patton, 1998; Artiles, 1998), that solutions to the dilemma of overrepresentation of minority students in special education will be found.

Study Questions

1. Is there an overrepresentation of minority students in special education in southern New Jersey Public Schools? Overrepresentation is indicated if an ethnic/racial group had an odds ratio of 1.5 or greater when compared to White students in each district.

American Indian/Alaskan Native students were overrepresented in one district examined in southern New Jersey Public Schools in the category of MR. They were overrepresented in three districts in the LD category. No overrepresentation existed for American Indian/Alaskan Native students in the ED category.

Asian/Pacific Islander students were overrepresented in the category of MR in three districts. These students were underrepresented in the other 22 southern New Jersey

Public School Districts studied. In the other categories of LD and ED, Asian/Pacific Islander students were underrepresented in each district.

African American students were overrepresented in ten southern New Jersey School Districts in the category of MR. They were overrepresented in the LD category in 14 of the school districts. In the ED category, African American students were overrepresented in 17 of the 25 districts examined in this study.

Hispanic students were overrepresented in 9 of the 25 districts in the category of MR. They were overrepresented in ten of the districts in the LD category. In the ED category, Hispanic students were overrepresented in five of the southern New Jersey School Districts studied.

2. Are some districts more likely than others to have an overrepresentation of minority students in special education?

African American students in Cherry Hill had about a 7 times greater risk for being identified as having MR than White students were. Hispanic students in Cherry Hill were at a 5 times greater risk than White students were for being identified as having MR.

Hispanic students in Folsom Borough were almost 41 times more likely to be identified as having an ED than their White counterparts were. African American students were about 17 times as likely to be classified as having an ED than the White students were.

In Galloway Township, African American students were at a 21 times greater risk; Hispanic students were at a 7 ½ times greater risk; and Asian/Pacific Islander students ran a 5 times greater risk for being classified as having MR.

In Somers Point, African American students were 3 ¼ as likely to be identified as having MR as White students were. African American students were 8 times as likely as their White counterparts to be identified as ED. They were 3 times as likely to be identified as having a LD as White students were.

3. What are the apparent risk factors for being labeled eligible for special education?

The data in this study indicated that being African American and Hispanic were two possible risk factors for being labeled as eligible for special education. Low SES was indicated as a possible risk factor for being labeled as having a LD.

4. Does the data on classified students in southern New Jersey correspond with the data on classified students in the national NRC (2002) study?

There appeared to be a greater overrepresentation of minority students classified for special education in many of the southern New Jersey Public School Districts studied.

5. Does race or SES cause overrepresentaion?

While this study can not give a definitive answer to the question of what causes overrepresentation, race came out as more of a factor than SES. This may be because the DFG index used as an indicator of SES status is not a precise measurement of the SES of the students classified as eligible for special education; it is an overview of the districts and not individuals.

Students in the poorer districts, as indicated by the DFG indices, did have a higher RI for LD than students in the wealthier districts. This does indicate a possible correlation between SES and students having a LD.

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Appendix A

IRB Approval

carolph14

From: "Tricia J. Yurak" <yurak@rowan.edu>
To: <CAROLPH14@COMCAST.NET>; "Steven Aaron Crites" <crites@groupwise.rowan.edu>; "Tricia J. Yurak" <yurak@groupwise.rowan.edu>
Sent: Wednesday, February 25, 2004 11:44 AM
Subject: Re: IRB APPROVAL: PHISTER

your IRB application is now approved.

you will receive formal notification from the IRB shortly.

thank you!

Tricia J. Yurak, Ph.D.
Chair, Rowan University Institutional Review Board
Department of Psychology
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Glassboro, NJ 08028

856.256.4500 x3778

Appendix B

2002 Absecon Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	102	6	3.77	5.88%	.36
African American	91	25	15.72	27.47%	1.68
Hispanic	57	8	5.03	14.04%	.86
White	732	120	75.47	16.39%	1.00
Total	985	159		16.14%	
Mental Retardation					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	102	1	16.67	.98%	1.78
African American	91	1	16.67	1.10%	2.00
Hispanic	57	0	0.00	0.00%	0.00
White	732	4	66.67	.55%	1.00
Total	985	6		.61%	
Learning Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	102	1	1.06	.98%	0.09
African American	91	13	13.83	14.29%	1.38
Hispanic	57	4	4.26	7.02%	0.68
White	732	76	80.85	10.38%	1.00
Total	985	94		9.54%	
Emotional Disturbance					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	102	0	0.00	0.00%	0.00
African American	91	1	16.67	1.10%	2.00
Hispanic	57	1	16.67	1.75%	3.18
White	732	4	66.67	.55%	1.00
Total	985	6		.61%	

Appendix C

2002 Atlantic City Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	41	0	0.00	0.00%	0.00
Asian/Pacific Islander	679.5	30	3.48	4.42%	0.80
African American	3,300	519	60.28	15.73%	2.85
Hispanic	2,297	270	31.36	11.75%	2.13
White	760.5	42	4.88	5.52%	1.00
Total	7,078	861		12.16%	
Mental Retardation					
American Indian/ Alaskan Native	41	0	0.00	0.00%	0.00
Asian/Pacific Islander	679.5	1	1.96	0.15%	.58
African American	3,300	40	78.43	1.21%	4.65
Hispanic	2,297	8	15.69	0.35%	1.35
White	760.5	2	3.92	0.26%	1.00
Total	7,078	51			
Learning Disabilities					
American Indian/ Alaskan Native	41	0	0.00	0.00%	0.00
Asian/Pacific Islander	679.5	13	2.44	1.91%	.66
African American	3,300	308	57.89	9.33%	3.22
Hispanic	2,297	189	35.53	8.23%	2.84
White	760.5	22	4.14	2.90%	1.00
Total	7,078	532		7.52%	
Emotional Disturbance					
American Indian/ Alaskan Native	41	0	0.00	0.00%	0.00
Asian/Pacific Islander	679.5	0	0.00	0.00%	0.00
African American	3,300	28	75.68	0.85%	6.54
Hispanic	2,297	8	21.62	0.35%	2.69
White	760.5	1	2.70	0.13%	1.00
Total	7,078	37		0.52%	

Appendix D

2002 Bridgeton Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	6	1	0.12	16.67%	0.95
Asian/Pacific Islander	19	1	0.12	6.25%	0.35
African American	2,167.5	553	67.77	25.51%	1.45
Hispanic	1,370	145	17.77	10.58%	0.60
White	658	116	14.22	17.63%	1.00
Total	4,220.5	816		19.33%	
Mental Retardation					
American Indian/ Alaskan Native	6	0	0.00	0.00%	0.00
Asian/Pacific Islander	19	0	0.00	0.00%	0.00
African American	2,167.5	70	73.68	3.23%	3.55
Hispanic	1,370	19	20.00	1.39%	1.53
White	658	6	6.32	0.91%	1.00
Total	4,220.5	95		2.25%	
Learning Disabilities					
American Indian/ Alaskan Native	6	1	0.22	16.67%	1.77
Asian/Pacific Islander	19	1	0.22	6.25%	0.66
African American	2,167.5	304	67.41	14.03%	1.49
Hispanic	1,370	83	18.40	6.06%	0.64
White	658	62	13.75	9.42%	1.00
Total	4,220.5	451		10.69%	
Emotional Disturbance					
American Indian/ Alaskan Native	6	0	0.00	0.00%	0.00
Asian/Pacific Islander	19	0	0.00	0.00%	0.00
African American	2,167.5	50	76.92	2.31%	1.52
Hispanic	1,370	5	7.69	0.36%	0.24
White	658	10	15.38	1.52%	1.00
Total	4,220.5	65		1.54%	

Appendix E

2002 Brigantine Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	141	7	3.89	4.96%	0.34
African American	68	12	6.67	17.65%	1.22
Hispanic	212	36	20.00	16.98%	1.17
White	861	125	69.44	14.52%	1.00
Total	1,282	180		14.04%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	141	0	0.00	0.00%	0.00
African American	68	0	0.00	0.94%	0.00
Hispanic	212	2	66.67	0.12%	7.83
White	861	1	33.33	0.23%	1.00
Total	1,282	3			
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	141	2	2.50	1.42%	0.24
African American	68	8	10.00	11.76%	1.97
Hispanic	212	19	23.75	8.96%	1.51
White	861	51	63.75	5.92%	1.00
Total	1,282	80		6.24%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	141	0	0.00	0.00%	0.00
African American	68	1	25.00	1.47%	4.20
Hispanic	212	0	0.00	0.00%	0.00
White	861	3	75.00	0.35%	1.00
Total	1,282	4		0.31%	

Appendix F

2002 Buena Regional Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	1	.23	7.69%	0.63
African American	369.5	120	27.97	32.48%	2.66
Hispanic	458	100	23.31	21.83%	1.79
White	1,703.5	208	48.48	12.21%	1.00
Total	2,547	429		16.84%	
Mental Retardation					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	0	0.00	0.00%	0.00
African American	369.5	0	0.00	0.00%	0.00
Hispanic	458	3	50.00	0.66%	3.67
White	1,703.5	3	50.00	0.18%	1.00
Total	2,547	6		0.24%	
Learning Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	0	0.00	0.00%	0.00
African American	369.5	58	27.36	15.70%	2.70
Hispanic	458	55	25.94	12.01%	2.07
White	1,703.5	99	46.70	5.81%	1.00
Total	2,547	212		8.32%	
Emotional Disturbance					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	0	0.00	0.00%	0.00
African American	369.5	9	42.86	2.44%	8.41
Hispanic	458	7	33.33	1.53%	5.28
White	1,703.5	5	23.81	0.29%	1.00
Total	2,547	21		0.82%	

Appendix G

2002 Cherry Hill Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	1,509	74	5.49	4.90%	0.39
African American	779	131	9.73	16.82%	1.35
Hispanic	392	64	4.75	16.33%	1.31
White	8,682	1,078	80.03	12.42%	1.00
Total	11,364	1,347		11.85%	
Mental Retardation					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	1,509	2	7.69	0.13%	0.87
African American	779	8	30.77	1.03%	6.87
Hispanic	392	3	11.54	0.77%	5.13
White	8,682	13	50.00	0.15%	1.00
Total	11,364	26		0.23%	
Learning Disabilities					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	1,509	17	2.92	1.13%	0.21
African American	779	58	9.95	7.45%	1.36
Hispanic	392	34	5.83	8.67%	1.59
White	8,682	474	81.30	5.46%	1.00
Total	11,364	583		5.13%	
Emotional Disturbance					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	1,509	5	4.20	0.33%	0.31
African American	779	15	12.61	1.93%	1.80
Hispanic	392	6	5.04	1.53%	1.43
White	8,682	93	78.15	1.07%	1.00
Total	11,364	119		1.05%	

Appendix H
 2002 Egg Harbor City Public Schools Data by Disability and Ethnic Group: Composition
 Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	3	2.97	23.08%	1.09
African American	131	16	15.84	12.21%	0.06
Hispanic	218	34	33.66	15.60%	0.74
White	227	48	47.52	21.15%	1.00
Total	589	101		17.15%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	0	0.00	0.00%	0.00
African American	131	2	40.00	1.53%	3.48
Hispanic	218	2	40.00	0.92%	2.09
White	227	1	20.00	0.44%	1.00
Total	589	5		0.85%	
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	3	6.25	23.08%	2.10
African American	131	6	12.50	4.58%	0.42
Hispanic	218	14	29.17	6.42%	0.58
White	227	25	52.08	11.01%	1.00
Total	589	48		8.15%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	13	0	0.00	0.00%	0.00
African American	131	0	0.00	0.00%	0.00
Hispanic	218	2	0.00	0.92%	0.52
White	227	4	33.33	1.76%	1.00
Total	589	6	66.67	1.02%	

Appendix I

2002 Egg Harbor Township Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	11	2	0.20	18.18%	1.21
Asian/Pacific Islander	488.5	32	3.24	6.55%	0.44
African American	813.5	206	20.85	25.32%	1.68
Hispanic	683	110	11.13	16.11%	1.07
White	4,244.5	638	64.57	15.03%	1.00
Total	6,240.5	988		15.83%	
Mental Retardation					
American Indian/ Alaskan Native	11	0	0.00	0.00%	0.00
Asian/Pacific Islander	488.5	4	16.00	0.82%	2.48
African American	813.5	6	24.00	0.74%	2.24
Hispanic	683	1	4.00	0.15%	0.45
White	4,244.5	14	56.00	0.33%	1.00
Total	6,240.5	25		0.40%	
Learning Disabilities					
American Indian/ Alaskan Native	11	2	0.36	18.18%	2.21
Asian/Pacific Islander	488.5	12	2.16	2.46%	0.30
African American	813.5	124	22.30	15.24%	1.85
Hispanic	683	69	12.41	10.10%	1.23
White	4,244.5	349	62.77	8.22%	1.00
Total	6,240.5	556		8.90%	
Emotional Disturbance					
American Indian/ Alaskan Native	11	0	0.00	0.00%	0.00
Asian/Pacific Islander	488.5	0	0.00	0.00%	0.00
African American	813.5	13	35.14	1.60%	2.96
Hispanic	683	1	2.70	0.15%	0.28
White	4,244.5	23	62.16	0.54%	1.00
Total	6,240.5	37		0.59%	

Appendix J

2002 Estell Manor Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	2	2	4.17	100.00%	4.91
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	0	0	0.00	0.00%	0.00
Hispanic	1	2	4.17	200.00%	9.82
White	216	44	91.67	20.37%	1.00
Total	219	48		21.91%	
Mental Retardation					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	0	0	0.00	0.00%	0.00
Hispanic	1	0	0.00	0.00%	0.00
White	216	1	100.00	0.46%	1.00
Total	219	1		0.46%	
Learning Disabilities					
American Indian/ Alaskan Native	2	1	4.35	50.00%	5.40
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	0	0	0.00	0.00%	0.00
Hispanic	1	2	8.70	200.00%	21.56
White	216	20	86.96	9.26%	1.00
Total	219	23		10.50%	
Emotional Disturbance					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	0	0	0.00	0.00%	0.00
Hispanic	1	0	0.00	0.00%	0.00
White	216	0	0.00	0.00%	0.00
Total	219	0	0.00	0.00%	0.00

Appendix K

2002 Folsom Borough Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	2	0	0.00	0.00%	0.00
African American	17	4	6.06	23.53%	1.17
Hispanic	14	4	6.06	28.57%	1.42
White	288	58	87.88	20.14%	1.00
Total	321	66		20.56%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	2	0	0.00	0.00%	0.00
African American	17	0	0.00	0.00%	0.00
Hispanic	14	0	0.00	0.00%	0.00
White	288	0	0.00	0.00%	0.00
Total	321	0		0.00%	
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	2	0	0.00	0.00%	0.00
African American	17	1	4.00	5.88%	0.71
Hispanic	14	0	0.00	0.00%	0.00
White	288	24	96.00	8.33%	1.00
Total	321	25		7.79%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	2	0	0.00	0.00%	0.00
African American	17	1	25.00	5.88%	16.80
Hispanic	14	2	50.00	14.29%	40.83
White	288	1	25.00	0.35%	1.00
Total	321	4		1.25%	

Appendix L

2002 Galloway Township Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	14	0	0.00	0.00%	0.00
Asian/Pacific Islander	489	34	6.04	6.95%	0.50
African American	478	111	19.72	23.22%	1.66
Hispanic	338	47	8.35	13.91%	1.00
White	2,656	371	65.90	13.97%	1.00
Total	3,975	563		14.16%	
Mental Retardation					
American Indian/ Alaskan Native	14	0	0.00	0.00%	0.00
Asian/Pacific Islander	489	1	14.29	0.20%	5.00
African American	478	41	57.14	0.84%	21.00
Hispanic	338	1	14.29	0.30%	7.50
White	2,656	1	14.29	0.04%	1.00
Total	3,975	7		0.18%	
Learning Disabilities					
American Indian/ Alaskan Native	14	0	0.00	0.00%	0.00
Asian/Pacific Islander	489	17	5.82	3.48%	0.50
African American	478	64	21.92	13.39%	1.93
Hispanic	338	27	9.25	7.99%	1.15
White	2,656	184	63.01	6.93%	1.00
Total	3,975	292		7.35%	
Emotional Disturbance					
American Indian/ Alaskan Native	14	0	0.00	0.00%	0.00
Asian/Pacific Islander	489	1	2.27	0.20%	0.19
African American	478	12	27.27	2.51%	2.39
Hispanic	338	3	6.81	0.89%	0.85
White	2,656	28	63.64	1.05%	1.00
Total	3,975	44		1.11%	

Appendix M

2002 Greater Egg Harbor Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities.					
American Indian/ Alaskan Native	12	3	0.47	25.00%	1.47
Asian/Pacific Islander	299	17	2.69	5.69%	0.33
African American	598	148	23.48	24.75%	1.45
Hispanic	353	102	16.11	28.90%	1.70
White	2,131	363	57.35	17.03%	1.00
Total	3,393	633		18.66%	
Mental Retardation					
American Indian/ Alaskan Native	12	0	0.00	0.00%	0.00
Asian/Pacific Islander	299	0	0.00	0.00%	0.00
African American	598	3	18.75	0.50%	0.89
Hispanic	353	1	6.25	0.28%	0.50
White	2,131	12	75.00	0.56%	1.00
Total	3,393	16		0.47%	
Learning Disabilities					
American Indian/ Alaskan Native	12	2	0.50	16.67%	1.61
Asian/Pacific Islander	299	12	2.98	4.01%	0.39
African American	598	97	24.07	16.22%	1.56
Hispanic	353	71	17.62	20.11%	1.94
White	2,131	221	54.84	10.37%	1.00
Total	3,393	403		11.88%	
Emotional Disturbance					
American Indian/ Alaskan Native	12	0	0.00	0.00%	0.00
Asian/Pacific Islander	299	0	0.00	0.00%	0.00
African American	598	12	27.27	2.01%	1.53
Hispanic	353	4	9.09	11.33%	8.65
White	2,131	28	63.64	1.31%	1.00
Total	3,393	44		1.30%	

Appendix N

2002 Haddonfield Borough Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	7	0	0.00	0.00%	0.00
Asian/Pacific Islander	74	0	0.00	0.00%	0.00
African American	39	4	1.30	10.26%	0.70
Hispanic	55	2	0.65	3.64%	0.25
White	2,067	301	98.05	14.56%	1.00
Total	2,242	307		13.69%	
Mental Retardation					
American Indian/ Alaskan Native	7	0	0.00	0.00%	0.00
Asian/Pacific Islander	74	0	0.00	0.00%	0.00
African American	39	0	0.00	0.00%	0.00
Hispanic	55	0	0.00	0.00%	0.00
White	2,067	3	100.00	0.15%	1.00
Total	2,242	3		0.13%	
Learning Disabilities					
American Indian/ Alaskan Native	7	0	0.00	0.00%	0.00
Asian/Pacific Islander	74	0	0.00	0.00%	0.00
African American	39	2	1.53	5.13%	0.83
Hispanic	55	1	0.76	1.82%	0.29
White	2,067	128	97.71	6.19%	1.00
Total	2,242	131		5.84%	
Emotional Disturbance					
American Indian/ Alaskan Native	7	0	0.00	0.00%	0.00
Asian/Pacific Islander	74	0	0.00	0.00%	0.00
African American	39	0	0.00	0.00%	0.00
Hispanic	55	0	0.00	0.00%	0.00
White	2,067	13	100.00	0.63%	1.00
Total	2,242	13		0.58%	

Appendix O

2002 Hamilton Township Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	4	1	0.23	25.00%	1.85
Asian/Pacific Islander	92	3	0.69	3.26%	0.24
African American	693	145	33.26	20.92%	1.54
Hispanic	352	54	12.39	15.34%	1.13
White	1,720	233	53.44	13.55%	1.00
Total	2,861	436		15.24%	
Mental Retardation					
American Indian/ Alaskan Native	4	1	10.00	25.00%	108.70
Asian/Pacific Islander	92	0	0.00	0.00%	0.00
African American	693	3	30.00	0.43%	1.87
Hispanic	352	2	20.00	0.57%	2.48
White	1,720	4	40.00	0.23%	1.00
Total	2,861	10		0.35%	
Learning Disabilities					
American Indian/ Alaskan Native	4	0	0.00	0.00%	0.00
Asian/Pacific Islander	92	2	1.30	2.17%	0.47
African American	693	47	30.52	6.78%	1.47
Hispanic	352	26	16.88	7.39%	1.60
White	1,720	79	51.30	4.60%	1.00
Total	2,861	154		5.38%	
Emotional Disturbance					
American Indian/ Alaskan Native	4	0	0.00	0.00%	0.00
Asian/Pacific Islander	92	0	0.00	0.00%	0.00
African American	693	12	48.00	1.73%	2.47
Hispanic	352	1	4.00	0.28%	0.40
White	1,720	12	48.00	0.70%	1.00
Total	2,861	25		0.87%	

Appendix P

2002 Hammonton Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	39	0	0.00	0.00%	0.00
African American	102	31	8.61	30.39%	3.25
Hispanic	425	89	24.72	20.94%	2.24
White	2,563.5	240	66.67	9.36%	1.00
Total	3,131.5	360		11.50%	
Mental Retardation					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	39	0	0.00	0.00%	0.00
African American	102	0	0.00	0.00%	0.00
Hispanic	425	2	50.00	0.47%	5.88
White	2,563.5	2	50.00	0.08%	1.00
Total	3,131.5	4		0.13%	
Learning Disabilities					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	39	0	0.00	0.00%	0.00
African American	102	15	10.20	14.70%	3.81
Hispanic	425	33	22.45	7.76%	2.01
White	2,563.5	99	67.35	3.86%	1.00
Total	3,131.5	147		4.69%	
Emotional Disturbance					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	39	0	0.00	0.00%	0.00
African American	102	3	14.29	2.94%	4.98
Hispanic	425	3	14.29	0.71%	1.20
White	2,563.5	15	71.43	0.59%	1.00
Total	3,131.5	21		0.67%	

Appendix Q

2002 Linwood Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	43	2	1.30	4.65%	0.31
African American	12	5	3.25	41.67%	2.76
Hispanic	18	6	3.90	33.33%	2.21
White	935	141	91.56	15.08%	1.00
Total	1,008	154		15.28%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	43	0	0.00	0.00%	0.00
African American	12	0	0.00	0.00%	0.00
Hispanic	18	0	0.00	0.00%	0.00
White	935	1	100.00	0.11%	1.00
Total	1,008	1		0.10%	
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	43	0	0.00	0.00%	0.00
African American	12	1	1.61	8.33%	1.30
Hispanic	18	1	1.61	5.56%	0.87
White	935	60	96.77	6.42%	1.00
Total	1,008	62		6.15%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	0	0	0.00	0.00%	0.00
Hispanic	0	0	0.00	0.00%	0.00
White	0	0	0.00	0.00%	0.00
Total	0	0	0.00	0.00%	0.00

Appendix R
 2002 Mainland Regional Public School Data by Disability and Ethnic Group:
 Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	5	0	0.00	0.00%	0.00
Asian/Pacific Islander	86	4	1.72	4.65%	0.31
African American	75.5	21	9.05	27.81%	1.93
Hispanic	79.5	15	6.47	18.86%	1.31
White	1,329.5	192	82.76	14.42%	1.00
Total	1,575.5	232		14.72%	
Mental Retardation					
American Indian/ Alaskan Native	5	0	0.00	0.00%	0.00
Asian/Pacific Islander	86	0	0.00	0.00%	0.00
African American	75.5	1	20.00	1.32%	4.40
Hispanic	79.5	0	0.00	0.00%	0.00
White	1,329.5	4	80.00	0.30%	1.00
Total	1,575.5	5		0.31%	
Learning Disabilities					
American Indian/ Alaskan Native	5	0	0.00	0.00%	0.00
Asian/Pacific Islander	86	2	1.32	2.33%	0.25
African American	75.5	14	9.27	18.54%	1.97
Hispanic	79.5	10	6.62	12.58%	1.34
White	1,329.5	125	82.78	9.40%	1.00
Total	1,575.5	151		9.58%	
Emotional Disturbance					
American Indian/ Alaskan Native	5	0	0.00	0.00%	0.00
Asian/Pacific Islander	86	0	0.00	0.00%	0.00
African American	75.5	2	8.33	2.65%	1.68
Hispanic	79.5	1	4.17	1.26%	0.80
White	1,329.5	21	87.50	1.58%	1.00
Total	1,575.5	24		1.52%	

Appendix S

2002 Margate Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	16	1	0.84	6.25%	0.30
African American	3	0	0.00	0.00%	0.00
Hispanic	30	4	3.36	13.33%	0.63
White	541	114	95.80	21.07%	1.00
Total	590	119		20.17%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	16	0	0.00	0.00%	0.00
African American	3	0	0.00	0.00%	0.00
Hispanic	30	0	0.00	0.00%	0.00
White	541	0	0.00	0.00%	0.00
Total	590	0	0.00	0.00%	0.00
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	16	0	0.00	0.00%	0.00
African American	3	0	0.00	0.00%	0.00
Hispanic	30	2	3.23	6.67%	0.60
White	541	60	96.77	11.09%	1.00
Total	590	62		10.51%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	16	0	0.00	0.00%	0.00
African American	3	0	0.00	0.00%	0.00
Hispanic	30	0	0.00	0.00%	0.00
White	541	1	100.00	0.18%	1.00
Total	590	1		0.17%	

Appendix T
 2002 Mullica Township Public Schools Data by Disability and Ethnic Group:
 Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	7	0	0.00	0.00%	0.00
African American	101	20	18.02	19.80%	1.58
Hispanic	195	24	21.62	12.31%	0.98
White	535	67	60.36	12.52%	1.00
Total	838	111		13.25%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	7	0	0.00	0.00%	0.00
African American	101	1	100.00	0.99%	*
Hispanic	195	0	0.00	0.00%	0.00
White	535	0	0.00	0.00%	0.00
Total	838	1		0.12%	
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	7	0	0.00	0.00%	0.00
African American	101	6	12.50	5.94%	1.10
Hispanic	195	13	27.08	6.67%	1.23
White	535	29	60.42	5.42%	1.00
Total	838	48		5.73%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	7	0	0.00	0.00%	0.00
African American	101	1	50.00	0.99%	5.21
Hispanic	195	0	0.00	0.00%	0.00
White	535	1	50.00	0.19%	1.00
Total	838	2		0.24%	

* There were no White students classified as MR to be able to make a comparison

Appendix U
 2002 Northfield Public Schools Data by Disability and Ethnic Group: Composition
 Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	44	5	3.62	11.36%	0.90
African American	30	5	3.62	16.67%	1.32
Hispanic	73	8	5.80	10.96%	0.87
White	952	120	86.96	12.61%	1.00
Total	1,099	138		12.56%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	44	0	0.00	0.00%	0.00
African American	30	0	0.00	0.00%	0.00
Hispanic	73	0	0.00	0.00%	0.00
White	952	2	100.00	0.21%	1.00
Total	1,099	2		0.18%	
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	44	1	1.61	2.27%	0.42
African American	30	4	6.45	13.33%	2.49
Hispanic	73	6	9.68	8.22%	1.53
White	952	51	82.26	5.36%	1.00
Total	1,099	62		5.64%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	44	0	0.00	0.00%	0.00
African American	30	1	20.00	3.33%	7.93
Hispanic	73	0	0.00	0.00%	0.00
White	952	4	80.00	0.42%	1.00
Total	1,099	5		0.45%	

Appendix V

2002 Pleasantville Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	45	4	0.57	8.89%	0.30
African American	2,349.5	509	73.13	21.66%	0.74
Hispanic	1,093	153	21.98	14.00%	0.72
White	103	30	4.31	29.13%	1.00
Total	3,593.5	696		19.37%	
Mental Retardation					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	45	0	0.00	0.00%	0.00
African American	2,349.5	32	74.42	1.36%	0.47
Hispanic	1,093	8	18.60	0.73%	0.25
White	103	3	6.98	2.91%	1.00
Total	3,593.5	43		1.20%	
Learning Disabilities					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	45	1	0.28	2.22%	0.15
African American	2,349.5	241	6.47	10.26%	0.70
Hispanic	1,093	95	26.99	8.70%	0.59
White	103	15	4.26	14.63%	1.00
Total	3,593.5	352		9.80%	
Emotional Disturbance					
American Indian/ Alaskan Native	3	0	0.00	0.00%	0.00
Asian/Pacific Islander	45	1	1.27	2.22%	0.76
African American	2,349.5	69	87.34	2.94%	1.01
Hispanic	1,093	6	7.59	0.55%	0.19
White	103	3	3.80	2.91%	1.00
Total	3,593.5	79		2.20%	

Appendix W
 2002 Port Republic Public Schools Data by Disability and Ethnic Group: Composition
 Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	1	0	0.00	0.00%	0.00
Hispanic	0	0	0.00	0.00%	0.00
White	131	28	100.00	21.37%	1.00
Total	132	28		21.21%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	1	0	0.00	0.00%	0.00
Hispanic	0	0	0.00	0.00%	0.00
White	131	0	0.00	0.00%	0.00
Total	132	0	0.00	0.00%	0.00
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	1	0	0.00	0.00%	0.00
Hispanic	0	0	0.00	0.00%	0.00
White	131	11	100.00	8.40%	1.00
Total	132	11		8.33%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	0	0	0.00	0.00%	0.00
African American	1	0	0.00	0.00%	0.00
Hispanic	0	0	0.00	0.00%	0.00
White	131	0	0.00	0.00%	0.00
Total	132	0	0.00	0.00%	0.00

Appendix X

2002 Somers Point Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	2	1	0.42	50.00%	4.22
Asian/Pacific Islander	55	5	2.12	9.09%	0.77
African American	166	49	20.76	29.52%	2.49
Hispanic	127	29	12.29	22.83%	1.92
White	1,282	152	64.41	11.86%	1.00
Total	1,632	236		14.46%	
Mental Retardation					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	55	0	0.00	0.00%	0.00
African American	166	1	33.33	0.60%	3.75
Hispanic	127	0	0.00	0.00%	0.00
White	1,282	2	66.67	0.16%	1.00
Total	1,632	3		0.18%	
Learning Disabilities					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	55	2	1.59	3.64%	0.60
African American	166	29	23.02	17.47%	2.87
Hispanic	127	17	13.49	13.39%	2.20
White	1,282	78	61.90	6.08%	1.00
Total	1,632	126		7.72%	
Emotional Disturbance					
American Indian/ Alaskan Native	2	0	0.00	0.00%	0.00
Asian/Pacific Islander	55	0	0.00	0.00%	0.00
African American	166	3	50.00	1.80%	7.83
Hispanic	127	0	0.00	0.00%	0.00
White	1,282	3	50.00	0.23%	1.00
Total	1,632	6		0.37%	

Appendix Y

2002 Ventnor Public Schools Data by Disability and Ethnic Group: Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	4	4	3.31	100.00%	8.58
Asian/Pacific Islander	188	6	4.96	3.19%	0.27
African American	62	10	8.26	16.13%	1.38
Hispanic	374	39	32.23	10.43%	0.90
White	532	62	51.24	11.65%	1.00
Total	1,160	121		10.43%	
Mental Retardation					
American Indian/ Alaskan Native	4	0	0.00	0.00%	0.00
Asian/Pacific Islander	188	0	0.00	0.00%	0.00
African American	62	0	0.00	0.00%	0.00
Hispanic	374	1	50.00	0.27%	1.42
White	532	1	50.00	0.19%	1.00
Total	1,160	2		0.17%	
Learning Disabilities					
American Indian/ Alaskan Native	4	2	3.39	50.00%	10.64
Asian/Pacific Islander	188	1	1.69	0.53%	0.11
African American	62	6	10.17	9.68%	2.06
Hispanic	374	25	42.37	6.68%	1.42
White	532	25	42.37	4.70%	1.00
Total	1,160	59		5.09%	
Emotional Disturbance					
American Indian/ Alaskan Native	4	0	0.00	0.00%	0.00
Asian/Pacific Islander	188	0	0.00	0.00%	0.00
African American	62	0	0.00	0.00%	0.00
Hispanic	374	0	0.00	0.00%	0.00
White	532	8	0.00	1.50%	1.00
Total	1,160	8		0.69%	

Appendix Z

2002 Weymouth Township Public Schools Data by Disability and Ethnic Group:
Composition Index, Risk Index, and Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	3	1	1.45	33.33%	1.45
African American	23	16	23.19	69.57%	3.02
Hispanic	7	2	2.90	28.57%	1.24
White	217	50	72.46	23.04%	1.00
Total	250	69		27.60%	
Mental Retardation					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	3	0	0.00	0.00%	0.00
African American	23	0	0.00	0.00%	0.00
Hispanic	7	0	0.00	0.00%	0.00
White	217	0	0.00	0.00%	0.00
Total	250	0	0.00	0.00%	0.00
Learning Disabilities					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	3	0	0.00	0.00%	0.00
African American	23	3	15.00	13.04%	1.89
Hispanic	7	2	10.00	28.57%	4.13
White	217	15	75.00	6.91%	1.00
Total	250	20		8.00%	
Emotional Disturbance					
American Indian/ Alaskan Native	0	0	0.00	0.00%	0.00
Asian/Pacific Islander	3	0	0.00	0.00%	0.00
African American	23	2	66.67	8.70%	18.91
Hispanic	7	0	0.00	0.00%	0.00
White	217	1	33.33	0.46%	1.00
Total	250	3		1.20%	

Appendix AA
 1998 OSEP Data by Disability and Ethnic Group: Composition Index, Risk Index, and
 Odds Ratio

Ethnicity	Total Number	N in Disability	Comp. Index	Risk Index	Odds Ratio
All Disabilities					
American Indian/ Alaskan Native	526,719	68,966	1.24	13.10%	1.08
Asian/Pacific Islander	1,794,189	95,343	1.72	5.31%	0.44
African American	7,785,863	1,111,650	20.03	14.28%	1.18
Hispanic	6,819,434	773,013	13.93	11.34%	0.94
White	28,937,632	3,500,911	63.08	12.10%	1.00
Total	45,863, 813	5,549,913		12.10%	
Mental Retardation					
American Indian/ Alaskan Native	526,719	6,295	1.03	1.20%	1.07
Asian/Pacific Islander	1,794,189	10,228	1.67	0.57%	0.51
African American	7,785,863	204,739	33.51	2.63%	2.35
Hispanic	6,819,434	66,543	10.89	0.98%	0.87
White	28,937,632	323,173	52.89	1.12%	1.00
Total	45,863, 813	610,978		1.33%	
Learning Disabilities					
American Indian/ Alaskan Native	526,719	38,455	1.37	7.30%	1.20
Asian/Pacific Islander	1,794,189	40,345	1.43	2.25%	0.37
African American	7,785,863	512,083	18.19	6.58%	1.08
Hispanic	6,819,434	464,458	16.50	6.81%	1.12
White	28,937,632	1,759,501	62.51	6.14%	1.00
Total	45,863, 813	2,814,842			
Emotional Disturbance					
American Indian/ Alaskan Native	526,719	5,261	1.14	1.00%	1.02
Asian/Pacific Islander	1,794,189	4,796	1.04	0.27%	0.27
African American	7,785,863	121,800	26.36	1.56%	1.59
Hispanic	6,819,434	46,118	9.98	0.68%	0.69
White	28,937,632	284,062	61.48	0.98%	1.00
Total	45,863, 813	462,037		1.01%	

National Research Council, 2002, p.57

