ABSTRACT
                Students of ninth-grade age in Austin, Texas, were
studied to discover how desegregation affected dropout rates for
Blacks, Hispanics, and Anglo/Others. Examination of the gross dropout
percentages over the first 15 months suggests that impacted-only
(nonreassigned, but in impacted schools) minority students were twice
as likely to drop out as unaffected (nonreassigned in nonimpacted
schools) minority students. Black and Hispanic males were even more
likely to drop out if they were reassigned to impacted schools.
However, reassignment had no appreciable effect on Hispanic females,
and reassigned Black females dropped out at a rate no higher than
unaffected Black females. Anglo/Other males had a pattern similar to
Black females and Anglo/Other females; that is, they were not much
affected. The gross percentages over the longer term (2 1/2 years)
suggest an impact of a different nature. Hispanic males had a high
dropout rate regardless of assignment. The likelihood of dropping out
for Hispanic females and Black males increased moderately if in an
impacted school and markedly if reassigned. Black females were most
likely to drop out if they were impacted only. Anglo/Others dropped
out least when reassigned. When the gross percentages were controlled
for grade point average, grade and discipline results were different
for some of the groups. Either way, however, the results indicate
clearly that desegregation had a negative effect on the holding power
of the school district for some students. (CMG)

DESEGREGATION AND DROPPING OUT

IN ONE SCHOOL DISTRICT

David A. Doss, Ph.D.

Austin Independent School District
Office of Research and Evaluation

Disclaimer

# DESEGREGATION AND DROPPING OUT IN ONE SCHOOL DISTRICT

In the spring of 1980 the Austin Independent School District (AISD) entered into a Consent Decree with the plaintiffs in a decade-old desegregation case which resulted in a large-scale desegregation plan for the District.  AISD is an urban school district of about 55,000 students.  Three groups of students are involved in the plan--Blacks, Hispanics, and Anglo/Others.  The breakdown by ethnicity is about 17% Black, 28% Hispanic, and 55% Anglo/Other.  The primary means of providing desegregation was the pairing of schools and the alteration of school boundaries.  Kindergarten assignments were unaffected.  At grades one through six, extensive pairing of schools occurred which placed grades 1-3 in one school of the pair and grades 4-6 in the other.  At the secondary level, attendance areas from throughout the District were combined to ensure that all schools were integrated.  At both levels those schools that were considered to be naturally integrated were unaffected or only minimally affected by the plan.  Students from virtually every area of the District were assigned to a school outside their traditional attendance areas at some time in their school careers. The plan remains in effect.

Whenever a school system is faced with a large-scale desegregation plan, much attention is given to the problem of "white flight," and attempts are made to encourage parents to remain in the school district and keep their children in the public schools.  One usually assumes that the students who leave the school system in response to the desegregation plan are primarily majority students who move to private or suburban schools.  This study raised the question for AISD of the extent to which the desegregation plan influenced high school students of whatever ethnicity to drop out of school.

This examination of the impact of desegregation on dropping out of school was done as part of a larger, recently completed study which examined a number of aspects of the dropout problem in Austin.  This paper will first give a brief description of the methodology used in doing the dropout study; then the results on the effect of desegregation will be examined in more detail.

## The Dropout Study

The study included all students of ninth-grade age (14 years old as of September 1) who were enrolled in the AISD at any time during the 1978-79 school year.  Their enrollment patterns were followed for the next four and a half years into January 1983.  Sudents who left the District were identified as school leavers, and their records were examined in order to determine to which of three categories each belonged.  They were classified as transfer students (those with transcript requests from other schools or school districts), dropouts (those without transcript

1

requests), and others (deceased students or those going to jail, etc. for whom dropout status could not be determined). The results in Tables 1 and 2 showed that about 25% of the 3,899 students in the study had dropped out of school by January 1983. The results of the study are presented in three publications (Doss, 1983a; Doss, 1983b; and Davis and Doss, 1982) and two other AERA papers (Curtis, et al; 1983; Jordan-Davis, 1984).

## Desegregation and Dropping Out

For these analyses, students were divided into three desegregation groups based on previously assigned desegregation codes. The codes were based on two factors that might affect students in recently desegregated settings. The first set of factors were those related to attending school in a newly desegregated setting in which the school had recently undergone a major change in student body. Such schools were called "impacted schools." The other distinction was between reassigned and nonreassigned students. Reassigned students were those whose school assignments for their grades were changed by either the 1971 or the 1980 court orders. The three groups based on desegregation codes were as follows:

Not Affected = nonreassigned students in nonimpacted schools. These students' school assignments were not modified by the desegregation order. They attended schools with traditional attendance zones to which no other students were transferred.

Impacted Only = nonreassigned students in impacted schools. These students attended schools that were traditional for their attendance areas, but the schools were impacted by the desegregation order by having students from other attendance areas reassigned to them.

Reassigned = reassinged students in impacted schools. These students were reassigned to a nontraditional attendance area. The schools they attended were impacted schools.

The impact of the desegregation plan on dropping out was assessed in two ways. First, the gross dropout rates were determined for each group defined by sex, ethnicity (Black, Hispanic, and Anglo/Other), and desegregation status (not affected, impacted only, and reassigned). The second approach was to use discriminant analysis to see if the prediction of dropping out was enhanced by knowledge of desegregation status. Two sets of discriminant analyses were done. The first predicted dropping out over the short term following desegregation (June 1980 through August 1981). The second covered a longer period (June 1980 through January 1983).

4 2

The variables used in the analyses were the same for both analyses and were as follows:

Sex:            Coded "1" for male and "3" for female.

Grade:          Although all of the same age, the students were
                not all in the same grade.

Grade Point
Average (GPA):  As of the end of the 1977-78 school year.

Discipline:     The number of serious discipline incidents (those
                resulting in suspension, etc.) in which the student
                had been involved during the 1977-78 school year.

Ethnicity:      Three-group membership variables coded as "1" or "0"--
                one each for the three ethnic groups. The names of
                the variables were Black, Hispanic, and Other.

In addition, six ethnicity-by-desegregation-status variables were
included. They were defined as follows:

HIMP = 1 if Hispanic and in an impacted school (impacted only or
       reassigned); 0, otherwise.

HREA = 1 if Hispanic, reassigned student; 0, otherwise.

BIMP   1 if Black and in an impacted school (impacted only or
       reassigned); 0, otherwise.

BREA = 1 if Black, reassigned student; 0, otherwise.

OIMP = 1 if Other, and in an impacted school (impacted only or
       reassigned); 0, otherwise.

OREA = Other, reassigned student; 0, otherwise.

Therefore, all "Not Affected" students received "0" values for these six
variables.

The short-term analysis compared students who dropped out from June 1980
through August 1981 with others who did not drop out during that period
(although they may have left school at some later time). The long-term
analysis compared those who did and did not drop out from June 1980
through the end of the study in January 1983.

The analyses were done on the University of Texas CDC Dual Cyber System
using the SPSS program DISCRIMINANT. A stepwise approach was used. The
method used was MAHAL; i.e., the Mahalanobis distance function was used
to identify the variable to add at each step. No default values were
changed to control the stepwise procedure.

3

5

Results: Table 3 displays the dropout rate for students by sex, ethnicity, and desegregation status for the period including the summer prior to desegregation (1980), the first school year of desegregation (1980-81), and the following summer (1981). Caution must be used in interpreting these results. The differences in dropout rates between groups cannot be taken as simply being due to the impact of the desegregation plan. For example, Black students at one high school lived in a naturally integrated area of the city which was unaffected by the plan. They generally have a higher SES level than those Black students from a school with a traditionally large minority enrollment who were bussed to a school that had previously been attended primarily by higher SES Anglo/Other students. Therefore, the results which suggest for some groups that the dropout rates for impacted and reassigned students are about double those of unaffected students must be interpreted with some caution because the groups are likely to differ in SES as well as desegregation status.

Table 4 provides the results for the long-term period. The same cautions apply.

The discriminant analyses were done to "control for" influences related to dropping out that were not associated with the desegregation plan. The short-term discriminant analysis identified nine variables which contributed to discrimination between those who did and did not drop out. The variables and the order in which they entered the analysis are given in Table 5. The overall canonical correlation was .29.

The eight variables which entered into the long-term analysis and the order in which they entered are given in Table 6. The overall canonical correlation was .45. Table 7 gives the standardized and unstandardized canonical discriminant function coefficients for the two analyses.

Discussion: Disregarding the cautions given above, an examination of the gross dropout percentages for the first year and three months of desegregation suggests that impacted-only minority students were more likely to drop out than minority students who were unaffected. Desegregation would appear to be especially hard on males. Hispanic males were twice as likely to drop out if they attended impacted schools and the results were similar for Black males. If these students were reassigned they were even more likely to leave school. Like the males, minority females were about twice as likely to leave school if they attended an impacted school compared with those who were unaffected. However, reassignment had no appreciable effect on Hispanic females, and reassigned Black females dropped out at a rate no higher than unaffected Black females. Other males had a pattern similar to Black females, and Other females did not appear to be much affected by the plan.

The gross dropout rates for the long-term period suggest that the long-term impact was of a different nature. Hispanic males had a high dropout rate regardless of assignment. The likelihood of dropping out for Hispanic females and Black males increased moderately if in an impacted school and increased markedly if reassigned. Black females were again most likely to drop out if they were impacted only. Other males and females showed the curious pattern of dropping out least when reassigned.

4

An examination of the standardized weights in Table 7 gives an indication
of the relative impact of the significant variables in distinguishing
between dropouts and nondropouts. GPA and grade are the most potent
discriminators in both analyses. In Table 7, a positive weight indicates
that the greater the value of the variable the greater the likelihood of
remaining in school. A negative weight obviously indicates an increasing
tendency to leave school as the value of the variable increases.

One way to make some sense out of the combinations of weights is to
create hypothetical students to represent groups of interest and
calculate discriminant function values for each. The differences between
the discriminant function scores of students who differ only in their
desegregation assignments reveal the impact of desegregation on dropping
out. GPA, grade, and discipline were included in the analyses because
they were previously shown to be related to dropping out and needed to be
controlled for in order to remove their influence from the prediction.
They are useful in overcoming the problem the gross results have which
comes from the nonequivalence of the different groups. However, their
inclusion in the discriminant function values to compare various groups
is cumbersome given the range of values each can take. If one is willing
to assume that all groups are equal on these variables, then they can be
removed from the discussion for the sake of clarity. That is, if one is
willing to say, "After equating the students on GPA, grade, and level of
discipline problems, what was the impact of the desegregation plan on
students by sex and ethnicity?" then these variables can be removed from
the calculation of discriminant function values. The discriminant
function values will not have the same meaning, but it is the difference
between values which is important to this study.

Therefore, assuming common values for students on GPA, grade, and
discipline, the effect of sex, ethnicity, and desegregation status can be
determined by multiplying the appropriate unstandardized weights by the
coded values in the variables for the groups of interest. For example,
this sort of residual value for the short-term analysis could be computed
for impacted-only Hispanic males by calculating the sum of the following
products:

$$-.85398 \text{ (The weight for HIMP)} \quad X \: 1 = -.85398$$

$$.69815 \text{ (The weight for Hispanic)} \quad X \: 1 = .69815$$

$$.51734 \text{ (The weight for Black)} \quad X \: 0 = .00000$$

$$-.84271 \text{ (The weight for HREA)} \quad X \: 0 = .00000$$

$$-.13995 \text{ (The weight for Sex)} \quad X \: 1 = -.13995$$

$$-.51614 \text{ (The weight for BIMP)} \quad X \: 0 = .00000$$

The sum of the products is -.29578. Discriminant function values for
each group for both the short-term and long-term analyses can be found in
Table 8. As mentioned previously, a positive value in Table 8 indicates
an above-average chance of staying in school. A negative value indicates
the opposite.

5

7

The short-term analysis results show that when controlling for GPA, grade, and discipline, unaffected Other students were more likely to drop out than unaffected Hispanic or Black students. Over the short term being in an impacted school or being reassigned had no impact on Other students. For Black students, being in an impacted school increased their likelihood of dropping out regardless of whether or not they were reassigned. The gross rates imply that Black males in impacted schools are more likely to drop out if they have been reassigned there. Hispanic students were most apt to leave school if they were reassigned and being in an impacted school only also increased the probability of dropping out. This is inconsistent with the gross results for Hispanic females which suggest that being reassigned does not significantly increase the probability of dropping out over being impacted only. Overall, girls were more likely to leave school than boys of the same ethnicity. This finding runs counter to the gross results and probably reflects the fact that compared with boys, girls generally make better grades and are involved in fewer discipline incidents. As a result, they have a lower overall dropout rate, although they are more likely to drop out than boys of similar achievement and discipline-problem levels.

The long-term analysis produced different results. For one thing, the difference in dropout rates for males and females disappeared. The impact of only being in an impacted school also disappeared for Hispanics; i.e., unaffected and impacted-only Hispanic students did not differ in the probability of dropping out. This runs slightly counter to the gross results for Hispanic girls. Only those who were reassigned had a greater-than-average chance of dropping out.

Black students who were unaffected had the best chance of all students of staying in school. It made no difference whether those who attended impacted schools were reassigned or not. This finding seems to conflict with the gross results.

The most curious results of all were for Others. Students who were not affected by desegregation were less likely to drop out than those who were impacted only, but they were <u>more</u> likely to drop out than those who were reassigned. <u>The Other students who were reassigned were the least likely to drop out.</u> These findings mirror the gross dropout results as well.

The finding that desegregation increased the dropout rate for some groups is supported by interviews with 95 of the dropouts in the study (Davis and Doss, 1982). Of those 95, 17 gave a reassignment-related problem as being of primary or secondary importance in their leaving school.

<u>Implications</u>: The results seem to indicate clearly that the desegregation plan had a negative effect on the holding power of the school district for some students. Other school districts in a similar situation need to realize that losing students to private schools or other school districts is not the only holding power concern raised by activities which have a large-scale impact on the organization of the district. Students who have neither the personal resources to face the impact of the plan nor the financial resources to escape to another school are likely to drop out.

While the general finding of an impact of desegregation on dropping out is a reasonable result from a major change in the school district and is probably to some extent generalizable to other districts, the more specific ethnic group results are more subject to the peculiarities of the school district and its desegregation plan. For example, the results for Other students are curious because they ran counter to the trends in the other ethnic groups. One fact that needs to be taken into account in trying to understand these results is that all or almost all of the reassigned Other students were transferred to the same high school. Therefore, unique or outstanding attributes of that school are potentially very important in understanding these results. Reports indicate that the school has done an excellent job in establishing a friendly and pleasant atmosphere that has won the praise of many students. Such an environment may have succeeded in holding some marginal students in school.

Furthermore, the level of competition within the classroom and the performance expectations held by the teachers may have changed in opposite directions for the different ethnic groups. It seems reasonable to expect the impact of the desegregation plan to be greatest on the marginal students, those students who were on the borderline of dropping out prior to desegregation.

Consider the marginal Other students who transferred from a school with predominantly upper middle to upper SES Other students to one which has traditionally served lower income, Hispanic and Black students. One can hypothesize that despite the change in population resulting from the desegregation plan, each school retains levels of competition and expectation that reflect the traditional composition. Therefore, the Other students moved into an environment with a greater mix of student achievement levels and lower teacher expectations. The students may flourish in such an environment compared to what they would have done at their traditional school. The marginal Other students who remained at the original high school were likely to have been held to a standard only slightly reduced by the change in student population and had to contend with the additional influences resulting from major changes in the composition of the school's student body and its operation.

The marginal minority students, on the other hand, moved into an invironment with more high-achieving students and greater expectations on the part of the teachers. Such students may have become overwhelmed quickly by the new situation and withdrew from school. The marginal minority students in the traditional high school had to contend with an influx of more well-to-do and higher achieving students plus increased teacher expectations, but perhaps not at quite the same level as the reassigned students. Therefore, their dropout rates did not rise as greatly.

Without any reference to other work on desegregation or any additional local data to report, these notions are obviously highly speculative.

| STATUS | NUMBER | PERCENT |
|--------|--------|---------|
| Graduated | 2,438 | 48% |
| Transferred | 745 | 15% |
| Still Enrolled | 527 | 10% |
| Dropped Out | 942 | 19% |
| Other Leavers | 387 | 8% |
| TOTAL | 5,039 | 100% |

Table 1. STATUS OF STUDENTS INCLUDED IN STUDY AS OF FALL 1982.

| GROUP | DROPOUTS | TOTAL IN GROUP | PERCENTAGE OF GROUP TOTAL |
|-------|----------|----------------|---------------------------|
| Hispanic | 335 | 947 | 35% |
| Males | 180 | 478 | 38% |
| Females | 155 | 469 | 33% |
| Black | 186 | 670 | 28% |
| Males | 97 | 329 | 29% |
| Females | 89 | 341 | 26% |
| Anglo and Other | 421 | 2,282 | 18% |
| Males | 216 | 1,176 | 18% |
| Females | 205 | 1,106 | 19% |
| Total Males | 493 | 1,983 | 25% |
| Total Females | 449 | 1,916 | 23% |
| TOTAL | 942 | 3,899 | 24% |

Table 2. DROPOUT RATE BY SEX AND ETHNICITY. Excludes transfer and other leavers.

|  | Dropouts | | |
|---|---|---|---|
| GROUP | N | % | Total |
| Hispanic Males | 33 | 11.0 | 299 |
| Not Affected | 3 | 3.8 | 79 |
| Impacted Only | 20 | 11.7 | 171 |
| Reassigned | 10 | 20.4 | 49 |
| | | | |
| Hispanic Females | 30 | 9.9 | 304 |
| Not Affected | 4 | 4.9 | 82 |
| Impacted Only | 20 | 11.6 | 172 |
| Reassigned | 6 | 12.0 | 50 |
| | | | |
| Black Males | 21 | 12.2 | 172 |
| Not Affected | 6 | 7.6 | 79 |
| Impacted Only | 5 | 12.2 | 41 |
| Reassigned | 10 | 19.2 | 52 |
| | | | |
| Black Females | 15 | 7.5 | 201 |
| Not Affected | 6 | 5.6 | 107 |
| Impacted Only | 7 | 13.5 | 52 |
| Reassigned | 2 | 4.8 | 42 |
| | | | |
| Other Males | 43 | 5.2 | 829 |
| Not Affected | 18 | 3.9 | 457 |
| Impacted Only | 22 | 5.7 | 386 |
| Reassigned | 3 | 3.0 | 101 |
| | | | |
| Other Females | 45 | 5.7 | 783 |
| Not Affected | 21 | 4.9 | 431 |
| Impacted Only | 20 | 5.9 | 337 |
| Reassigned | 4 | 4.2 | 96 |
| | | | |
| Hispanics | 63 | 10.4 | 603 |
| Not Affected | 7 | 4.3 | 161 |
| Impacted Only | 40 | 11.7 | 343 |
| Reassigned | 16 | 16.2 | 99 |
| | | | |
| Blacks | 36 | 9.7 | 373 |
| Not Affected | 12 | 6.5 | 186 |
| Impacted Only | 12 | 12.9 | 93 |
| Reassigned | 12 | 12.8 | 94 |
| | | | |
| Others | 88 | 5.5 | 1,612 |
| Not Affected | 39 | 4.4 | 888 |
| Impacted Only | 42 | 5.8 | 723 |
| Reassigned | 7 | 3.6 | 197 |
| | | | |
| Males | 97 | 7.5 | 1,300 |
| Not Affected | 27 | 4.5 | 615 |
| Impacted Only | 47 | 7.9 | 598 |
| Reassigned | 23 | 11.4 | 202 |
| | | | |
| Females | 90 | 7.0 | 1,288 |
| Not Affected | 31 | 5.0 | 620 |
| Impacted Only | 47 | 8.4 | 561 |
| Reassigned | 12 | 6.4 | 188 |
| | | | |
| Total | 187 | 7.2 | 2,588 |
| Not Affected | 58 | 4.7 | 1,235 |
| Impacted Only | 94 | 8.1 | 1,159 |
| Reassigned | 35 | 9.0 | 390 |

Table 3.. DROPOUT RATE FOR THE SUMMER OF 1980, THE 1980-81 SCHOOL YEAR, AND THE SUMMER OF 1981 FOR STUDENTS COMPLETING THE 1979-80 SCHOOL YEAR.

9

11

| GROUP | Dropouts N | % | Total |
|---|---|---|---|
| Hispanic Males | 78 | 26.1 | 299 |
|   Not Affected | 20 | 25.3 | 79 |
|   Impacted Only | 43 | 25.1 | 171 |
|   Reassigned | 15 | 30.6 | 49 |
| Hispanic Females | 65 | 21.4 | 304 |
|   Not Affected | 11 | 13.4 | 82 |
|   Impacted Only | 36 | 20.9 | 172 |
|   Reassigned | 18 | 36.0 | 50 |
| Black Males | 50 | 29.1 | 172 |
|   Not Affected | 16 | 20.3 | 79 |
|   Impacted Only | 13 | 31.7 | 41 |
|   Reassigned | 21 | 40.4 | 52 |
| Black Females | 29 | 14.4 | 201 |
|   Not Affected | 9 | 8.4 | 107 |
|   Impacted Only | 13 | 25.0 | 52 |
|   Reassigned | 7 | 16.7 | 42 |
| Other Males | 115 | 13.9 | 829 |
|   Not Affected | 49 | 10.7 | 457 |
|   Impacted Only | 57 | 14.8 | 386 |
|   Reassigned | 9 | 8.9 | 101 |
| Other Females | 81 | 10.3 | 783 |
|   Not Affected | 38 | 8.8 | 431 |
|   Impacted Only | 37 | 11.0 | 337 |
|   Reassigned | 6 | 6.3 | 96 |
| Hispanics | 143 | 23.7 | 603 |
|   Not Affected | 31 | 19.3 | 161 |
|   Impacted Only | 79 | 23.0 | 343 |
|   Reassigned | 33 | 33.3 | 99 |
| Blacks | 79 | 21.2 | 373 |
|   Not Affected | 25 | 13.4 | 186 |
|   Impacted Only | 26 | 28.0 | 93 |
|   Reassigned | 28 | 29.8 | 94 |
| Others | 196 | 12.2 | 1,612 |
|   Not Affected | 87 | 9.8 | 888 |
|   Impacted Only | 94 | 13.0 | 723 |
|   Reassigned | 15 | 7.6 | 197 |
| Males | 243 | 18.7 | 1,300 |
|   Not Affected | 85 | 13.8 | 615 |
|   Impacted Only | 113 | 18.9 | 598 |
|   Reassigned | 45 | 22.3 | 202 |
| Females | 175 | 13.6 | 1,288 |
|   Not Affected | 58 | 9.4 | 620 |
|   Impacted Only | 86 | 15.3 | 561 |
|   Reassigned | 31 | 16.5 | 188 |
| Total | 418 | 16.2 | 2,588 |
|   Not Affected | 143 | 11.6 | 1,235 |
|   Impacted Only | 199 | 17.2 | 1,159 |
|   Reassigned | 76 | 19.5 | 390 |

Table 4. DROPOUT RATE FOR STUDENTS WHO COMPLETED
THE SCHOOL YEAR PRIOR TO DESEGREGATION.

12

| Step | Variable | Wilk's Lambda | Sig. | Minimum D Squared | Sig. |
|------|----------|---------------|------|-------------------|------|
| 1 | GPA | .935 | .000 | 1.234 | .000 |
| 2 | Grade | .925 | .000 | 1.441 | .000 |
| 3 | HREA | .922 | .000 | 1.504 | .000 |
| 4 | Discipline | .919 | .000 | 1.560 | .000 |
| 5 | Sex | .918 | .000 | 1.587 | .000 |
| 6 | HIMP | .917 | .000 | 1.600 | .000 |
| 7 | HISP | .916 | .000 | 1.638 | .000 |
| 8 | Black | .915 | .000 | 1.649 | .000 |
| 9 | BIMP | .914 | .000 | 1.664 | .000 |

Table 5. SHORT-TERM IMPACT DISCRIMINANT ANALYSIS SUMMARY TABLE.

| Step | Variable | Wilk's Lambda | Sig. | Minimum D Squared | Sig. |
|------|----------|---------------|------|-------------------|------|
| 1 | GPA | .837 | .000 | 1.630 | .000 |
| 2 | Grade | .813 | .000 | 1.892 | .000 |
| 3 | Discipline | .810 | .000 | 1.931 | .000 |
| 4 | Black | .807 | .000 | 1.966 | .000 |
| 5 | BIMP | .804 | .000 | 2.001 | .000 |
| 6 | HREA | .802 | .000 | 2.035 | .000 |
| 7 | OREA | .801 | .000 | 2.042 | .000 |
| 8 | OIMP | .800 | .000 | 2.053 | .000 |

Table 6. LONG-TERM IMPACT DISCRIMINANT ANALYSIS SUMMARY TABLE.

13

| SHORT-TERM PREDICTION | | | LONG-TERM PREDICTION | | |
|---|---|---|---|---|---|
| | Discriminant Function Coefficients | | | Discriminant Function Coefficients | |
| Variable | Standardized | Unstandardized | Variable | Standardized | Unstandardized |
| GPA | .70664 | .09975 | GPA | .76683 | .11494 |
| GRADE | .34976 | .69593 | GRADE | .35445 | .72873 |
| HISPANIC-IMPACTED* | -.31905 | -.85398 | BLACK | .24873 | .71670 |
| HISPANIC | .29285 | .69815 | BLACK-IMPACTED | -.19985 | -.78125 |
| DISCIPLINE | -.21226 | -.28103 | DISCIPLINE | -.16657 | -.22188 |
| BLACK | .17828 | .51734 | HISPANIC-REASSIGNED | -.12047 | -.64821 |
| HISPANIC-REASSIGNED | -.15892 | -.84271 | OTHER-REASSIGNED | .08878 | .36449 |
| SEX | -.13995 | -.13995 | OTHER-IMPACTED | -.08391 | -.18233 |
| BLACK-IMPACTED | -.13133 | -.51614 | CONSTANT | - | -16.21936 |
| CONSTANT | - | 14.36408 | | | |

*Variables that are hyphenated such as "Hispanic-Impacted" were coded 1 if the student was of the designated ethnicity and desegregation status; 0, otherwise.

Table 7. CONONICAL DISCRIMINANT FUNCTION COEFFICIENTS FOR THE VARIABLES ENTERING THE DISCRIMINANT ANALYSIS.

15

12

| GROUP | SHORT-TERM PREDICTION | LONG-TERM PREDICTION |
|---|---|---|
| Hispanic Males | | |
| Not Affected | .55820 | .00000 |
| Impacted Only | -.29578 | .00000 |
| Reassigned | -1.13849 | -.64821 |
| | | |
| Hispanic Females | | |
| Not Affected | .27830 | .00000 |
| Impacted Only | -.57568 | .00000 |
| Reassigned | -1.41839 | -.64821 |
| | | |
| Black Males | | |
| Not Affected | .37739 | .71670 |
| Impacted Only | -.13875 | -.06455 |
| Reassigned | -.13875 | -.06455 |
| | | |
| Black Females | | |
| Not Affected | .09749 | .71670 |
| Impacted Only | -.41865 | -.06455 |
| Reassigned | -.41865 | -.06455 |
| | | |
| Other Males | | |
| Not Affected | -.13995 | .00000 |
| Impacted Only | -.13995 | -.18233 |
| Reassigned | -.13995 | .18216 |
| | | |
| Other Females | | |
| Not Affected | -.41985 | .00000 |
| Impacted Only | -.41985 | -.18233 |
| Reassigned | -.41985 | .18216 |

Table 8.  EFFECT OF SEX, ETHNICITY, AND DESEGREGATION STATUS ON DISCRIMINANT FUNCTION VALUES. An average student on the GPA, grade, and discipline variables would have a discriminant function value determined entirely by sex, ethnicity, and desegregation status. The values in this table show the impact these variables would have on the calculation of the discriminant function for various groups. The units are fractions of standard deviation units.

References

Curtis, J., Doss, D.  Dropout Prediction (AERA paper)  Austin, Texas:
     Office of Research and Evaluation (Pub. No. 82.56), Austin
     Independent School District.

Davis, D.  "Mother Got Tired of Taking Care of My Baby."  A Study of
     Dropouts from AISD:  1982-83 Final Report Summary.  Austin, Texas
     Office of Research and Evaluation (Pub. No. 82.44), Austin
     Independent School District.

Doss, D.  SYSTEMWIDE EVALUATION:  1982-83 Technical Report:  Volume II
     Special Populations, Appendix H - School Leavers.  Austin, Texas
     Office of Research and Evaluation (Pub. No. 82.55), Austin
     Independent School District.

Jordan-Davis, W.  The Cry for Help Unheard:  Dropout Interviews (AERA
     paper) Austin, Texas:  Office of Research and Evaluation (Pub. No
     83.47), Austin Independent School District.

14     17