This document combines a review of the literature on Hispanic high school dropouts and urban dropout prevention initiatives with an analysis of the findings of a study of the individual, family, school, and community characteristics of Hispanic ninth grade students in predominantly minority high schools in American cities. The study was designed as a longitudinal multi-method study based on information from school records, a student survey, and one-year follow-up sources. Data collection began in the 1986-87 school year and ended in the 1987-88 school year. The 597-student sample in Year 2 of the study represented all those students who participated in Year 1 for whom there existed complete information, and comprised the following groups: (1) 309 (51.6 percent) Mexican Americans; (2) 161 (27 percent) Puerto Rican; (3) 63 (10.6 percent) Cubans; and (4) 64 (10.7 percent) Central Americans. Correlation analyses showed that the following characteristics were the best predictors of dropping out or remaining in school: (1) age: older students are less likely to remain in school than younger students because they perceive few economic benefits from a high school diploma; (2) academic achievement: good grades boost self-concept and make future learning easier or less costly for good student than for less successful students; (3) paternal presence: single-parent families may provide less adult supervision and cannot financially afford to keep children in school on a steady basis; and (4) absences: truancy indicates a lack of institutional commitment to and alienation from school precipitating the decision to drop out. Policy implications of the following factors are discussed: (1) over-age students; (2) grades; (3) grade repetition; (4) absenteeism; (5) paternal presence; and (6) college aspirations. A 32-item bibliography, a chart illustrating the distribution of the student sample by race/ethnicity, and four tables of statistical data illustrating definitions of the variables are appended. (FMW)
WHO STAYS? WHO LEAVES? Findings from the ASPIRA Five Cities High School Dropout Study

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The ASPIRA Five Cities High School Dropout Study is an investigation into the dropout phenomenon among Hispanic youth that began in Fall, 1985 and was completed in Spring, 1989. Two major research questions guided the study: 1) What roles do community, institution (family and school), and student characteristics play in the student's decision to drop out or stay in school?, and 2) Do differences in ethnic group, gender, and geographical location influence the relative role played by these factors in determining the student's decision to drop out or stay in school?

An area of special interest to ASPIRA has been the Hispanic dropout phenomenon. Beginning in 1968 when it commissioned a seven-city study of Puerto Rican children (Margolis, 1968), ASPIRA has documented the plight of Puerto Rican students in the public schools. In the past two decades a number of studies on this topic have been conducted under its sponsorship (Hernandez, 1976; ASPIRA of New York, 1983; Gutierrez and Montalvo, 1984; Kyle, 1984; Rivera Medina, 1984). A recent ASPIRA Association report: Five Cities High School Dropout Study: Characteristics of Hispanic High School Students (Fernandez, 1989) describes individual, family, school, and community characteristics of Hispanic ninth grade students in predominantly minority high schools in major U.S. cities.

Dropout rates for Puerto Rican students in New York City have been reported to be above 80%; in other cities, the percentages are lower (45%-60%) but nonetheless alarming, given their magnitude. Reports that focus on
other cities and states also document similar rates for Mexican Americans, as did the statewide study conducted by Intercultural Development Research Association in Texas (IDRA, 1986) and the study of the National Commission on Secondary Education for Hispanics (1984), to cite but two of the major ones.

The rapid growth of the Hispanic population in the past decades is well documented. A recent report of the Bureau of the Census indicates that as of March, 1989, there were 20.1 million Hispanics living in the continental United States, a 39% increase over the 1980 figure. Currently, the Hispanic population constitutes 8.2% of the total U.S. population (Hispanic Link Weekly Report, Oct. 16, 1989, p.1). The persistent dropout problem among Hispanic students continues to have a deleterious impact on the country's economy and social system. If left unattended, it could have many negative consequences for cities and states in which Hispanics are concentrated, and ultimately for the nation as a whole. For example, it was estimated that in Texas the yearly cost of having thousands of dropouts is about $17 billion dollars (IDRA, 1986). If projections are extended to the rest of the nation, the amount escalates into the hundreds of billions in terms of forgone income taxes and welfare costs.

The dropout problem has received much attention in recent years as part of the ongoing debate on school reform. Programs aimed at preventing potential dropouts and other "at-risk" students from leaving school have been widely publicized (Orr, 1987; Hahn and Danzberger, 1987). In 1988 a national dropout prevention center was established at Clemson University (South Carolina). Legislators and policy makers at the federal and state levels have initiated many programs and have also allocated significant resources to address this educational problem. Despite this renewed interest, the dropout problem among Hispanics and other minority youth seems almost impervious to repeated attempts to reduce it significantly. Even highly-
publicized collaborative efforts between business and industry and public school systems in certain cities, such as the Boston Compact, which guarantees jobs to high school graduates as an incentive to keep students in school until they obtain a diploma, have had a spotty record of success in reducing Boston Public Schools's dropout rate. The Greater Milwaukee Education Trust's "One-on-One" mentoring program, which pairs "at-risk" middle schoolers with professionals from local companies and aims at reducing the drop out rate, reducing absenteeism, improving academic achievement and expanding students' horizons and postsecondary options, reports mixed results after a significant expenditure of private and public funds (Milwaukee Journal, August 29, 1989, p. 1).

There have been documented successes in addressing the dropout problem. Hispanic organizations, such as ASPIRA and Intercultural Development Research Association (IDRA) in San Antonio, have reported increased retention rates and improved academic achievement for Hispanic high school and middle school students as a result of special initiatives undertaken with support from the private sector and the federal government. For example, in Chicago, the ASPIRA Coca Cola Support Services Project (Project A.C.C.E.S.S.) of ASPIRA of Illinois, which began in 1984, reported a higher retention rate for Hispanic freshmen after two years in the program (87.8% compared to 72.4% for the control group). After four years, the retention rate was 63.6%, in contrast to 54.3% for students in the control group. In addition, many of the students in the program who dropped out ended up enrolling in high school equivalency (GED) programs, whereas students in the control group did not. IDRA (1989a) reported that the Partners for Valued Youth program, in which 7th graders tutor elementary grade students, has resulted in significant positive increases in student self concept, attitudes toward school, and reading levels as well as a significant decrease in the number of absences among the middle
school students. Although no data was reported on the impact of this program on the elementary students who were tutored, perceptions of their teachers were that the students were benefiting also. After one year of operation, none of the 7th graders had dropped out of school, which is a considerable achievement considering that in Texas 50% of the Hispanic students who drop out of school do so before reaching the ninth grade.

It may be too early to pass judgment on the ultimate success or failure of these initiatives in cities across America. The problems they address are longstanding and in some respects have worsened over the past several decades. It is likely to take years before dramatic gains are seen. The consensus among educational policy makers is that the bulk of reform efforts must be directed at the early years of childhood so that the educational, health, social and other deficits that many poor urban youngsters exhibit before they begin their formal education can be lessened significantly or eliminated before they reach the upper grades. Thus, in many cities programs aimed at the pre-school and early elementary years have been established. However, at-risk youth have been the focus of heightened interest among educators, politicians and business executives across America, and it is reasonable to assume that the momentum of initiatives directed at potential dropouts will continue, and perhaps even increase, in the foreseeable future.

CAUSES OF SCHOOL LEAVING

The extensive literature on dropping out of school has identified various factors that are associated with the decision to leave school. Poverty, pregnancy, poor academic achievement, parent's educational attainment, lack of motivation, disengagement from learning, single-parent families are among the most commonly cited factors. Research has tended to
focus on social and economic characteristics of individuals or their families
and, as Wehlage et al. (1989) have pointed out, whether it was intended or
not, much of this work has served to reinforce the view that students who drop
out are deficient, deviant, and inadequate. An approach that is different and
avoids stigmatizing students and their families is what Wehlage and Rutter
(1986) used in their analysis of school-related variables that contribute to
students' dropping out. The ASPIRA Five Cities High School Dropout Study
adopted this approach in the design of the inquiry because it held greater
promise of yielding findings that could translate into policies and practices
in areas over which schools (teachers, administrators, counselors, board
members) and parents could exert greater control, in contrast to societal
forces beyond their direct sphere of influence. These factors are:

- **Parent's Education:** Previous research indicates that a parent's level
  of education affects the chances of dropping out of school (IDRA, 1989). In
general, the lower the parent's educational level, the greater the chances the
student will drop out. More educated parents possess the human capital that
may provide a favorable cognitive environment to support the student's
learning (Coleman, 1988).

- **College Plans:** A lack of expected educational achievement is a powerful
  predictor of dropping out. Students who expect to attend college are more
likely to stay in school than were those who do not plan to go on to college
(IDRA, 1989).

- **Grade Retention:** Students who have been delayed in their schooling as a
  result of grade retention tend to experience higher rates of withdrawal from
school (Velez, 1989). Latino students are frequently held back because of
language difficulties, learning disorders, or academic failure. A review of
previous research suggests that retained students are at a greater risk for
dropping out that cannot be explained primarily by their poor achievement.
When retention is a result of flunking a grade, it can create a feeling of alienation and contribute to a student's sense that graduation is out of reach. As suggested by Grissom and Shepard (1989), retained students who reach high school age may "leave school for a variety of reasons, often because they are not good at school or because the attractions of job, marriage ... become harder to resist" (p. 61).

Absences: Truancy can be classified as a "confrontational practice" (Kim, 1985). Sporadic attendance that results from unexcused absences (i.e., lacking a valid reason) can be a sign that the student is alienated from educational goals and school officials. Truancy can also be the result of peer pressure. Persistent confrontation can lead to official dismissal from school (Fine, 1986), or to an uncomfortable situation that prompts some students to leave on their own.

Age: Students who are overage compared to their cohort are very likely to have experienced grade retention. Other reasons for being overage include missing school due to family residential moves, being initially enrolled late in school, and missing school because of family responsibilities. Students who leave their homeland due to civil war or political persecution may lose a school year or more while in transit to the United States. Older students are more likely to drop out because they may feel ashamed in the presence of younger classmates, or they may be offered paid positions in the labor force that conflict with school attendance. Given limited financial resources at home and doubts about the long-term benefits of a high school diploma, older students may decide that the personal costs of staying in school are too high.

Father present: Previous studies have concluded that students with two parents at home are more likely to continue their schooling than are those from single-parent homes (Rumberger, 1983; Velez, 1989). Having only one parent at home can result in inadequate parental supervision, increased family
demands, or both (Fine, 1986). Although integration with kin or an extended family can soften or alleviate some of the problems associated with female-headed households (Moore, 1989), our expectation is in the direction of negative effects in relation to school persistence.

It should be pointed out that, consistent with the purpose of the ASPIRA study, of the six variables listed above, four can be classified as being school-related factors while only two ("parent's education" and "father present") are not.

SAMPLE AND METHODOLOGY

The study was designed as a longitudinal multi-method study, to be based on archival (school records), primary (interview), and one year follow-up data sources. Data collection began in the 1986-87 school year and ended in the 1987-88 school year. During Year I, a survey questionnaire was administered to 1,232 Black, White and Hispanic ninth grade students in eight schools in five cities across the country. Three schools were selected in Chicago, IL; two in Miami, FL; and one each in San Antonio, TX, Milwaukee, WI, and Newark, NJ. Each of the schools selected was representative of the schools in the district and also of the Latino population in that city's schools. Due to difficulties in obtaining full cooperation from the principal of one of the schools, the sample obtained from that school did not meet random qualities. Therefore, the effective population reported in this paper is drawn from seven schools.

The major purpose of the student questionnaire was to obtain students' opinions and perceptions about the schools they attend, their teachers, their parents, and their own aspirations. Archival data regarding present and past academic performance, attendance, and disciplinary record from the students' cumulative folders for both years of the study was collected as well.
The questionnaire was to be administered to 50 Black students, 50 White students, and 110 Latino students at each site, all randomly selected. During Year II, a revised version of the original questionnaire was administered to all subjects who participated in Year I of the study, regardless of whether they were still attending school or not. This study focuses on 706 Latino students who come from the following national origins: Mexican American; Puerto Rican; Cuban; and Central American. During Year II we could not ascertain enrollment status for 109 students, and these were dropped from the analyses, leaving a sample of 597 students for whom there exists complete information. The ethnic background of these 597 students is as follows: a total of 309 (51.8%) students are Mexican American; 161 (27%) students have Puerto Rican origins; 63 (10.6%) students are Cuban; and 64 (10.7%) respondents are of Central American extraction. Forty-eight students were confirmed as dropouts, representing 8% of the Hispanic students in the study. (See Appendix 1 for a breakdown of the student sample by race/ethnicity.)

The statistical techniques used to test our hypotheses are zero order correlations and discriminant analysis. Initially, correlation analyses were used to describe simple relations among pairs of variables. To learn which variables were significantly related to the criterion variable (STAY-IN), we employed discriminant analysis. This technique, which has been used in previous studies of the dropout problem (e.g., Wehlage and Rutter, 1986), was helpful in the process of building prediction models. (For definitions of the variables used in this study, please refer to Appendix 2.)

RESULTS

The results from the correlation analyses show that all the hypothesized relations between dropping out and the predictors in the model were confirmed.
All the obtained zero order correlations are in the expected direction (Table 4).

The variable showing the largest correlation coefficient with the dependent variable is AGE ($r = -.227$). The negative sign suggests that older students are less likely to stay in school than younger students.

School performance also appears to be related to dropping out. While dropouts had a "D" grade average, stay-ins achieved a "C-" grade average. The correlation between GRADES and STAY-IN ($r = .217$) suggests that students getting better grades are more likely to remain in school (Table 1).

Repeating a grade appears to be negatively related with staying in school. School leavers are approximately twice as likely as school persisters to have ever repeated a grade (73% versus 38% respectively). The correlation coefficient between STAY-IN and REPEAT is the third largest in the matrix ($r = .192$) and strongly suggests that the practice of holding back students has a deleterious impact on Latinos.

Excessive number of absences are negatively related to school persistence ($r = -.157$). Truancy suggests a lowered commitment to the role of student as well as a violation of school rules, indicative of oppositional behaviors.

Holding higher educational goals appears to be related to staying in school. The modest coefficient ($r = .141$) suggests that college expectations have holding power over some students. Stay-ins were almost twice as likely as dropouts (50% vs 26%) to expect to attend college.

The presence of a paternal figure in the home has a modest relation with staying in school ($r = .109$).

Having a more educated father appears to have only a small positive relation with school persistence ($r = .078$). This is somewhat surprising, given the persistent finding in the educational literature that socioeconomic
status impacts educational attainment. Perhaps this result is explained by the fact that we chose urban high schools for our study, thus narrowing the distribution of parental education in our sample. In other words, had we sampled a more socially heterogeneous group of students the resulting larger variance would have yielded more substantial effects for parental education.

Another objective of the study was to look at the predictive power of these variables. The results from the discriminant analysis (Table 2) suggest that the variables in our model have fairly high prediction power, as we can correctly classify 70% of the cases (Table 3). The best predictors in our model are AGE, GRADES, FATHER PRESENT, and ABSENCES. The coefficients for all these four variables reach a significance level of .01.

The importance of age as a predictor suggests that being "on schedule" plays a fundamental role in the decision to stay in school among Latino students. The cost to older students of staying in school is higher because these students lose at least one additional year of income in comparison to students who are on schedule. Since the type of jobs that high school graduates can get are directly tied to local labor-market and personal networks (Wehlage et al., 1989) to which most young Latinos do not have access, finishing high school would seem to be of dubious value to many Latino students. Older students may think they are acting as rational agents in withdrawing because the perceived benefits of a high school diploma do not offset the potential loss in earnings that are associated with one or more years of earnings (Boudon, 1981).

Good academic performance, as measured by grades, prevents school leaving among Latino students. Good grades can be a boost to the academic self-evaluation of Latino students and make future learning easier or less costly for them than for their less successful counterparts (Boudon, 1974).

The school holding power of a paternal presence at home suggests that
the family unit can provide resources that are important in understanding the behavior of dropouts. One plausible explanation for this finding is that students in one-parent families receive less adult supervision and have more family-related duties, such as taking care of younger siblings or accompanying a family member to a clinic (Fine, 1986). Thus, the family cannot afford to keep these youths in school on a steady basis.

The father's presence is also probably related to a larger family income, although by including father's education in the model we captured some of the effects of financial resources at home. However, during preliminary analyses (results not presented here) we attempted to assess the effects of family assets through a variable measuring the presence of a number of material possessions in the home (e.g., a typewriter, over 50 books). This variable was dropped from our final model since it failed to show any relation to school leaving. Thus, our best guess is that the effects of having a father at home reflect a more effective supervision over the student by the family unit and a lighter load of household chores in comparison to female-headed households.

Truancy (absences) also had a significant effect on the probabilities of staying in school among our respondents. The more days a student missed school, the more likely he or she was to drop out of school. It appears that some students are lacking a sense of institutional attachment. This can lead to feelings of alienation from their schools, precipitating the decision to leave.

SUMMARY AND POLICY IMPLICATIONS

The major findings of this study suggest that the most important factors in predicting who stays in school among Latino ninth graders, most of which
car be affected by school policies and practices, are: Age, grades, presence of father, and absences. Students were more likely to stay in school when their education had not been delayed by prior grade retentions or by arbitrary placements in lower grades (as compared to other students of the same age), and when they obtained good grades in school. Students were less likely to stay in school when they engaged in excessive truancy and when their fathers were not present at home. The typical Latino dropout in our study has the following profile: he or she has repeated at least one grade in school; is overage for the ninth grade (15.6 years old); had a "D" grade average for school work; has missed an average of seventeen days of classes in a semester; and does not plan to go on to college. We proceed now to discuss in more detail each of the major variables reported earlier in the findings. A commentary on the important variables identified in this study as being related to dropping out or staying in school follows, along with a brief discussion of the policy implications of the main findings.

OVERAGE

When overage students take on adult roles early on in their lives, as evidenced by dating, marriage, pregnancy, use/abuse of alcohol and/or drugs, and full-time employment, it is not uncommon for them to place lesser value on completing high school. In the calculus and exercise of personal life options, the value of completing high school often pales when compared to undertaking the adult roles listed above. Although many students who drop out of school to work, get married and raise a family often return several years later to earn a high school equivalency degree (NCES, 1989) and pursue further schooling as necessitated by more demanding work requirements, staying in high school is not at all enticing to many teenagers who are lured away by the prospect of earning an income --however meager-- immediately.
GRADES

Failure in school, as reflected by very low grades and few credits earned toward graduation, is a major reason why students leave high school. The typical dropout in our study had a GPA of 1.19, as compared to 1.90 for stay-ins. Nevertheless, the goal of many high school students in urban schools today is simply to pass, which can be achieved by earning a grade of "D" (1.0 GPA), the minimum required to earn course credit toward graduation. It is not surprising, therefore, that the GPA for high schoolers in many major urban districts is less than 2.0, and even lower in many individual schools.

For example, figures reported in the Milwaukee Journal (September 27, 1989, pp.1A, 8A) reveal that in 1988-1989 the typical high school student in Milwaukee Public Schools (MPS) earned a 1.62 GPA, the equivalent of a letter grade of "C-" on a 0 ("F") to 4 ("A") point scale. When disaggregated by race/ethnicity, the GPAs of MPS minority students were even lower: 1.35 for Blacks, 1.27 for American Indians, and 1.47 for Hispanic students, in contrast to 1.98 for Whites. It is obvious that higher expectations for student achievement are much needed in the nation's public schools, especially in major urban systems. Students need to be challenged, encouraged and supported in their efforts to excel, not just to pass with minimum effort. Special resources to support low-achieving students in the form of tutors and other special initiatives appear to be warranted, along with a restructuring of the curriculum and a clear articulation of learning goals and objectives at each schooling level (elementary, middle and high school). The September 1989 "Education Summit" called by President Bush to discuss with the nation's governors ways to improve the public schools may prove to be an important first step in developing a coordinated push by the states and the federal government for educational reform.
GRADE REPETITION

Grade repetition as a means of pholding high standards has been enthusiastically supported by a majority of Americans. Teachers believe that students benefit from being held back and repeating a grade (Shepard and Smith (1989), p.4), and the era of social promotion in schools appears to be a thing of the past. National data are not available on the number of children who are retained in grade each year but there is a general perception that grade retention rates, which are closely linked to students being overage by grade level, have increased in the past several years in urban schools, with the advent of achievement-based promotion policies (Shepard and Smith, p.6).

In spite of the extensive research about school dropouts that has been conducted in the past decade, the connection between being retained in grade, especially in the early years of schooling, and eventually dropping out of school has not been emphasized, or even adequately explored. A decade and a half earlier it had been reported that delayed education rates for Puerto Rican students age 13 to 15 led to higher dropout rates between ages 16 to 18, and that this delay could be traced in most instances to children being held back in elementary school (Hernandez, 1976).

A valuable, recent contribution to the research literature in this area is Flunking Out: Research and Policies on Retention by Lorrie A. Shepard and Mary Lee Smith (1989). In this book, the editors present powerful evidence that holding students back has several negative consequences: 1) it "has no benefits for either school achievement or personal adjustment"; 2) it "is strongly related to later dropping out of school"; and 3) "from the student's perspective, retention is conflict-laden and hurtful" (pp. 215-216).

"Promotion plus remediation" is their recommended alternative to grade retention of students who are achieving substantially below grade level (p. 230). Included in remediation are tutoring, summer school, pull-out or
within-class individualized instruction, and accelerated learning.

Given the high proportion of dropouts who had been retained earlier in their schooling years, the data in our study suggest that for Hispanic students grade retention is a common practice which has ominous consequences later -- sometimes as much as eight or ten years later -- in the student's life. School districts, perhaps at the urging of federal and state education agencies, need to collect and scrutinize data on student grade retention on a regular basis. A longitudinal analysis of the data from grades K through 12 is likely to reveal useful information on the eventual impact of the policy of grade retention on individual students as well as on racial/ethnic groups of students. State agencies should also collect and publish these figures, which then could also be reported by state and nationally by the U.S. Department of Education. Currently, a major difficulty lies in the dearth of available data, given that they are not collected or reported regularly by school districts.

ABSENTEEISM

Another serious problem confronting urban school across America is absenteeism. The Hispanic students in our study who dropped out of school had missed approximately 17 days of school in one semester; stay-ins missed about 8.6 days in the same time period. Assuming a similar rate for the second semester, dropouts missed thirty-four days, or close to six weeks of classes, roughly one-sixth of an average school year (36 weeks or 180 school days). Average daily attendance in many urban high schools usually hovers around 80-85%, and tends to be even lower in schools with high concentrations of minority and poor children. A norm seems to develop in some schools by which high rates of absenteeism become acceptable to students, while parents often remain uninformed or powerless to do much about this behavior, given their own personal or economic circumstances. Teachers have little or no assistance in
doing something about it; typically all they are able to do is to report
students as being absent and to encourage them to attend regularly when they
do show up for class. The time lag in reporting absences in many large urban
high schools is such that it may be weeks or months before chronic truants are
listed and social workers/counselors can deal with the problem. The root
causes for this behavior are complex and may include such factors as a lack of
vision on the part of the student as to the relevance of obtaining a high
school diploma in the face of uncertain employment opportunities, or a need to
help at home with the care of younger siblings. Some students leave due to
unpleasant experiences in school, including difficulties with teachers, or
simply out of boredom. In light of this, teachers and administrators need to
pay increasing attention to strategies that will make schooling more
meaningful to students by tying the curriculum more directly to employment.
They also need to work toward making students feel less isolated and more
engaged in learning and in academic and social activities.

FATHER PRESENT

The reality of single-parent households, and the poverty or economic
hardship that usually is associated with these households, is a growing
problem for children in urban public schools. Having a father present in the
home appears to have some impact in helping to keep students in school.
However, given the existence of many such households, special efforts may need
to be targeted at children who come from these homes, who often make up a
significant portion of the minority students. While teachers and other school
personnel, such as social workers, may be limited in what they can do to
alleviate or eliminate specific problems, a joint effort between the school,
social service agencies and community-based organizations may provide the
necessary support for these families. Examples of these may be the provision
of health screenings, such as physical examinations, to students by city or
county health department staff; homework centers located in neighborhood centers; and drug education programs offered to students in schools by personnel from social/recreational agencies.

COLLEGE ASPIRATIONS

It comes as no surprise that in our study students who stayed in school were almost twice as likely to have plans to attend college as students who dropped out. This finding is consistent with the research literature and serves to highlight the important role that parents, teachers, counselors, administrators and others outside the school building (including the corporate sector) can play in creating for each student a vision of the future that includes postsecondary education. It is hard for students who experience personal or academic difficulties to plan beyond high school yet this is exactly what at-risk students need to push them toward high school completion. Since many of these students' parents themselves did not graduate from high school and fewer still have ever attended college, it follows that the burden of creating this vision falls more heavily on school personnel, especially teachers and counselors. Irrespective of their own educational attainment, however, parents can often play a key part in motivating their children to stay in school and to look beyond high school for their education. Teachers need to acknowledge the parental contribution to building a vision of the future; in turn, parents need to work closely with teachers and counselors in fostering in their children a desire to better themselves educationally throughout their entire lives and in providing a home environment that is conducive to discipline, good habits, and learning. Participation in pre-collegiate programs while in middle school or high school has been effective in giving students the opportunity to create for themselves the vision of attending college. Parents need to become better informed about these opportunities, and policy makers must seek additional resources to fund these
A word of caution is needed in the interpretation of the finding that only 8% of the Hispanic students in the study dropped out. This was the proportion of students researchers were able to verify as having indeed dropped out, that is, they had formally withdrawn from school, or someone (their parents, teachers, principal or, in a few cases, the students themselves) confirmed their departure. It is quite probable that among the 15% of the students who were missing, that is, students whom researchers were unable to locate and interview in Year II, there were a number of dropouts. In some respects, e.g., absences and age, the typical missing student resembled the typical dropout, which leads us to believe that the dropout rate among these students will be higher than 8%. (These results are not included in this paper.)

FUTURE DIRECTIONS

The ASPIRA Association Five Cities High School Dropout Study represents the latest attempt by researchers to address the phenomenon of dropping out of school among Hispanic high school students. It also provides data on those Hispanic students who stay in school. In this paper the most significant findings of this longitudinal study have been presented, along with a brief analysis of the implications for policy makers at the local, state, and national levels.

There is a wealth of information contained in the ASPIRA Association Five Cities High School Dropout Study. Additional reports will analyze this comprehensive database which contains over 300 specific variables for a sample of 706 students selected to represent the high school experiences of Hispanic students enrolled in predominantly minority high schools. Budget limitations in the original study did not allow for the analysis of a parent file.
containing 121 cases and a matching with their respective son/daughter. It is expected that the lead consultants in this study as well as other interested researchers will examine these data and report the findings in future publications. This paper, the companion chart essay (ASPIRA Five Cities High School Dropout Study: Characteristics of Hispanic High School Students) and the ASPIRA Five Cities High School Dropout Study: Focus on Parents (Petrovich and Parsons, 1989), are the first three publications to emerge from the ASPIRA Association study. Although they represent an essential first step in data collection and analysis for seeking answers to why Hispanic students drop out or stay in school, we expect them to be the precursors of many other research papers and monographs based on the database assembled for the study.

NOTES

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The ASPIRA Association, Inc., formerly known as ASPIRA of America, Inc., is a not-for-profit organization established almost three decades ago in New York City to promote the educational welfare of Puerto Ricans and other Hispanic youth. Since its inception ASPIRA, through its offices in Florida, Illinois, New Jersey, New York, Pennsylvania, and Puerto Rico have served thousands of students at all levels (middle and high school, college/university, graduate/professional school) through a service model called the "ASPIRA Process" that incorporates mentoring, counseling, academic skills development, leadership training, research and advocacy, and parent/community involvement. The national office of ASPIRA is located in Washington, D.C.
APPENDIX 1

STUDENT SAMPLE (DISTRIBUTION BY RACE/ETHNICITY)

The complete sample of the ASPIRA Association, Inc. Five Cities High School Dropout Study is as follows:

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican Americans</td>
<td>367</td>
</tr>
<tr>
<td>Puerto Ricans</td>
<td>183</td>
</tr>
<tr>
<td>Cubans</td>
<td>73</td>
</tr>
<tr>
<td>Central Americans</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total:</strong> 706</td>
</tr>
<tr>
<td>Whites</td>
<td>138</td>
</tr>
<tr>
<td>Blacks</td>
<td>215</td>
</tr>
<tr>
<td>American Indians</td>
<td>30</td>
</tr>
<tr>
<td>Asians/Pacific Islanders</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total:</strong> 1,094</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
</tr>
<tr>
<td>Other Hispanics</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong> 1,161</td>
</tr>
</tbody>
</table>
APPENDIX 2

DEFINITIONS OF VARIABLES

Note: with the exception of the dependent variable, STAY-IN, all variables are constructed using Year I information.

AGE- Student's chronological age in the fall of 1986.

RETENTION- Self-reported grade retention, kindergarten through the 9th grade. Coded ever retained=1; never retained=0.

FATHER PRESENT- A measure for family intactness. If student is living with a father or step-father coded=1; other=0.

COLLEGE PLANS- Student's expectations as to how far in school will get. Coded vocational/trade school, high school or less=0; college=1.

FATHER'S EDUCATION- Student's estimate of father's educational attainment. Coded less than high school=0; high school or more=1.

ABSENCES- Number of days absent in the first semester of the ninth grade.

GRADES- Overall grade point average for semester 1 of the ninth grade, measured on a four-point scale, with 0.0 being the lowest and 4.0 being the highest.

STAY-IN- A dropout is defined as any student interviewed in Year I who was not enrolled in school in Year II. Transfer students and those enrolled in G.E.D. programs are defined as stay-ins. Coded not enrolled=0; stay-in=1.
Table 1: Sample Means by Student Status
(standard deviations shown in parenthesis)

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Dropout</th>
<th>Stay-In</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPEAT</td>
<td>.73</td>
<td>.38</td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td>(.44)</td>
<td>(.48)</td>
<td>(.49)</td>
</tr>
<tr>
<td>COLLEGE PLANS</td>
<td>.26</td>
<td>.50</td>
<td>.48</td>
</tr>
<tr>
<td></td>
<td>(.42)</td>
<td>(.47)</td>
<td>(.47)</td>
</tr>
<tr>
<td>ABSENCES</td>
<td>17.2</td>
<td>8.6</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>(21.0)</td>
<td>(9.9)</td>
<td>(11.4)</td>
</tr>
<tr>
<td>FATHER PRESENT</td>
<td>.43</td>
<td>.67</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>(.50)</td>
<td>(.47)</td>
<td>(.48)</td>
</tr>
<tr>
<td>FATHER'S EDUCATION</td>
<td>.14</td>
<td>.26</td>
<td>.25</td>
</tr>
<tr>
<td></td>
<td>(.31)</td>
<td>(.41)</td>
<td>(.40)</td>
</tr>
<tr>
<td>AGE</td>
<td>15.6</td>
<td>14.8</td>
<td>14.9</td>
</tr>
<tr>
<td></td>
<td>(1.06)</td>
<td>(.86)</td>
<td>(.90)</td>
</tr>
<tr>
<td>GRADES</td>
<td>1.19</td>
<td>1.90</td>
<td>1.84</td>
</tr>
<tr>
<td></td>
<td>(.84)</td>
<td>(.86)</td>
<td>(.88)</td>
</tr>
<tr>
<td>N OF CASES</td>
<td>48</td>
<td>549</td>
<td>597</td>
</tr>
</tbody>
</table>
### Table 2: Discriminant Analysis (standardized canonical coefficients)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Function 1</th>
<th>WILKS' LAMBDA</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPEAT</td>
<td>-.149</td>
<td>.963</td>
<td>22.86</td>
</tr>
<tr>
<td>COLLEGE PLANS</td>
<td>.118</td>
<td>.980</td>
<td>11.99</td>
</tr>
<tr>
<td>ABSENCES</td>
<td>-.337</td>
<td>.958</td>
<td>26.21</td>
</tr>
<tr>
<td>FATHER PRESENT</td>
<td>.278</td>
<td>.988</td>
<td>7.20</td>
</tr>
<tr>
<td>FATHER'S EDUCATION</td>
<td>.183</td>
<td>.994</td>
<td>3.67</td>
</tr>
<tr>
<td>AGE</td>
<td>-.489</td>
<td>.949</td>
<td>32.24</td>
</tr>
<tr>
<td>GRADES</td>
<td>.346</td>
<td>.953</td>
<td>29.49</td>
</tr>
</tbody>
</table>

---

**Group Centroids**

<table>
<thead>
<tr>
<th>Group 1 Dropouts</th>
<th>Group 2 Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.19</td>
<td>.104</td>
</tr>
</tbody>
</table>

---

### Table 3: Classification Results

<table>
<thead>
<tr>
<th>Actual Group Membership</th>
<th>Predicted Group Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dropout (n=48)</td>
<td>Predicted Group 1: 60.4%</td>
</tr>
<tr>
<td></td>
<td>Predicted Group 2: 39.6%</td>
</tr>
<tr>
<td>2 Stayed-in (n=549)</td>
<td>Predicted Group 1: 29.8%</td>
</tr>
<tr>
<td></td>
<td>Predicted Group 2: 70.2%</td>
</tr>
<tr>
<td>Overall 69.6% Correct</td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>STAY-IN</th>
<th>REPEAT</th>
<th>COLLPLANS</th>
<th>ABSENCES</th>
<th>FATHRPRES</th>
<th>FATHRED</th>
<th>AGE</th>
<th>GRADES</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAY-IN</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REPEAT</td>
<td>-.192</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLPLANS</td>
<td>.141</td>
<td>-.283</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSENCES</td>
<td>-.205</td>
<td>.167</td>
<td>-.167</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FATHRPRES</td>
<td>.109</td>
<td>-.057</td>
<td>.031</td>
<td>-.120</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>FATHRED</td>
<td>.078</td>
<td>-.015</td>
<td>.110</td>
<td>-.061</td>
<td>.027</td>
<td>1.00</td>
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<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-.227</td>
<td>.512</td>
<td>-.240</td>
<td>.122</td>
<td>.002</td>
<td>-.020</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>GRADES</td>
<td>.217</td>
<td>-.274</td>
<td>.231</td>
<td>-.452</td>
<td>.032</td>
<td>.034</td>
<td>-.198</td>
<td>1.00</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY


