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## The Color of Discipline: Sources of Racial and Gender Disproportionality in School Punishment

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The disproportionate discipline of African-American students has been extensively documented; yet the reasons for those disparities are less well understood. Drawing upon one year of middle-school disciplinary data for an urban school district, we explored three of the most commonly offered hypotheses for disproportionate discipline based on gender, race, and socioeconomic status. Racial and gender disparities in office referrals, suspensions, and expulsions were somewhat more robust than socioeconomic differences. Both racial and gender differences remained when controlling for socioeconomic status. Finally, although evidence emerged that boys engage more frequently in a broad range of disruptive behavior, there were no similar findings for race. Rather, there appeared to be a differential pattern of treatment, originating at the classroom level, wherein African-American students are referred to the office for infractions that are more subjective in interpretation. Implications for teacher training and structural reform are explored.

**KEY WORDS:** minority; overrepresentation; school discipline; suspension; expulsion.

On September 17, 1999, an intense brawl between students rumored to have been members of opposing gangs cleared the stands at a football game at Decatur High School in Decatur, Illinois. On October 1, the Decatur School Board accepted a recommendation from its superintendent that seven students, all of them African-American, be expelled from the school for two years. The deci-

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sion sparked a local outcry that escalated dramatically with the involvement of a national organization, Operation PUSH. Over 1,000 protesters marched to the school on November 14, and two days later several supporters of the students were arrested. Despite an offer to reduce the expulsions to one year, Operation PUSH filed suit against the district on behalf of six of the students (the seventh had elected to drop out), alleging procedural improprieties, harsh punishments exceeding the offense, and racial bias. On January 11, 2000, Judge Robert McLoskey rejected that suit on all counts, ruling that the Decatur School Board was well within its rights when it expelled the students.

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Despite the apparent vindication of the board's actions, the case opened an intense national dialogue on zero-tolerance policies and minority disproportionality in school discipline. In many ways, the Decatur case provides a prototype of the conflicting values and emotions that swirl around the topic. In the wake of nationally reported school shooting incidents, there can be no doubt that schools and school boards have the right—indeed, the responsibility—to take action to preserve the safety of students, staff, and parents on school grounds. On the other hand, two-year expulsions for a fistfight without weapons when weapons incidents in the same district received less severe punishments raise issues of fairness. Videotapes of the event clearly showed that seven students engaged in a rolling brawl that cleared the stands and placed bystanders at risk. Yet the fact that all of those expelled were African-American,<sup>1</sup> members of an ethnic group overrepresented in suspension and expulsion not only in Decatur, but in cities and towns across the country, created the appearance of an injustice that could not be ignored. Eventually, reaction to the incident led to consideration of the general issues of zero tolerance and racial inequity in discipline by both the U.S. Commission on Civil Rights and the Secretary of Education (Koch, 2000).

Minority overrepresentation in school punishment is by no means a new finding in school discipline research. Investigations of a variety of school punishments over the past 25 years have consistently found evidence of socioeconomic and racial disproportionality in the administration of school discipline (e.g., Children's Defense Fund, 1975; McCarthy and Hoge, 1987; Skiba, Peterson, and Williams, 1997; Thornton and Trent, 1988; Wu, Pink, Crain, and Moles, 1982). Despite extensive documentation of the existence of racial, socioeconomic, and gender disparities in school discipline data, however, the meaning of those statistics remains unclear. Few studies have systematically explored possible explanations or reasons for disciplinary disproportionality.

**DISPROPORTIONALITY BY SOCIOECONOMIC STATUS**

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Studies of school suspension have consistently documented the overrepresentation of low-socioeconomic status (SES) students in disciplinary conse-

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quences. Students who receive free school lunch are at increased risk for school suspension (Skiba et al., 1997; Wu et al., 1982). Wu et al. (1982) also found that students whose fathers did not have a full-time job were significantly more likely to be suspended than students whose fathers were employed full time.

In a qualitative study of student reactions to school discipline, Brantlinger (1991) interviewed adolescent students from both high- and low-income residential areas concerning their reactions to school climate and school discipline. Both low- and high-income adolescents agreed that low-income students were unfairly targeted by school disciplinary sanctions. There also appeared to be differences in the type of punishment meted out to students of different social classes. While high-income students more often reported receiving mild and moderate consequences (e.g., teacher reprimand, seat reassignment), low-income students reported receiving more severe consequences, sometimes delivered in a less-than-professional manner (e.g., yelled at in front of class, made to stand in hall all day, search of personal belongings).

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#### DISPROPORTIONALITY BY MINORITY STATUS

Of particular concern in the administration of school discipline is the overrepresentation of minorities, especially African-American students, in the use of exclusionary and punitive consequences. In one of the earliest explorations of evidence concerning school suspension, the Children's Defense Fund (1975) studied national data on school discipline provided by the U.S. Department of Education Office for Civil Rights (OCR) and reported rates of school suspension for black students that exceeded those for white students on a variety of measures. The CDF reported that higher rates of black students were suspended, and that black students were more likely than white students to be suspended more than once, although no racial differences were found in the length of suspension administered.

Since that report, racial disproportionality in the use of school suspension has been a highly consistent finding (Costenbader and Markson, 1994, 1998; Glackman et al., 1978; Gregory, 1997; Kaeser, 1979; Lietz and Gregory, 1978; Massachusetts Advocacy Center, 1986; McCarthy and Hoge, 1987; McFadden, Marsh, Price, and Hwang, 1992; Nichols, Ludwin, and Iadicola, 1999; Skiba et al., 1997; Streitmatter, 1986; Taylor and Foster, 1986; Thornton and Trent, 1988; Wu et al., 1982). African-American students are also more frequently exposed to harsher disciplinary strategies, such as corporal punishment (Gregory, 1996; Shaw and Braden, 1990), and are less likely than other students to receive mild disciplinary alternatives when referred for an infraction (McFadden et al., 1992). Fewer investigations have explored disciplinary disproportionality among students of other ethnic backgrounds, and those studies have yielded inconsistent results. While there appears to be overrepresentation of

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Latino students in some studies, the finding is not universal across locations or studies (see, e.g., Gordon et al., 2000).

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Studies have suggested that the rate of minority disproportionality is correlated with the overall rate of school suspension and minority disproportionality, and that overrepresentation becomes more severe after school desegregation. Overrepresentation of African-American students in school suspension and expulsion appears to increase as those punishments are used more frequently (Advancement Project/Civil Rights Project, 2000; Massachusetts Advocacy Center, 1986). Finally, while overrepresentation of African-American students in school exclusion does not appear to be dependent on the proportion of African-American students enrolled, racial disproportionality in school suspension appears to increase immediately after school desegregation, especially in high-socio-economic-status schools (Larkin, 1979; Thornton and Trent, 1988).

**DISPROPORTIONALITY BY GENDER**

There appears to be consistent evidence of overrepresentation of boys in school disciplinary sanctions. In virtually every study presenting school disciplinary data by gender, boys are referred to the office and receive a range of disciplinary consequences at a significantly higher rate than girls (Lietz and Gregory, 1978; McFadden et al., 1992; Shaw and Braden, 1990; Skiba et al., 1997; Taylor and Foster, 1986). Indeed, a number of studies have found that boys are over four times as likely as girls to be referred to the office, suspended, or subjected to corporal punishment (Bain and MacPherson, 1990; Cooley, 1995; Gregory, 1996; Imich, 1994). There appears to be a gender-by-race interaction in the probability of being disciplined. Using U.S. Office for Civil Rights data from 1992, Gregory (1996) found that black males were 16 times as likely to be subjected to corporal punishment as white females. At both the junior and senior high school levels, Taylor and Foster (1986) reported a consistent ordering in the likelihood of suspension from most to least: black males, white males, black females, white females.

**REASONS FOR DISCIPLINE OVERREPRESENTATION:  
IS DISPROPORTIONALITY DISCRIMINATION?**

Given the ubiquity of findings of African-American overrepresentation in a variety of school punishments, it is surprising that there are virtually no extant studies exploring in more detail the reasons for disproportionate representation. It is important to note that statistical disproportionality, in and of itself, is not a certain indicator of discrimination or bias. While certain conditions, such as more severe punishments for black students, or punishment for less serious behavior, would suggest bias in the administration of school discipline, under

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other conditions (e.g., high levels of disruptive behavior on the part of African-American students) disproportionality would probably not represent discrimination.

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Demonstrating that disproportionality represents discrimination or bias is highly complex. A direct survey of racial attitudes will probably fail to capture bias, since self-reports about disciplinary practices involving race or gender would likely be highly influenced by social acceptability. Thus, determining whether a finding of disproportionality constitutes bias is likely a matter of ruling out alternative hypotheses that might account for overrepresentation. Three such alternative explanations of disproportionality data have been offered, described below.

**Statistical Artifact**

Apparent differences between groups could be simply a statistical artifact, a product of the particular method of reporting the data (see, e.g., MacMillan and Reschly, 1998; Reschly, 1997). Commenting upon minority overrepresentation in special education, Reschly (1997) notes that disproportionality data have been typically reported in two different ways, yielding percentages that differ dramatically. The first method compares the proportion of the target group in the population with the proportion of that group in the category under study (e.g., African-Americans represent 16% of general enrollment but 24% of the enrollment in classes for students with mild mental retardation); the second is the absolute proportion of a population being served in a category (e.g., of the entire population of African American students, 2.1% are enrolled in programs for students with mild mental retardation). Reschly (1997) also notes that investigations of disproportionality have used a number of different criteria for judging whether a statistical discrepancy constitutes over- or underrepresentation.

**Relationship to Socioeconomic Status**

Race and socioeconomic status (SES) are unfortunately highly connected in American society (Duncan, Brooks-Gunn, and Klebanov, 1994), increasing the possibility that any finding of disproportionality due to race is a by-product of disproportionality associated with SES. As noted, low SES has been consistently found to be a risk factor for school suspension (Brantlinger, 1991; Skiba et al., 1997; Wu et al., 1982). In its statement before the U.S. Commission on Civil Rights, the National Association of Secondary School Principals (2000) thus argued that racial disproportionality in the application of zero tolerance policies

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is not an issue of discrimination or bias between ethnic or racial groups, but a socioeconomic issue. . . . A higher incidence of ethnic and racial minority students being

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1 — affected by zero tolerance policies should not be seen as disparate treatment or discrimination but in terms of an issue of socioeconomic status. (p. 3) — 1

The only study of disciplinary disproportionality controlling for SES suggests that race makes a contribution to disciplinary outcome independent of socioeconomic status. Using a regression model controlling for socioeconomic status at the school level (percentage of parents unemployed and percentage of students enrolled in free lunch program), Wu et al. (1982) reported that non-white students still reported significantly higher rates of suspension than white students in all locales except rural senior high schools.

***Relationship of Behavior and Discipline***

The possibility exists that higher rates of school exclusion and punishment for African-American students are due to correspondingly high rates of disruptive behavior. In such a case, disproportionality in suspension or other punishments would represent not racial bias, but a relatively appropriate response to disproportionate misbehavior.

Although there have been no studies directly investigating this hypothesis, investigations of behavior, race, and discipline have yet to provide evidence that African-American students misbehave at a significantly higher rate than other students. Shaw and Braden (1990) reported that although black children received a disproportionate share of disciplinary referrals and corporal punishment, white children tended to be referred for disciplinary action for more severe rule violations than black children. McCarthy and Hoge (1987) found that black students reported receiving higher rates of sanctions for all disciplinary measures studied; yet the only two behaviors that showed significant differences between white and black students across both years of that study—“skipped class” and “carved desk”—indicated higher rates of misbehavior for white students.

**IMPORTANCE AND CONTEXT OF DISCIPLINARY DISPROPORTIONALITY**

Racial bias in the practice of school discipline is also part of a broader discourse concerning the continuing presence of institutional racism (Hannssen, 1998) or structural inequity (Nieto, 2000) in education. Racial and socioeconomic inequality in educational opportunity have been extensively documented in areas as diverse as tracking (Alexander, Cook, and McDill, 1978; Oakes, 1982), representation in curriculum (Anyon, 1981; Sleeter and Grant, 1991), quality of instruction (Greenwood, Hart, Walker, and Riskey, 1994), physical resources (Kozol, 1991; Oakes, Ormseth, Bell, and Camp, 1990), and school funding (Rebell, 1999; Singer, 1999). Thus, the discriminatory treatment of African-American students in school discipline is not an isolated phenome-

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1 — non, but appears to be part of a complex of inequity that appears to be associated with both special-education overrepresentation and school dropout (Gordon, Della Piana, and Keleher, 2000; Gregory, 1997). These sources of institutional inequity persisting throughout public education may not rise to a conscious level among school personnel, yet they have the effect of reinforcing and perpetuating racial and socioeconomic disadvantage. Bowditch (1993) argues that, whether or not discrepancies in school discipline are in fact racially motivated, the overrepresentation of African-Americans and those of lower socioeconomic status in school discipline contributes to racial stratification in school and society. — 1

Thus, it becomes highly important to come to a better understanding of the reasons for minority disproportionality in school disciplinary consequences. The purpose of this investigation is to explore the phenomenon of African-American disproportionality in school discipline in greater detail. In particular, we sought to test three commonly offered explanations in order to explore the extent to which racial and gender overrepresentation in school disciplinary referrals are artifactual, or possible indicators of bias:

1. To what extent is disproportionality in school discipline a function of variations in statistical methodology?
2. To what extent are disciplinary disparities by race or gender attributable to socioeconomic differences?
3. To what extent is disproportionality in school discipline a function of disproportionate rates of misbehavior among those groups disciplined more frequently?

## METHOD

### *Subjects*

Subjects for this study were all middle-school students in a large, urban midwestern public school district. The district is located in 1 of the 15 largest cities in the United States, serving over 50,000 students.

The data reported herein were drawn from the disciplinary records of all 11,001 students in 19 middle schools in the district for the 1994–1995 school year. Students were almost exactly evenly divided between Grades 6, 7, and 8, with four students listed as being in Grade 9. Male students accounted for 51.8% (5,698) of the participants compared to 48.2% female (5,303) participants in the study. The majority of students were categorized as either black (56%) or white (42%). Latino students represented 1.2% of the middle-school population, while 0.7% of the students were designated Asian-American and 0.1% were described as Native American. Students in general education accounted for 83.2% (9,095) of the middle-school population, while a total of 2,006 (16.8%) students were eligible for special-education services. The largest

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1 — special-education category in the district comprised the 982 (9.8%) students with learning disabilities. There were 580 students with mild or moderate mental handicaps (5.3%) in the sample, 193 (1.8%) students classified as emotionally handicapped, and 85 students (0.8%) classified as communication handicapped. — 1

Information on socioeconomic status was represented by qualification for free or reduced-cost lunch. Of the entire sample, 7,187 (65.3%) students' families met the criteria required for free-lunch status. Another 891 (8.1%) students were eligible for reduced-cost lunch. Students either not eligible for free or reduced lunch or for whom meal status data were not recorded represented 26.6% (2923) of the total number of students.

The 19 middle schools were located in a predominantly urban setting. Of the 19 public middle schools, 4 had fewer than 400 students, 11 schools had student bodies ranging from 400 to 800, and four had a school population greater than 800.

**Procedures**

The disciplinary data were drawn from an extant data-collection system for recording disciplinary contacts in the district. When a formal discipline referral was made to the office of any of the middle schools, a standardized coding form was filled out by the administrator receiving the referral. The form included information regarding the nature of the incident triggering the referral and the resulting action taken by the administrator. Other general information reported on the coding form were referral date and time, by whom and to whom the referral was made, previous actions taken, date of administrative action, and whether parents were contacted. Data were scanned, organized, and maintained in a central database.

Information about disciplinary referrals and consequences was based on the district's disciplinary policy, as outlined in the disciplinary handbook. There were 33 reasons for referral listed on the coding sheet (complete listings of these variables may be found in Skiba et al., 1997). The coding form required that at least one reason for referral be marked, with an option of applying up to two secondary codes. Only the primary reason for referral is included in these analyses. The category "Other" was dropped for purposes of the current analyses, leaving 32 reasons for referral. In terms of sanctions, only out-of-school suspensions and school expulsions were analyzed in this investigation.

**Analyses**

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N — disciplinary infraction as the unit of analysis. For purposes of the present investigation, the data were aggregated so that the student became the unit of anal- — N  
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1 — ysis. Because gender, race, and socioeconomic status have all demonstrated evidence of disproportionate representation in previous investigations, disparities for all three were explored in this data set, in terms of number of office referrals, suspensions, and expulsions. — 1

*Disproportionality as a Statistical Artifact*

Reschly (MacMillan and Reschly, 1998; Reschly, 1997) has documented substantial inconsistencies in the display and analysis of data concerning minority disproportionality in special education, describing two common methods assessing disproportionate representation. While failure to clearly specify which method is being applied will create confusion, it is unclear whether simply changing reporting method or analysis will affect the conclusions drawn. Thus, for all disciplinary measures (office referrals, suspensions, and expulsions) degree of disproportionality was tested using both methods.

There appears to be no single criterion for determining how large a discrepancy constitutes over- or underrepresentation. To test the robustness of findings of disproportionality across different methodologies, both the 10%-of-population proportion criterion described by Reschly (1997)<sup>2</sup> and chi-square tests were applied for all analyses.

*Socioeconomic Comparisons*

To explore the extent to which disparities in discipline by race and gender can be explained by discrepancies in socioeconomic status, free or reduced-lunch status served as a proxy variable for socioeconomic status, entered in a two-factor (race, gender) analysis of covariance predicting a number of disciplinary outcomes. Effect sizes were computed from the *F* ratios using procedures recommended by Cooper (1998). Comparison of the effect sizes drawn from the unadjusted means to effect sizes drawn from means adjusted for the covariate provided an index of the extent to which the covariate, free-lunch status, reduced the mean difference between black and white students on disciplinary measures.

*Racial Comparisons of Misbehavior*

If a group subject to disproportionate discipline evidenced concomitant elevations in disruptive behavior among the members of that group, one might well conclude that disproportionality indicated not bias, but a relatively appropriate response to differential rates of misbehavior. The ideal test of this hypothesis would be to compare observed student behavior with school disciplinary data. Those data were not available for this study, nor are we aware of any other investigation that has directly observed student behaviors that led to office

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referrals. A less direct method for testing this hypothesis is to explore the types of behavior for which different groups of students are referred to the office. Since boys and African-American students are suspended at a higher rate than other students, one might expect them to engage in correspondingly higher rates of more serious infractions (e.g., more disruptive, aggressive, or violent types of infractions). Alternately, higher rates of referral for less serious offenses might suggest that racial or gender disproportionality in suspension reflects some systematic bias operating at the classroom level. To test this hypothesis, discriminant analysis (Huberty, 1994; Lachenbruch, 1975) was used to explore the types of infractions that differentiate referrals to the office on the basis of gender and race.

### RESULTS

Table 1 presents descriptive comparisons of disciplinary measures broken down by gender, ethnicity, and socioeconomic status as represented by free-lunch status. The upper half of the table presents the percentage of students disciplined who are represented by a given gender, ethnic, or lunch-status category. For purposes of comparison, enrollment percentages are presented at the top of each column. Applying the 10%-of-the-population proportion criteria to these data (Reschly, 1997), males and black students were overrepresented on all measures of school discipline (referrals, suspensions, and expulsions), while females and white students were underrepresented on all measures of school discipline. Disproportionality among males and African-American students appears to increase as one moves from suspension to expulsion. All comparisons were statistically significant on chi-square tests at the  $p < .01$  level.

Analyses in the upper half of Table 1 showed evidence of disproportionality by income level for most but not all disciplinary indices. All comparisons met or exceeded the 10%-of-population proportion criteria for over- or underrepresentation, with the exception of office referrals for the category *reduced-cost lunch*. Using chi-square tests, differences among the three SES groups were statistically significant for office referrals and school suspensions, but not expulsions.

Proportions of each group referred, suspended, and expelled are presented in the lower half of Table 1. All differences between the groups due to gender, ethnicity, and socioeconomic status are statistically significant for both proportion of the group referred to the office, proportion suspended, and proportion expelled.

A more detailed analysis of disciplinary referrals and consequences by gender and race can be found in Table 2. Across both office referrals and suspensions, there is a clear rank order from greatest to least frequency (black male, white male, black female, white female). Differences in the rate of office referrals were significant for both the main effects of race,  $F(3, 10,776) = 165.35$ ,

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**TABLE 1.**  
**Disproportionality on Various Disciplinary Indices by Gender, Race, and Socioeconomic Status**

Analysis	Gender		Racial status		Free/reduced-cost status (SES)		
	Male	Female	Black	White	Free	Reduced	Not eligible
<i>% of total represented by group<sup>a</sup></i>							
% of enrolled (n = 11,001)	51.8	48.2	56.0	42.0 <sup>b</sup>	65.1	8.1	26.6
% of referred (n = 4,513)	63.0	37.0	66.1	32.7	71.4	7.4	21.4
<i>Discrepancy</i>	+11.2	-11.2	+11.1	-7.3	+6.6	-0.6 <sup>+</sup>	-5.8
% of suspended (n = 2,476)	67.2	32.8	68.5	30.9	74.5	7.1	18.4
<i>Discrepancy</i>	+15.4	-15.4	+13.5	-9.1	+9.7	-0.9	-8.8
% of expelled (n = 43)	83.7	16.3	80.9	17.0	74.4	11.6	14.0 <sup>*</sup>
<i>Discrepancy</i>	+31.9	-31.9	+24.9	-25.0	+9.6	+3.6	-13.2
<i>% of group receiving disciplinary consequence<sup>c</sup></i>							
% of group referred	49.9	31.5	48.4	21.4	45.6	38.5	32.8
% of group suspended	29.2	15.3	27.0	17.1	25.9	19.9	15.2
% of group expelled	0.6	0.1	0.6	0.2	0.4	0.6	0.2 <sup>*</sup>

*Note.* All comparisons (gender, ethnic status, SES) of percentage of total represented by group were significant at  $p < .01$  level on chi-square tests except for percentage of expulsions for SES comparison.

<sup>a</sup>Represents percentage of disciplinary incidents accounted for by the index group. Discrepancy is the difference between proportion of incidents accounted for and percentage of total enrollment.

<sup>b</sup>Proportions represent only black and white students. Given that the remaining 2% of students were represented by students in other ethnic categories, percentages in this column will not total to 100%, nor will discrepancies with enrollment figures be reciprocal of one another.

<sup>c</sup>Represents percentage of index group receiving each disciplinary consequence. Statistical significance represented as above.

<sup>+</sup>Does not reach the disproportionality criteria of 10% plus or minus the population proportion (Reschly, 1997).

<sup>\*</sup>No significant difference in expulsions by socioeconomic status,  $p > .05$ . All other chi-square tests were significant at the  $p < .05$  level.

$p < .001$ , and gender,  $F(3, 10,776) = 310.56$ ,  $p < .001$ , as well as the interaction of the two variables,  $F(3, 10,776) = 6.19$ ,  $p < .05$ . In terms of the likelihood of being suspended once referred to the office, boys were suspended at a significantly higher rate than girls given at least one office referral,  $F(3, 4457) = 4.19$ ,  $p < .05$ ). There were no statistically significant differences in

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**TABLE 2.**  
**Mean Rates of Occurrence for Various Disciplinary Indices:**  
**Race and Gender Comparisons**

Measure	Total sample		Black		White	
	Mean	<i>n</i>	Mean	<i>n</i>	Mean	<i>n</i>
Office referrals per student						
Male	2.08	5585	2.50	3187	1.53	2398
Female	.98	5195	1.26	2978	.61	2217
Total	1.55	10780 <sup>a</sup>	1.90	6165	1.09	4615
Suspensions per student						
Male	0.72	5585	0.85	3187	0.54	2398
Female	0.32	5195	0.40	2978	0.20	2217
Total	0.53	10780 <sup>a</sup>	0.63	6165	0.38	4615
Proportion of referrals suspended						
Male	0.34	2802	0.33	1811	0.35	991
Female	0.31	1659	0.31	1173	0.30	486
Total	0.33	4461 <sup>b</sup>	0.32	2984	0.33	1477
No. of days per suspension						
Male	2.38	1698	2.39	1106	2.38	592
Female	2.33	840	2.36	609	2.18	231
Total	2.36	2538 <sup>c</sup>	2.38	1715	2.33	823

<sup>a</sup>Includes total number of black or white students, including those with no office referrals.

<sup>b</sup>Includes only those students who were referred to the office one or more times during the school year.

<sup>c</sup>Includes only those students who were suspended one or more times during the school year.

proportion of incidents resulting in suspension by race or for the interaction of race and gender. Nor were there any significant race or gender differences in the mean number of days of suspension assigned for those students who had been suspended. Effect sizes for all four measures are provided in Table 3 for both main and interaction effects.

**Sources of Racial Disproportionality**

*Correlation with Socioeconomic Status*

To test the hypothesis that racial disproportionality in discipline is due in large measure to the correlation between race and socioeconomic status, the mean differences represented in Table 3 were retested using a two-factor analysis of covariance. The criterion measures were the four measures of discipline (referrals, suspensions, proportion of referrals suspended, mean days suspended); the two factors were race (black, white) and gender (male, female);

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**TABLE 3.**  
**Unadjusted and Adjusted Effect Sizes for Race and Gender Differences on**  
**Various Disciplinary Indices**

Measure	Unadjusted <i>d</i>	<i>d</i> adjusted for Lunch status <sup>a</sup>	<i>d</i> adjusted for # of referrals
Office referrals per student			
Race	.248	.206	—
Gender	.340	.350	—
Race × gender interaction	.048	.050	—
Suspensions per student			
Race	.252	.196	.025
Gender	.400	.405	.020
Race × gender interaction	.055	.057	.001
Proportion of referrals suspended			
Race	.020	.038	—
Gender	.061	.066	—
Race × gender interaction	.034	.033	—
No. of days per suspension			
Race	.029	.040	—
Gender	.058	.056	—
Race × gender interaction	.075	.063	—

<sup>a</sup>Effect size was calculated from *F* ratios for main effects and interactions, adapted from Cooper (1998):

$$d = \frac{2\sqrt{F}}{\sqrt{df_{error}}}$$

where *F* = the value of the *F* test for the associated comparison; and *df*<sub>error</sub> = the error degrees of freedom associated with the *F* test.

and socioeconomic status was controlled by using lunch status as a covariate. Across all four variables, the addition of lunch status as a covariate resulted in no change in significance for any of the analyses. Effect sizes for main effects and interactions adjusted by the covariate lunch status are presented in Column 2 of Table 3. Comparison of unadjusted and adjusted effect sizes shows only a minimal influence of socioeconomic status on race or gender differences on any disciplinary measure.

*Classroom Referrals vs. Administrative Action*

While differences in the rate of referral to the office were statistically significant by both race and gender, there were no significant differences by race in the measures related to the administration of consequences at the office level (e.g., mean number of days suspended). This pattern of results may suggest that

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1 — highly disparate rates of suspension for black and white students in this sample may be due in large part to prior disproportionate representation in referrals to the office from classrooms. To test this hypothesis, mean differences by race and gender in number of suspensions were retested with analysis of covariance, using frequency of office referral as a covariate. Controlling for number of office referrals reduced previously significant mean differences in number of suspensions to nonsignificance for the main effects of gender,  $F(4, 10775) = 1.11, p > .05$  and race,  $F(4, 10,775) = 2.25, p > .05$ , as well as their interaction,  $F(4, 10775) = .001, p > .05$ . These reductions are also reflected in the decrease in suspension effect sizes for both race and gender to near zero (see Table 3). These results suggest that, for this sample, disproportionality in school suspension for African-American students can be accounted for in large measure by prior disproportionate referral of African-American students to the office.

***Discriminant Analyses: Testing Differences in Types of Referrals***

*Differences in Referrals by Gender*

Discriminant analysis was used to explore the extent to which the types of behaviors resulting in referral to the office differed for boys and girls (see Table 4). The sample for this analysis consisted of all students referred to the office for a disciplinary infraction at least once during the school year ( $n = 4513$ ). The grouping variable was gender (0 = male, 1 = female). The response variables were the 32 reasons for office referral. With two conditions for the criterion variable, the analysis yielded a single canonical discriminant function. The Wilks's lambda associated with the function, a measure of residual discrimination after accounting for the variance of the entered variables, was relatively large (.952), but still statistically significant ( $\chi^2(df = 13) = 222.65, p < .001$ ).

Of greater interest for this analysis than the overall significance of the discriminant function were the specific reasons for referral that significantly differentiated between boys and girls.<sup>3</sup> Variables entering the equation and measures of their respective strength are presented in Table 4. Reasons for referral that were significantly more probable for boys are represented with a negative sign, and for girls by a positive sign. While boys were referred to the office more often for a host of infractions ranging in seriousness from minor offenses to sexual acts, girls were significantly more likely than boys to be referred to the office for only one of the possible infractions (truancy).

*Differences in Referrals by Race*

S — A similar discriminant analysis was conducted to explore differences in the reasons for office referrals received by black and white students (see Table 5). — S  
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**TABLE 4.**  
**Discriminant Function Analysis Predicting Gender by Reason for Office Referral**

Reason for referral	Variables predicting male referral		Variables predicting female referral	
	DFA coefficient <sup>a</sup>	Structure matrix <i>r</i> <sup>b</sup>	DFA coefficient	Structure matrix <i>r</i>
Fighting	-.468	-.519		
Endangering	-.352	-.453		
Conduct interference	-.208	-.375		
Throw/propel objects	-.255	-.345		
Gambling	-.332	-.341		
Threat	-.181	-.283		
Vandalism	-.204	-.260		
Sexual acts	-.139	-.237		
Indecent exposure	-.203	-.235		
Minor offenses	-.176	-.232		
Spit	-.182	-.221		
Truancy			.230	.519

*Note:* Analysis based on the 4,513 students who were referred to the office for a disciplinary violation one or more times during the school year. All variables significantly entered/remained in the discriminant function at  $p < .05$  level or better. Overall discriminant function significantly distinguished between the two groups ( $\chi^2 = 222.65$ ,  $df = 13$ ,  $p < .001$ ). Positive and negative signs are arbitrary, based on coding of male as 0 and female as 1. Negative sign thus connotes significantly higher mean referrals for males, while positive signs indicate significantly higher referrals for female students.

<sup>a</sup>Represents standardized canonical discriminant function coefficient, transformed so that all variables have a mean of 0 and a standard deviation of 1. This coefficient might be regarded as an index of the relative importance of each variable in the function.

<sup>b</sup>Represents pooled within-group correlations between discriminating variables and standardized canonical discriminant function and is an index of the degree of correlation of the variable with the function within each group.

The sample for this analysis consisted of all black or white students who had been referred to the office for a disciplinary infraction at least once during the course of the school year ( $n = 4,461$ ). The grouping variable was reported ethnic status (0 = white, 1 = black). The response variables were again the 32 reasons for office referral. Once again, the overall discriminant function was highly significant in differentiating the two groups ( $\chi^2$  ( $df = 8$ ) = 86.223,  $p < .001$ ), although a large Wilks's lambda (.981) suggests that the proportion of overall variance accounted for was relatively small.

Table 5 presents the reasons for referral that significantly differentiated black and white referrals. A positive sign indicates a greater likelihood of referral for black students; a negative sign indicates a greater referral probability for white

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**TABLE 5.**  
**Discriminant Function Analysis Predicting Race by Reason for Office Referral**

Reason for referral	Variables predicting white referral		Variables predicting black referral	
	DFA coefficient <sup>a</sup>	Structure matrix <i>r</i> <sup>b</sup>	DFA coefficient	Structure matrix <i>r</i>
Smoking	-.681	-.680		
Left without permission	-.228	-.205		
Vandalism	-.225	-.191		
Obscene language	-.225	-.113		
Disrespect			.401	.429
Excessive noise			.285	.355
Threat			.287	.291
Loitering			.235	.277

*Note:* Analysis based on 4,461 African-American or European-American students who were referred to the office for a disciplinary violation one or more times during the school year. All variables significantly entered/remained in discriminant function at  $p < .05$  level or better. Overall discriminant function significantly distinguished between the two groups ( $\chi^2 = 86.22$ ,  $df = 8$ ,  $p < .001$ ). Positive and negative signs are arbitrary, based on coding of white students as 0 and black students as 1. Negative signs thus connote significantly higher mean referrals for white students, while a positive sign indicates significantly higher referral rate for black students.

<sup>a</sup>Standardized canonical discriminant function coefficient.

<sup>b</sup>Pooled within-group correlations between discriminating variables and standardized canonical discriminant function.

students. In contrast to the results for the gender analysis, the analysis for race provided no evidence that the group with the higher rate of referrals (black students) were referred for a greater variety of offenses or more serious offenses. Rather, the results seem to indicate a different pattern in the types of behavior for which white or black students are referred to the office. White students were significantly more likely than black students to be referred to the office for *smoking*, *leaving without permission*, *vandalism*, and *obscene language*. Black students were more likely to be referred for *disrespect*, *excessive noise*, *threat*, and *loitering*.

## DISCUSSION

The results of this study were consistent with a large body of previous research documenting racial and gender overrepresentation across a variety of school consequences. Previous ethnographic studies interviewing students in both urban and small-town school systems have consistently reported perceptions that students of color and those from low-income backgrounds are more

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likely to experience a variety of school punishments (Brantlinger, 1991; Sheets, 1996). Unfortunately, the data from this study add to a body of research going back at least 25 years in verifying those perceptions.

In and of itself, however, disproportionality in school discipline is not sufficient to prove bias in the administration of discipline. Rather, determinations of bias might be seen as probabilistic. As more alternative hypotheses that might explain disproportionality can be ruled out, the likelihood increases that statistical disparities between groups are the result of bias at the individual or system level. This investigation explored a number of alternative hypotheses that might account for racial and gender disparities in school discipline.

Given the inconsistency with which studies of disproportionality report their results (MacMillan and Reschly, 1998; Reschly, 1997), apparent discrepancies between groups on one or more measures of school discipline could be simply artifacts of the method of data presentation or analysis. For measures of disproportionality due to SES, results indicated some change in the apparent extent of disparity depending upon the statistical criteria used, for both office referrals and expulsions. Findings for both race and gender appeared to be robust with respect to methodological variations, however; all group differences met the disproportionality criteria for all three disciplinary consequences (referral, suspension, and expulsion), regardless of the method of analysis. Indeed, the current results echo previous findings (Gregory, 1996; Taylor and Foster, 1986) in suggesting a consistent rank ordering in the likelihood of office referral: black male, white male, black female, white female.

Contrary to the socioeconomic hypothesis, the current investigation demonstrates that significant racial disparities in school discipline remain even after controlling for socioeconomic status. In this sample, an index of socioeconomic status had virtually no effect when used as a covariate in a test of racial differences in office referrals and suspensions. Indeed, disciplinary disproportionality by socioeconomic status appears to be a somewhat *less* robust finding than gender or racial disparity.

A number of findings in this study converge to suggest that gender and race disparities in school suspension in this district were due primarily to prior differences in the rate of referral to the office for black and white students. Mean rates of office referral showed large, statistically significant differences by both gender and race. At the administrative level, however, measures reflecting the disposition of the disciplinary referral showed no evidence of racial disproportionality. Although boys were slightly more likely than girls to be suspended once referred to the office, measures of administrative response (e.g., mean number of days suspended, probability of suspension given a referral) were almost identical for white and black students. Moreover, significant racial and gender differences in the rate of suspension disappeared when controlling for the rate of office referral. In this district, then, administrative decisions regard-

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ing school suspension did not appear to be the primary source of disciplinary disproportionality; rather, school suspension seemed to function to “pass along” the racial discrepancies originating at the level of referral to the office.

Discriminant analysis revealed that boys in this sample were more likely than girls to be referred to the office for a host of misbehaviors ranging from minor offenses and throwing objects, to fighting and threats, to sexual offenses. These findings are consistent with higher prevalence rates for boys across a range of externalizing behaviors and syndromes, including aggression (Parke and Slaby, 1983), bullying (Boulton and Underwood, 1992), school violence (Walker, Ramsey, and Colvin, 1995), theft and lying (Keltikangas and Lindeman, 1997), conduct disorders (American Psychiatric Association, 1994), and delinquency (Mears, Ploeger, and Warr, 1998). For the one infraction elevated for girls in this district, truancy, previous findings regarding gender differences in school avoidance and school refusal appear to be inconsistent (Paige, 1997). If replicated, these results may suggest that elevated rates of disciplinary referral for boys are, at least in part, a proportionate response to a higher rate of engagement by boys in a wide range of major and minor misbehavior. Previous research (e.g., Gregory, 1996) has in fact found an interaction of race and gender in school punishment, with African-American males being consistently most likely to experience punitive or exclusionary discipline.

Similar discriminant analyses by race revealed no evidence that racial disparities in school punishment could be explained by higher rates of African American misbehavior. In striking contrast to the gender analyses, discriminant analysis of racial disparities failed to show a pattern of more serious misbehavior among the group with the higher rate of office referral. White students were significantly more likely to be referred to the office for *smoking, leaving without permission, obscene language, and vandalism*. In contrast, black students were more likely to be referred to the office for *disrespect, excessive noise, threat, and loitering*.

It is difficult to judge which of these two sets of behaviors is more “serious.” Different observers might well come to different conclusions about whether obscene language and vandalism are more or less serious than disrespect or threat. Yet there are clearly different patterns of referral for the two races. The majority of reasons for which white students are referred more frequently seem to be based on an objective event (e.g., smoking, vandalism) that leaves a permanent product. Reasons for black referrals to the office, on the other hand, are infractions (e.g., loitering, excessive noise) that would seem to require a good deal more subjective judgment on the part of the referring agent. Even the most serious of the reasons for office referrals among black students, *threat*, is dependent on perception of threat by the staff making the referral.

These data are consonant with previous ethnographic studies of the perceptions of minority students regarding the disciplining event. Sheets (1996) re-

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ported that both majority and ethnically diverse students in an urban high school perceived sources of racism in the application of discipline. But while white students and teachers perceived racial disparity in discipline as unintentional or unconscious, students of color saw it as conscious and deliberate, arguing that teachers often apply classroom rules and guidelines arbitrarily to exercise control, or to remove students whom they do not like. In particular, African-American students felt that contextual variables, such as a lack of respect, differences in communication styles, lack of interest on the part of teachers, and “being purposefully pushed to the edge where they were expected and encouraged to be hostile” (Sheets, 1996, p. 175), were the primary causes of many disciplinary conflicts. If indeed black students are more likely to be sent to the office for reasons requiring more subjective judgment, it might well be expected that they will come to view disparities in discipline as intentional and biased.

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In summary, the data from this investigation describe a robust pattern in which black students are suspended disproportionately due primarily to a higher rate of office referral. Socioeconomic differences in this sample were not entirely robust across varying methodology, and gender differences appeared to be to some extent explainable by large differences in behavior between boys and girls. Yet the large and consistent black overrepresentation in office referral and school suspension was not explainable by either SES or racial differences in behavior. Rather, racial disparities in school suspension appear to find their origin primarily in the disproportionate rate of office referral for African-American students. Significantly different patterns of referrals suggest that black students are more likely to be referred to the office for more subjective reasons. What is especially clear is that neither this nor any previously published research studying differential discipline and rates of behavior by race (McCarthy and Hoge, 1987; McFadden et al., 1992; Shaw and Braden, 1990) has found any evidence that the higher rates of discipline received by African-American students are due to more serious or more disruptive behavior.

***Implications***

Current findings that racial disproportionality in school suspension originates primarily at the classroom level support and amplify previous findings that the disproportionate discipline of minority students appears to be associated with a general overreliance on negative and punitive discipline. There is evidence that schools with the highest rate of suspension in general also have the highest rates of overrepresentation of African-American students in suspension (Advancement Project/Civil Rights Project, 2000; Massachusetts Advocacy Center, 1986). Bullara (1993) argues that the typical classroom management style in many schools, relying heavily on negative consequences, contributes to school

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rejection and dropout by African-American youth; for such students, “the choice of either staying in school or dropping out may be less of a choice and more of a natural response to a negative environment in which he or she is trying to escape” (p. 362). Indeed, Felice (1981) found significant correlations in urban schools between high rates of minority suspension, minority dropout rate, and student perceptions of racial discrimination.

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In many secondary classrooms, cultural discontinuity or misunderstanding may create a cycle of miscommunication and confrontation for African-American students, especially male adolescents. Townsend (2000) suggests that many teachers, especially those of European-American background, may be unfamiliar and even uncomfortable with the more active and physical style of communication that characterizes African-American adolescents. The impassioned and emotive manner popular among young African-Americans may be interpreted as combative or argumentative by unfamiliar listeners. Fear may also contribute to overreferral. Teachers who are prone to accepting stereotypes of adolescent African-American males as threatening or dangerous may overreact to relatively minor threats to authority, especially if their anxiety is paired with a misunderstanding of cultural norms of social interaction.

Teacher training in appropriate and culturally competent methods of classroom management is likely, then, to be the most pressing need in addressing racial disparities in school discipline. Although consistently rated as among the most important teaching skills by both regular and special-education teachers (J. Brown, Gable, Hendrickson, and Algozzine, 1991; Canon, Idol and West, 1992; Mandell and Strain, 1978; Myles and Simpson, 1989), classroom teachers report feeling most underprepared in the area of classroom management (Calhoun, 1987; Leyser, 1986). Ill equipped to handle the challenges of disruptive classroom behavior, inexperienced teachers may increasingly adopt an authoritarian approach to management and engage students in power struggles that serve only to escalate disruption (Emmer, 1994; Kearney, Plax, Sorenson, and Smith, 1988), especially in urban environments (Brophy and Rohrkemper, 1980). Appropriate training in classroom management, appropriate rules adequately communicated to students, and the support of mental health staff and administration can all assist in developing a more supportive classroom environment (Bullara, 1993).

In particular, effective teacher training will focus on culturally competent practices that enable new teachers to address the needs of a diverse classroom. Townsend (2000) suggests a number of important components that may reduce cultural discontinuity and enhance the educational experience of African-American students, including relationship-building strategies, knowledge of linguistic or dialectic patterns of African-American youth, increased opportunity for participation in a range of school activities, and family and community partner-

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ships. Finally, effective preparation for teaching diverse students goes beyond “feel-good” or single-issue approaches to teaching tolerance (Banks, 1996; Nieto, 1994) to include a range of skill instruction and experiences. For example, Leavell, Cowart, and Wilhelm (1999) describe a multicomponent training program to enhance the multicultural awareness of preservice teachers in the Dallas Public Schools, focusing on pedagogical and community awareness, exposure to diverse communities, instructional practice, and experiences that challenge students to examine previously held assumptions.

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Given that racial inequity in discipline appears to be nested within a broader context of educational inequity in general (Nieto, 2000), reducing the disciplinary gap between black and white students may also require attention to broad-scale systemic reform, whose goal is to equalize educational opportunity for all students. Hilliard (1999) argues for a shift in emphasis in urban education away from the linguistic or cultural “deficits” of minority students toward improving the quality of educational service for all children. Brown and Peterkin (1999) propose an integrated strategy for public schools, particularly urban schools, designed to address a broad range of factors related to racial and socioeconomic inequity, including administrative restructuring, equitable resource distribution, and a methodology for implementation and evaluation across schools. In some cases, systemic reform may require litigation in order to overcome institutionalized practices that contribute to educational inequity. Legal challenges of inequitable practices in the areas of tracking (Welner and Oakes, 1996) and resource availability (Dunn, 1999) have met with some success.

**Limitations**

While we have tried to examine the phenomena of disproportionate representation in school discipline in greater detail than previous investigations, it should be noted that these findings still do not constitute a proof of racial discrimination. It is possible that there are other hypotheses not examined here that could account for these and other disparities due to race, gender, or SES. We did, however, address three of the most common explanations offered for findings of disciplinary disproportionality. If there are other explanations for racial disproportionality in school discipline, they have not yet been widely represented in the literature. The limitations of an extant school discipline data base should also be noted. The process of school discipline is complex (Morrison and Skiba, in press), suggesting a number of possible sources of error in the data between an infraction, referral to the office, and the administration of a consequence. Further quantitative and qualitative research is necessary in order to more fully describe the variables that contribute to minority overrepresentation in school discipline. In particular, analysis of important variables not avail-

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able in the current data set, such as race of the teacher or administrator making the referral, could enrich our understanding of the processes by which African-American students come to be overrepresented in school discipline.

**SUMMARY AND CONCLUSIONS**

The current results are highly consistent with a large body of previous literature in finding that schools and school districts that rely on school exclusion as a disciplinary tool run a substantial risk of minority disproportionality in the application of those punishments. This investigation explored a number of alternatives to bias as an explanation for gender, race, and socioeconomic disproportionality and found that none were capable of accounting for large and consistent disparities in the discipline of black and white students. To the extent that these alternative hypothesis can be ruled out, it becomes more likely that highly consistent statistical discrepancies in school punishment for black and white students are an indicator of systematic and prevalent bias in the practice of school discipline.

Indeed, the ubiquity of racial disparity in school punishment suggests that bias may be inherent in the use of school suspension and expulsion, and that school districts that rely on suspension and expulsion for enforcing discipline may need to routinely monitor and evaluate the extent of disproportionality in those punishments. As the widespread acceptance of zero-tolerance disciplinary strategies continues to increase school use of suspension and expulsion (Advancement Project/Civil Rights Project, 2000), one can expect a concomitant increase in the documentation of discriminatory treatment of African-American students. Reducing the discrepancy between black and white rates of suspension will likely require increased attention to teacher training in effective and culturally competent methods of classroom behavior management.

While further investigation of these processes is critical, many of the important questions that remain to be addressed may be less a function of data than of attitude and perception. It might be fruitful, for example, to explore why disciplinary inequity continues in our nation's schools despite 25 years of consistent documentation. Why must advocates for students of color prove that African-American students do not deserve unequal treatment? One might well ask whether the data will ever be sufficient to constitute convincing proof of racial bias for those who believe that discrimination is no longer an issue in American society. Most important, what will it take to persuade the American public in general, and policymakers in particular, that the time has come to eradicate racial disparities in public education and ensure equal access to educational opportunity for all children, regardless of the color of their skin?

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NOTES

1. In this manuscript, we use terms suggested by Nieto (2000) for labeling racial categories (e.g., *African-American* and *European-American*) whenever speaking of those students in themselves, without comparison. But since those terms are somewhat cumbersome for purposes of comparison, particularly in tables, we will use the terms *black* and *white* when comparing populations.
2. A discrepancy between representation in a given population and representation in a given category is considered significant if it exceeds 10% of the target group's representation in the population. Thus, if African-Americans represent 20% of the school population, they are considered overrepresented in school suspension if they account for more than 22% of the school's suspensions (e.g.,  $20\% + 20\%/10 = 22\%$ ).
3. Given that the dependent variables being discriminated in these analyses are gender and race, the finding that other factors unmeasured in the current analysis account for a large proportion of the difference between groups is obvious. Thus, the more important information presented in Tables 4 and 5 is the structure coefficients for variables that made a significant contribution to the discriminant function.

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