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ABSTRACT

This literature review summarizes and analyzes the current literature on variables predicting high school dropping out and the relationship between those variables and language minority youth (defined as those who are national origin minorities by birth and who speak, in varying degrees, languages other than English). After the introduction, which presents the rationale for the study, background data are presented on the numbers of language minority youth dropouts by ethnic origin, e.g., Blacks, American Indians, Hispanic Americans. The correlates and causes of dropping out are discussed, e.g., student, school, and community factors, and the relationship between those factors and language minority youth is explored. Language minority youth status and school leaving is next applied to Hispanic youths, addressing the influences of school, family, peers, the workplace, the community, and culture. The booklet concludes with an agenda for further research, and a 12-page bibliography. (BL)

DROPPING OUT AMONG LANGUAGE MINORITY YOUTH: A REVIEW OF THE LITERATURE

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I. INTRODUCTION

The literature on high school dropouts has grown dramatically in recent years. Despite this growth, however, only a few studies exist on dropping out among language minority youth (LMY). There are even fewer studies on the role of language as a factor of premature school-leaving. This gap in the literature is particularly unfortunate in light of programmatic decisions that must be made by educators and decisionmakers about educational policies affecting the growing population of youngsters for whom English is not the primary language. The purpose of this literature review is to amass the evidence collected to date--both direct and indirect--on the correlates and causes of dropping out among language minority youth.

An essential premise of this review is that formal schooling is a means of accomplishing certain goals for both individuals and society as a whole. Completion of schooling implies the attainment of skills and the credentialing that are required of working and functioning members of society. These, in turn, also enable social and economic mobility for the individual. For society as a whole such individuals generate necessary services for which they are paid. Premature exit from school, therefore, has personal and social costs which are borne disproportionately by those subpopulations most likely to drop out.

The most definitive report on the costs of dropping out to individuals and to society is The Effects of Dropping Out, prepared for the U.S. Senate Select Commitee on Equal Educational Opportunity (1972).[1] In Levin's (1972) estimation, inadequate education as a result of premature

[1]The report contains a reprint of Levin's (1972) report to the Select Committe on Educational Opportunity on the The costs to the Nation of Inadequate Education and excerpts from Jerald G. Bachman's report, Youth in Transition, Vol. III, Dropping Out--Problem or Symptom?

school-leaving accounted for a loss of $47 billion in federal revenues and $24 billion to state and local governments in 1969. Failure to graduate from high school among the cohort of males aged 25-34 in 1969 cost "$237 billion in income over the lifetime of these men, and $71 billion in foregone government revenues" (p. ix). Recent estimates continue to demonstrate enormous losses of personal and governmental revenue that are attributable to premature school-leaving (King, 1978).

Youths who fail to complete high school are more likely to become economic burdens to society. Levin's investigation concludes that the public will pay heavily for the high proportion of youths who drop out, in increased taxes to support welfare programs, fight crime, and maintain special programs. Dropping out accounts for an estimated $3 billion annually in welfare expenditures and an additional $3 billion in expenditures in response to crime. Youths who leave school early, Levin adds, will also be less likely to participate in the decision-making processes of government, enjoy good health, or move, from one generation to the next, up the socio-economic ladder.

The investment required to prevent dropping out, Levin states, is substantially less than the loss to the nation; indeed, losses are substantially greater than the investment that would be required to alleviate dropping out among high school students. In contrast to the $237 billion in personal income losses and $71 billion in foregone government revenues attributable to dropping out among males who were between 24 and 34 in 1969, the probable cost of having provided a minimum of high school completion to this group of men was estimated to be about $40 billion. (Although some researchers view Levin's estimates as inflated (see Bachman, 1972), others have shown that, at a minimum, the costs of dropping out far exceed current investments for educating and training youth (see Carnegie Council, 1979). To our knowledge, there are no studies that demonstrate the positive effects of dropping out, or even that it is neutral, or minimally negative.

There are also consequences of dropping out which are difficult to assess monetarily. Because dropouts are not likely to become involved in political decision-making as adults (Levin, 1972), they are far less able to shape their own fates. This is especially crucial for racial, ethnic, and languege minorities, all of whom are overrepresented among premature school leavers. Indeed, some social critics might view the nation's tolerance of exceedingly high dropout rates among certain groups as a manifestation of a social strategy designed to keep minorities out of political decision-making roles (Bowles & Gintis, 1976; Ogbu, 1978). For example, in his study on Mexican-American education in the southwest, Carter (1970) wrote:

> The fact that the school fails to Americanize or raise the group status of so many Mexican-Americans is evidence of its success. Local society functioned well with easily controlled, politically impotent and subordinate castes. School practices evolved that functioned to perpetuate the social and economic system by unconsciously encouraging the minority students to fail academically, dropout early, and enter society at the low status traditional for Mexican-Americans. . . . This self-reinforcing circle of circumstances became well established in the Southwest and persists to the present. (p. 204)

The purpose of this review is thus to: (1) Conduct an analysis of the literature in which factors predicting dropping out in general are summarized, and (2) to determine the relation between language minority status and each of these correlates of dropping out.

II. BACKGROUND DATA

Number of Language Minority Youth

Accurate estimates of the number of language minority, school-aged youth in the United States are difficult to come by, owing to variations from one study to the next in how language minority status is defined. In some studies, classification is based on the language spoken in the individual student's household, regardless of the student's own language preference. In other studies, students are classified according to whether they speak English or another language. In still others, students are classified in terms of their degree of proficiency in English. However, there is no way to determine how well students actually speak their own language. This state of affairs is further confused by the different methods of assessment employed in categorizing students according to their language status. Some studies have employed self-report measures in which students are asked to respond to a series of questions; other studies have assessed student's language usage on the basis of parents' responses to questionnaire items; and still others have assessed language usage on the basis of standardized tests of language proficiency. Owing to such wide variations in definition and categorization procedures, comparisons between studies are difficult, and findings must be interpreted cautiously. For a more detailed discussion of the problems of defining and estimating language minority students see Maclas and Spencer (1982).

A 1978 study by the Office of Civil Rights estimated that minority students represented approximately 25 percent of the public school enrollment nationwide. Black students constituted 15 percent of the total enrollment; Hispanic Students, 7 percent; American Indians, 1 percent: and Asian-Americans, 1 percent (U. S. Department of Education, Office of Civil Rights, Regional and National Summaries, data from the Fall, 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980). In metropolitan United States areas, 9.7 percent of Hispanic and 6.2 percent of Black students are enrolled in private schools. No figures are available for Asian-Americans or American Indians enrolled in private schools.

The National Center for Education Statistics (1978) estimated that in 1975, approximately 10.6 million children and youths between the ages of 4 and 25 resided in households where a language other than English was spoken. Of these youngsters, nearly half were from Spanish-speaking households. (We assume that a large population of the remaining half are from Asian-American households; other groups likely to be represented in the population of households where English is not spoken as the primary language include American Indians.) Given the large number and proportion of language minority youngsters who are from Hispanic backgrounds, it is not surprising to find that virtually all research on language minority youngsters focuses on this particular population. We know very little about the status of education in this country for Asian-Americans and American Indians. Still less is known about youngsters from immigrant groups who have recently arrived in this country, most notably those from Southeast Asia, Latin America, Cuba, and Haiti. It is also worth noting that many studies of Hispanic youngsters do not sufficiently differentiate among the different ethnic groups who speak Spanish (i.e., Cubans, Puerto Ricans, Mexican-Americans, and those from Central and South America). It is important to make these distinctions since there is some evidence that English language acquisition, cultural adjustment and levels of educational achievement vary for each Hispanic group.

For purposes of this review, the term "language minority" will be used to designate youngsters who are national origin minorities by birth and who speak, in varying degrees, languages other than English.

School Dropouts

Definitional problems tend to plague studies on school-leaving. Official statistics also underestimate the true proportion of youngsters who leave school early: They do not reflect those who drop out during the elementary and junior high school years and, most certainly, they do not reflect the substantial number of youngsters who

have not officially dropped out, but whose attendance is so sporadic that they may as well have left school. Rates must be viewed, therefore, as rough estimates. In 1979, the Carnegie Council on Policy Studies and Higher Education reviewed data from the Bureau of Census and the National Center for Education Statistics on premature school-leaving. The report indicated that the national dropout rate declined steadily from 40 percent in 1960 to 25 percent in 1965; the rate leveled off in the mid-60s and has not changed substantially since then. When data are disaggregated for Whites and non-Whites--with Hispanic youngsters classified as White--we find that the dropout rate for Whites declined steadily from roughly 25 percent in 1960 to roughly 15 percent in the mid 1960's. The dropout rate for non-Whites also declined steadily, although less markedly, from roughly 45 percent in 1960 to approximately 30 percent in 1965. It is not until the data are disaggregated for Blacks, Hispanics, and Whites that a clear picture of differential trends for these three groups is revealed. (In 1967, dropout rates for Blacks, classified separately, became available for the first time; the dropout estimates for Hispanics, classified separately, did not become available until 1972.) Between 1967 and 1976, the dropout rate among Black youths declined from roughly 25 percent to slighly less than 20 percent. Since 1976, however, the dropout rate for Blacks has risen to slightly less than 25 percent. The dropout rate for Blacks is thus equal to the national average. Among Hispanics, the dropout rate has risen steadily from approximately 30 percent in 1974 to 40 percent in 1979. In contrast to Black youngsters, Hispanic youngsters thus drop out at a rate far in excess of the national average.

Dropout rates among American Indian youngsters, many of whom are poor and non-English-speaking, are exceedingly high. Estimates of dropout rates among Indians, however, vary widely from study to study, due, doubtless, to the variations in the subpopulations studied. For example, the Washington State Commission on Civil Rights (1972-73) estimates the dropout rate of Indians to be somewhere between 38 and 60

percent. Dropout rates among Indians in Nome, Alaska, have been estimated to be 90 percent; in Minneapolis, 62 percent; and in parts of California, 70 percent (the National Advisory Council on Indian Education, 1974). Unfortunately, data are not available on the relation between language usage and school-leaving within the American Indian population.

The question of the independent effects of dropping out by ethnicity, socioeconomic status, and language usage remains unresolved. For example, the Carnegie Council (1979) argues that for youths aged 16 and 17 from families whose incomes are less than $10,000 the dropout rate for Hispanics is only slightly higher than the rate for White, non-Hispanics. In contrast, Brown and his associates (1980) (using recent data from the Survey of Income and Education (SIE), collected by the Bureau of Census in 1976) show that at four different levels of poverty the Hispanic dropout rate among those aged 14-30 is two to three times higher than the rate among comparably poor White non-Hispanics. This analysis, however, does not separate Hispanics in this age group who were educated in the U.S. from those who were not. Rumberger (1981), using the National Longitudinal Survey of Youth Labor Market Experience data on persons 14-21 years old, also demonstrated that among the economically disadvantaged dropout rates differ for Hispanics and Whites. Rumberger estimates that the Hispanic dropout rate is roughly 1.5 times greater than the rate for comparably disadvantaged Whites.

SIE data indicated that both language usage and Hispanic origin contribute to the likelihood of dropping out (see Table 1). Putting language usage aside, we find that persons of Hispanic origin drop out at twice the rate of non-Hispanic individuals (24 percent compared to 10 percent). Holding for ethnic origin, we find that persons from non-English language backgrounds drop out at roughly twice the rate of persons from English language backgrounds (18 percent vs. 10 percent). Again putting ethnicity aside, we find that individuals from homes

Table 1.--Numbers and Percentages of Persons 14 to 25 Years Old Who Had Not Completed 4 Years of High School and Were Not Currently Enrolled[1], by Total, Ethnic Origin, and Language Characteristics: Spring 1976
(Numbers in thousands)

Ethnic origin of population, 14 to 25 years old	Total	English-language background	Non-English-language background			
			Usual individual language			
			Total	English	Non-English	Not reported
Total	47,311[2]	42,541	4,618	2,868	1,049	701
Dropouts	5,013	4,145	844	347	423	75
Percentage	(11)	(10)	(18)	(12)	(40)	(11)
Persons of other than Hispanic origin	44,700	42,141	2,411	1,527	330	566
Dropouts	4,394	4,082	290	147	98	45
Percentage	(10)	(10)	(12)	(10)	(30)	(8)
Persons of Hispanic origin	2,611	400	2,208	1,342	721	145
Dropouts	618	62	554	200	324	30
Percentage	(24)	(16)	(25)	(15)	(45)	(20)

[1] Not enrolled at any time from February-May 1976.

[2] Includes an estimated 151,000 persons whose language background is unknown. An estimated 3,000 among the 151,000 persons are of Hispanic origin; 23,000 are dropouts.

NOTE--Details may not add to total shown because of rounding.

SOURCE--Survey of Income and Education, conducted by the U.S. Bureau of the Census, spring 1976, preliminary data. The questions on language were developed by the National Center for Education Statistics, which provided partial support for the SIE.

where English is not spoken and who themselves do not speak English, drop out at a rate approximately four times that of individuals who are from an English language background (40 percent vs. 10 percent). Thus, it appears that whether an individual speaks English is far more important a determinant of dropping out than whether he/she comes from a non-English-speaking background. English-speaking youngsters from non-English-speaking backgrounds had a 12 percent dropout rate. In contrast, the dropout rate for individuals who do not speak English and come from a non-English-speaking background was 40 percent.

Also of interest in this table are the data concerning comparisons of Hispanic origin individuals from non-English-speaking backgrounds and non-Hispanic individuals who are also from non-English language backgrounds. In general, among the youngsters from non-English language backgrounds, we find that youngsters of Hispanic origin have approximately twice the dropout rate of those of non-Hispanic origin (25 percent vs. 12 percent). Among youngsters of non-English language backgrounds who themselves speak English, the dropout rate for persons of Hispanic origin is approximately 1.5 times the rate of persons of other than Hispanic origin (15 percent vs. 10 percent). Among persons whose individual language is not English, but who are from non-English language backgrounds, the dropout rate for persons of Hispanic origin is again greater than that of non-Hispanic origin persons by a factor of approximately 1.5 (45 percent vs. 30 percent). It is difficult to interpret why being of Hispanic origin appears to contribute to a greater risk of dropping out. One possible explanation may be that Hispanic 14 to 25 year olds include immigrants who may not have had enough exposure to the American educational system. Additionally, those who enter the United States after age 18 often have less then a high school education or may have come from rural schools with sub-standard levels of education. These factors alone would inflate the estimate of U. S. educated Hispanic dropouts.

Unfortunately, we find no analyses which assess the independent contributions of socioeconomic status, language usage, previous exposure to education and ethnicity to the predictors of dropping out. Although quantitative estimates of the significance of each of these three factors are not available, the data on dropout rates, taken together, suggest that coming from an economically disadvantaged family, and not speaking English, all increase the likelihood of early school-leaving. Being of Hispanic origin, per se, does not increase the likelihood of dropping out, but since large numbers of Hispanics are both non-English speaking and economically disadvantaged, chances are that Hispanic youngsters are more at risk when it comes to premature school leaving. The data suggest that youngsters with two of these three characteristics are more likely to leave school earlier than youngsters with one of these characteristics. Youngsters with all three of these characteristics, i.e., poor, Hispanic origin and non-English-speaking, are the most likely of all to drop out of school.

The actual impact of Hispanic ethnicity, poverty, and not being English-speaking on dropping out remains speculative at this point and we advance the role of these three variables in early school-leaving with a great deal of caution. Although the available data do support the contention that income, Hispanic ethnicity, and language usage all make unique contributions to predictions for dropping out, accurate data on educational exeriences of non-Hispanic, non-English-speaking, poor youth are not presently available. For example, we do not know if dropout rates are as high among recently arrived, poor Asian youngsters as they are for poor, foreign born, Hispanic youngsters. We also know nothing about other groups such as Europeans and Middle Easterners who have recently immigrated to the U. S., speak little English, and are unfamiliar with the American school system. The time of arrival among people who have migrated to the U. S. is also a variable as far as literacy and levels of education are concerned. For instance, most of the Asian families who immigrated to this country prior to the time that these recent surveys were conducted were from urban, middle-class

backgrounds with exposure to Western languages and cultures. This is a contrast to children of refugees who arrived after 1975 as part of the recent wave of immigrants.

Because language minority youths have not been identified as a separate population in major studies on premature school-leaving, direct information on the causes and correlates of dropping out among these youngsters is non-existent. It is noteworthy that the three major studies of dropping out conducted to date, (Those of Bachman, Green & Wirtanen, 1971a; Bachman, O'Malley & Johnson, 1971b; and Rumberger, 1981) neither include language proficiency (in either English or the mother tongue) nor language usage as variables contributing to premature school-leaving. It is not known, therefore, whether language minority youngsters drop out of school at a higher rate than English-speaking youngsters because (a) language minority youngsters are more likely to be characterized by those attributes which characterize school leavers in general or, (b) there are factors which operate to promote school-leaving among language minority youth which are unique to that population.

III. THE CORRELATES AND CAUSES OF DROPPING OUT

Nielsen (1980) and others have suggested that factors related to premature school-leaving can be classified into three groups:

- Characteristics of the school-leaver;
- Characteristics of the school; and
- Factors outside the school.

Although this scheme is overly simplified--for example, it is not clear whether poor academic performance, a variable implicated in almost every major study of school-leaving, should be classified as a characteristic of the student or of the student's school--we will employ the framework here to summarize and present the major findings of the studies of dropping out. In a subsequent section of this report, we shall propose a broader, more ecological framework, and a research agenda for studies of school-leaving.

Student Factors

Those student factors most frequently studied fall into three groups:

- Demographic and family characteristics;
- Abilities and school achievement; and
- School experiences.

The most comprehensive and rigorous studies to date are those by Bachman et al. (1971a and 1971b) and Rumberger (1981). We shall devote more attention to the findings of the Bachman and Rumberger studies because these are better executed than others.

Virtually every study which has included social class as an independent variable has indicated that youngsters from the lower socio-economic strata are more likely to drop out of school than their more

economically privilged peers. The Bachman study, for example, which was a longitudinal investigation of 2,000 boys over a period between 1966 and 1970, indicates that 23 percent of boys from the bottom socioeconomic strata dropped out of school compared to 4 percent from the top strata, and only 20 percent of youngsters from lower socioeconomic strata went on to further education. This general finding is supported by several other studies (Alexander, Eckland & Griffin, 1976; Camp, 1980; Children's Defense Fund, 1974; Combs & Cooley, 1968; Howard, 1978; Hoyt, 1962; Lloyd, 1978; Mare, 1980; Rumberger, 1981; Schriber, 1962; Stroup & Robins, 1972).

There is some indication in the literature that predictions of school-leaving from socioeconomic data are more powerful when made during the elementary school years than when made during secondary school (see Cook and Alexander, 1980); that is, relative to other predictive factors, the importance of family SES may decline as the age of students rises. For youngsters of high school age, school performance appears to be a stronger predictor of dropping out than family socioeconomic status. It is our suspicion that socioeconomic status predicts school achievement during the elementary and secondary school years, which, in turn, determines school completion or school-leaving. Thus, depending upon the age of the respondents studied, different factors, all of which may be predictive of school-leaving at one time or another, will appear to have different degrees of predictive utility.

National origin has been included in several studies of school-leaving. The results of these studies suggest that Hispanic youngsters are more likely to drop out of school than other youngsters, even when social class is limited to those in the lower strata (Brown, Rosen, Hill & Olivas, 1980; Rumberger, 1981). For example, Rumberger (1981), using data from the National Longitudinal Survey of Youth Labor Market Experience, finds that dropping out is approximately 1.5 times more likely among Hispanics than among Blacks or Whites. As noted eerlier, Brown et al, (1980) show

that, across various economic groups, the dropout rate for Hispanic youngsters is two to three times higher than the rate for Whites. In these studies, however, English language proficiency and immigrant versus native born status were not examined for possible impact on dropping out.

In addition to family SES and ethnicity, several other family variables have been implicated in premature-school leaving. Rumberger and Bachman both find that dropouts are more likely to come from families characterized by: (1) A large number of children; (see also Cicirelli, 1978); (2) the absence of one parent; and (3) fewer material possessions and reading material in the home. Bachman, for example, finds that, even when family income is controlled, youngsters from large families are three times as likely to drop out of school as other youngsters. These youngsters average 3.6 siblings in comparison to those who have fewer than 3.2 siblings. On the average, youngsters entering college have 2.4 siblings. Bachman also finds that dropping out is twice as likely among youngsters from single-parent households than from two-parent homes. Moreover, Rumberger's (1981) study suggests that factors such as the number of parents in the home, the number of siblings in the home, and the amount of reading material in the home may moderate the influence of variables, such as parents' income, that otherwise predict premature school-leaving. Of further interest is the finding that, when such family factors as number of parents, number of siblings, and amount of reading material in the home are controlled, Hispanic youngsters continue to drop out at a rate far in excess of either White or Black students. This suggests, again, that the exaggerated school-leaving rate of Hispanics cannot be attributed solely to their greater economic disadvantage. The finding points to the likelihood that either language, or some other factors, represent the loci of interest peculiar to Hispanic youngsters.

Evidence concerning the relationship between academic achievement and performance on intellectual tests and school-leaving is quite consistent. In general, prior to dropping out, at both the elementary and secondary school levels, students who ultimately leave school early perform poorly on

tests of intelligence, reading, vocabulary, and mathematics. For instance, in Bachman's study, the researchers found that, of those youngsters who scored low on tests of reading, approximately 40 percent dropped out of high school. Similarly, of those youngsters who scored low on tests of vocabulary, approximately 35-38 percent dropped out of school. That potential dropouts test out lower than youngsters who graduate from school on various measures of academic achievement is further confirmed in studies by Alexander, Eckland, and Griffin (1976); Combs and Cooley (1968); Cook (1956); Lloyd (1978); Penty (1956); and Walters and Kranzler (1970). The general consensus across these and other studies on the relation between achievement test scores and school-leaving is that aptitude variables, such as reading and mathematical aptitude, contribute to the prediction of school-leaving above and beyond the contribution of family social class. Furthermore, as noted earlier, the relative predictive power of achievement scores in comparison to family social class seems to increase as the age of the subject population increases. That is, achievement scores are more powerful predictors of dropping out among students in higher grades than among students in lower grades, although they are significant predictors for both elementary and secondary school students.

The importance of academic achievement in combination with family social class is underscored in two studies which attempted to predict dropping out from a constellation of other academic and familial variables. Walters and Kranzler (1970) tried to predict dropping out on the basis of data collected on students at the time they entered 9th grade. The researchers find that an equation, which includes IQ, age, mathematics achievement, and father's occupation, correctly identifies 91 percent of all students who drop out during the remaining years of high school. (Age at entry into 9th grade is no doubt a proxy for grade retention during the years prior to 9th grade.) Lloyd (1978) reported the development of a discriminant function analysis that yields an overall correct classification of dropouts and graduates with 75 percent accuracy based on data collected at the third grade level. Important variables in his prediction equation were: Father's education, mother's education, marital status of

parents, father's occupation, reading and language achievement test scores in the 3rd grade, 3rd grade grade-point average, prior grade retention, and 3rd grade IQ. A striking absence in this research on the relationship between academic and intellectual aptitude, and subsequent dropping out, however, is research on how predictive equations vary from one ethnic or racial group to the next. That is to say, we do not know whether predictive equations derived from studies of one population are generalizable to studies of other populations.

Given the consistency of findings on the relationship between achievement test scores and school-leaving, it is not surprising to find that the school experiences of students who eventually drop out are generally far more negative than that of their peers who graduate. For example, Bachman finds that students who are held back one grade are four times more likely to drop out, that one-half of those with D averages in school drop out, and that dropouts are far more likely to have negative attitudes towards school than their peers who stay in school. Being held back a grade is also more a part of the experience of those who drop out than those who complete school (Aspira, 1976; Cervantes, 1965a; Cook, 1956; Elliot & Voss, 1974; Livingston, 1958; Lloyd, 1978; Schiber, 1962; Yudin et al., 1973).

Studies such as those by Alexander, Eckland, and Griffin (1976); Bachman, Green and Wirtenan (1971); Cervantes (1965a); Combs and Cooley (1968); Elliot and Voss (1974); Elliot, Voss and Wendling (1966); Howard and Anderson (1978); Stroup and Robin (1972); and Yudin et al. (1973) all indicate that dropouts receive lower grades or maintain lower grade point averages than their graduating counterparts.

Dissatisfaction with, or negative attitudes toward, school or school-related matters are reported in several other studies as well (Center for Human Resource Research, 1980; Cervantes, 1965a; Hunt & Woods, 1979; Lucas, 1971; Schriber, 1962).

Studies have also shown that students who ultimately drop out of school are:

- More likely to be absent or truant (Camp, 1980: Children's Defense Fund, 1974; Cook, 1956; Fox & Elder, 1980; Hunt & Woods, 1979; Yudin et al., 1972);
- More likely to be either suspended or expelled at some point during their career (Children's Defense Fund, 1974; Elliot & Voss, 1974; Lucas, 1971; Woodworth, 1965);
- Less likely to participate in extracurricular activities at the school (Carnegie Council, 1979; Cervantes, 1964; Combs & Cooley, 1968; Fox & Elder, 1980; Hunt & Woods, 1979; Livingston 1958; Thomas, 1954); and
- Have lower educational and occupational aspirations (Bachman et al., 1971a and b; Combs & Cooley, 1968; Lucas, 1971; Margolis, 1968; Rumberger, 1981).

It is difficult to say to what extent these negative experiences are directly attributable to either family background or earlier academic failure; it is perhaps more useful to resist the temptation of attributing a given percentage of the variance in dropping out to one set of factors or another, and view, instead, the dropout's entire school experience as one that begins with lower academic achievement which, in combination with differential treatment of students from different socioeconomic and ethnic groups, leads to repeated academic failure and disenfranchisement from the school.

Tangential support for the notion that the differential school experiences of potential dropouts, versus graduates, are due largely to differences between the two groups with respect to background characteristics and academic performance, comes from a methodological study by Cook & Alexander (1980). These researchers contrasted predictions of <u>educational expectations</u> (not academic achievement) based on cross-sectional data with predictions based on longitudinal data. Seventeen communities of youngsters were studied between 1961 and 1969; data were derived from a sutdy conducted for ETS on academic prediction and growth (Hilton, 1971). Students in the fifth, seventh, ninth, eleventh and twelfth grades were

surveyed at least every two years during the course of the study, and data were collected on youngsters' SES, sex, race, academic ability, school achievement, curriculum placement, the influences of significant others (including peers and parents), and educational plans. When the predictor variables are divided into those that are exogenous (achievement, curriculum placement, influences of significant others) and those that are endogenous, the predictive utility of all endogenous variables was far greater in cross-sectional designs than in longitudinal designs. The most dramatic differences emerged in contrasts of the predictive utility of race, which was far more predictive in longitudinal designs. Maternal encouragement was far less predictive in longitudinal than in cross-sectional designs. Consistent with previous studies, these researchers find that the influence of endogenous school experience variables becomes more important the later the grade at the time of assessment.

Personality traits have also been investigated as possible influences on early school-leaving. The variable most often studied in this category is self-esteem, especially self-esteem as it relates to academic achievement and school-related matters. Several researchers have found that potential drop outs score lower on measures of self esteem than those who will graduate (Bachman et al., 1971a and b; Hunt & Woods, 1979; Lucas, 1971; Takesian, 1967). We are skeptical, however, about the predictive usefulness of self-esteem in studies of school leaving, since it is so very likely to be dependent upon academic achievement and earlier school experiences. Combs & Cooley (1968) examined the personality traits such as reflectivity/ impulsivity, maturity, and sociability. Not surprisingly, these researchers find that school leavers are more likely to be impulsive, less mature, and less sociable.

School Variables and School-Leaving

Several researchers have focused their attention not on characteristics of individuals who leave school early, but on the schools that they leave. Overall, however, we are struck by the

relative absence of research on how school environment factors influence school-leaving behavior. Moreover, virtually nothing is known about the relationship between school-leaving and the "fit" (or "non-fit") between the characteristics and abilities of the student and the school which he or she attends.

Several researchers have suggested that a discrepancy exists between the demands and expectations of schools, which tend to reflect the dominant middle-class ideology, and the socialization and preparation of minority and lower-class youngsters (Camp, 1980; Chan & Rueda, 1979; Children's Defense Fund, 1974; Elliot, Voss, & Wendling 1966; Lucas, 1971), but empirical evidence on this widely held notion is scant. Thus, while it is well documented that minority and lower-class youngsters perform more poorly in school than do White and middle-class youngsters, whether this peformance differential is due to a lack of fit between youngsters' abilities and needs and their schools' demands and resources has yet to be systematically documented. Research in this area is sorely needed. Elliot, Voss, & Wendling (1966), for example, suggest that dropping out is a response to status deprivation experienced by lower-class youth in the middle-class environment of the school, but these researchers provide no data to support this contention. We do know that teachers and school personnel are more likely to interact negatively with lower-class, minority, and non-English speaking youngsters than with children from their own racial background (Laosa, 1977), but we do not know whether these negative interactions precede, catalyze or follow students' poor academic performance.

Those studies which have directly examined, on an aggregate level, the impact of school factors on either school-leaving or school achievement, provide some evidence that student-teacher ratios may be related to school-leaving. Bledsoe (1959), for example, reports that dropouts are more likely than graduates to have attended elementary classes with large numbers (i.e., 38 or more) of students.

Several researchers have suggested that the socioeconomic climate of a school influences student achievement and, hence, school retention (e.g., Schriber, 1962; Yudin et al., 1973). In these studies, however, it has been difficult to separate the effects that can be attributed to some aspect of the socioeconomic climate of the school from those attributable merely to the socioeconomic composition of the student body. This specific issue is directly addressed in a study by Alexander, Fennessey, McDill, and D'Amico (1979). These researchers point out that while we know that the socioeconomic status of an individual student and the socioeconomic status of that student's peers are the crucial influences on educational achievement and educational attainment, we do not know whether SES operates as either an overall contextual or ecological variable which also depresses educational attainment and achievement. These researchers, in a study of educational achievement in 20 public schools, contrast the predictive utility of an SES variable reflecting school composition with an SES variable reflecting school climate. Their results indicate that between-school differences attributable to SES result primarily from social class differences in the student bodies. The importance of the contextual, or climate, SES variable is thus minimal.

Brookover, Beady, Flood, Schweitzer and Wisenbaker (1979) also investigated the relationship between school climate and student achievement. Unlike Alexander et al. (1979), these researchers were interested not so much in the predictive utility of school climate indices in studies of differences between schools of different social classes, than in whether school climate is a valid predictor of student achievement within more limited samples of schools from similar class backgrounds. Across schools of different social classes, these researchers find that the school's SES composition accounts for about 50% of the variance in between-school differences in student achievement, a finding similar to that of Alexander et al. However, within the subsample of schools where school composition is controlled, school

climate (i.e., attitudes of other students; teacher and principal attitudes, school behaviors and norms; expectations of peers in the school environment) accounts for an additional 25% of the variance in school achievement. In other words, these researchers find that, within subsamples of those of similar SES composition, school climate does make the difference.

In schools characterized by a large proportion of high achieving students, students feel that they have some degree of control in their mastery of academic work. These students also feel that the school system is not "stacked" against them and that their teachers and principals believe that they can master their work and expect them to do so. Additionally, they learn that rewards are provided for demonstrated achievement.

In low achieving schools, students express feelings of futility and generally believe that the system is designed to defeat them. Students in low achieving schools also feel that teachers and principals think them incapable of achievement. Because Brookover et al.'s study was cross-sectional in nature, however, it is not clear whether school climate influenced student achievement (as the authors would have us believe) or, as is equally tenable, resulted from it.

Although we know that potential dropouts are, more likely than not, to have been placed in either general or remedial educational tracks (Combs & Cooley, 1968; Lucas, 1971), we do not know whether this tracking directly affects school leaving. Studies by Alexander et al. (1978) and Rosenbaum (1976, 1978) indicate, however, that tracking mechanisms serve to restrict the opportunity of those students who are placed in the lower tracks. He finds that the choices of students who are in the lower tracks are often based on minimal, erroneous, or inadequate information. We may assume that choices concerning leaving school for the student in the lower tracks are similarly misguided. Rosenbaum suggests that one of the most insidious consequences of

tracking is that it allows students to maintain a high degree of misinformation about the actual opportunities likely to be afforded them, given their academic track.

Two recent studies provide evidence that a lack of fit between either a student's abilities or interests with characteristics of the school environment may have deleterious consequences, but neither study directly addresses premature school-leaving. Kulka, Klingeo, and Mann (1980) investigated school crime and disruption as a function of student-school fit. The authors suggest that psychological strain results from a misfit between environmental demands and individual abilities or needs. They suggest that such strain leads to school problems. These researchers investigated the correlations between a student's perceived abilities and needs for affiliation, academic achievement, and social leadership, on the one hand, and opportunities for affiliation, academic achievement, and social leadership provided by the school, on the other. Indices of person-environment fit were calculated for each individual based on the match between self-reported needs and opportunities. Half of the measures of person-environment fit were significantly related to measures of school problems. All three dependent variables, namely, crime, school avoidance, and school misbehavior, were predicted by a lack of fit that was attributed to discrepancies between opportunities and needs for academic relevance, social leadership, and influence. A study conducted by Greenberger, Steinberg, and Vaux (1982) yielded similar findings. These researchers examined the fit between eight self-reported needs, such as needs for affiliation, autonomy, and competence, and the perceived opportunities in the school environment to meet these needs. A lack of person-environment fit was significantly related to several factors associated with adolescents' well-being, such as drug and alcohol use. Both of these studies suggest that a further investigation on the relationship between student/school fit and school-leaving for LMYs is definitely needed. What the level of person-environment fit is for

non-English-speaking students and what role it plays in terms of school achievement are still totally unknown.

Other Factors and School-Leaving

A handful of researchers have examined factors other than student attributes and school variables affecting school-leaving. Pregnancy is perhaps the most widely researched variable in this category; not surprisingly, research indicates that pregnant adolescents are more likely to drop out of school than their non-pregnant peers (Camp, 1980; Center for Human Resource Research, 1980; Children's Defense Fund, 1974; Combs & Cooley, 1968; Elliot & Voss, 1974; Lucas, 1971; Mott & Shaw, 1978; Rumberger, 1981; Waite & Moore, 1978). In Rumberger's (1981) study, pregnancy is one of the few factors that predicts dropping out very powerfully for both disadvantaged as well as advantaged youngsters. The negative impact of pregnancy on school completion appears to be a cross ethnic phenomenon (Briley et al., 1980); Elliot and Voss (1974), in their longitudinal study of over 2,500 California high school students, find that for girls, pregnancy or marriage is the most common reason given for dropping out of school. Among White girls, 56% of those who dropped out some time after the 9th grade mention either pregnancy or marriage; among Black girls, 50%; and among Hispanic girls, 37%.

Aside from pregnancy, there are no studies which determine reasons for dropping out in terms of race and sex. Thus, while we know that Hispanic girls drop out at a higher rate than White and Black girls, the actual reasons for this are not known.

There is also research indicating that potential dropouts are more likely to be involved in delinquent or juvenile crime activities than

their peers who ultimately graduate (Bachman et al., 1971; Camp, 1980; Carnegie Council. 1979; Elliot & Voss, 1974; Lucas, 1971), but how delinquency is related to school leaving is not clear from these studies. Because engaging in antisocial or delinquent behavior is itself highly correlated with many of the same factors that predict school-leaving, the importance of antisocial behavior per se is questionable.

The relationship between school-leaving and employment has been examined in several studies, but in some cases school-leaving is the independent variable and employment the outcome under question; that is to say, most researchers have been more interested in the impact of employment on school continuation. Many have suggested that some youngsters drop out of school either because they are employed or drawn toward employment (Center for Human Resource Research, 1980; Carnegie Council, 1979; Camp, 1980; Hunt & Wood, 1979), but is not clear, again, whether interest in employment over school is a correlate of other factors, such as economic need predicting school-leaving or an influence on school-leaving in its own right.

Steinberg and Greenberger (1982), however, provide data which indicate that employment during high school may lead to a decline in school involvement and performance among students who work in excess of fifteen hours weekly. Specifically, their studies show that when this time limit is exceeded, school attendance drops, the amount of time a youngster spends on homework declines, participation in extracurricular activities diminishes, and reported enjoyment of school falls somewhat as well. Not surprisingly, a decline in school performance is often followed by a decline in school involvement. These findings support the view that employment opportunities may serve to draw youngsters away from school, expecially if the opportunities for employment involving substantial numbers of hours each week are available.

Preliminary analyses of the Steinberg and Greenberger data suggest a mechanism by which this attenuation and school involvement may occur. These researchers find that the negative impact of working on school performance is greatest among those youngsters whose academic performance was lower prior to entry into the labor force. Moreover, they found that, on several dimensions, working students evaluated their work setting more favorably than their school environment. Thus, we suggest that among youngsters who by their sophomore year are significantly alienated from, or unhappy with, school, the work environment provides a dramatic relief from school. The more time youngsters spend at work, the more their attitudes toward school may shift in a negative direction. Thus, a cycle may be set in motion when a youngster enters into the labor force: A student who is somewhat alienated from school may seek employment during the school year and, subsequently, his or her disenchantment with school may increase.

Work as a factor for school-leaving may be a moot point, however, considering that unemployment for youths has continued to increase since 1955. In particular, minority youths who have either failed to complete their education or have not yet completed school are far less likely to find work (Freeman, 1979; Wachter, 1980).

Additionally, work availability for youths is highly dependent on the general economic climate. While there is material evidence that periods of economic growth coincide with reductions of youth unemployment rates, and vice versa during recessionary periods, there are no studies which either link these economic fluctuations with dropping out or staying in school, particularly where LMYs are concerned.

Finally, a number of researchers have examined the broader context in which students reside. These studies indicate that students living in communities characterized by a high proportion of families of low socioeconomic status, a high rate of unemployment, urbanization, or

ethnic segregation are more likely to leave school earlier than their peers residing in different communities (Aspira, 1976; Carnegie Council, 1979; Dentler & Warshauer, 1968; Lucas 1971; U.S. Department of Health, Education and Welfare, 1979). It is not clear from these studies, however, whether the effect of the broader ecology in which the student lives is independent of that student's individual life circumstances.

Summary

Research on premature school-leaving has been surprisingly narrow in scope. The majority of studies has focused on characteristics of students who leave school and on the early identification of such students. A few studies have examined characteristics of the school environment which may provoke school-leaving, and a few studies have examined factors outside the school which may pull a student out of school early. There are neither studies that examine the cumulative process leading up to premature school-leaving, nor those which look at the interaction of student and school characteristics. It is possible, therefore, to briefly summarize what is known about premature school-leaving:

1. The most powerful predictors of school-leaving, of those that have been studied, are family socioeconomic background, family ethnicity, and academic achievement. Lower class, Hispanic, and youngsters scoring low on measures of academic achievement are all more likely to leave school earlier than their peers. Data on Hispanics, however, is confounded by group variations in English language proficiency and years of experience in American schools.

2. The process through which these variables influence dropping out is not well understood. Academic failure as a consequence of home environmental factors and limited academic capability have been implicated by several researchers. However, we do not know enough about institutional barriers and differential treatment of youngsters from the lower socioeconomic strata, Hispanic backgrounds, or who have been labeled as academically less talented. Consequently, we cannot rule out these factors and their impact on school-leaving populations.

3. The pattern of findings suggests a sequence of events whereby family background factors and early academic failure lead to negative school experiences and negative attitudes toward school. These events, in turn, lead to premature school-leaving.

4. Of the variables apart from family background, ethnicity, and academic, early pregnancy and/or marriage appears to be the most powerful predictor of dropping out.

IV. THE RELATIONSHIP BETWEEN CORRELATES OF DROPPING OUT AND LANGUAGE MINORITY STATUS

Since no studies have directly examined the correlates of dropping out among LMYs we must approach the problem via a more circuitous route. Our indirect approach to the problem will focus on studies examining the relation between language minority status and factors shown to be predictive of premature school exit. Many researchers have contrasted the academic achievement of Hispanic and non-Hispanic youngsters (e.g., Brown et al., 1980; Church, 1980; Felice, 1973; Schwartz, 1971). Although these studies are tangentially relevant to the topic at hand, since many Hispanic youngsters are either Non-English-Speakers (NES) or Limited-English-Speakers (LES), only a few of these studies provide direct information on the actual role of language usage in dropping out. Thus, in the majority of studies it is impossible to separate out the effects of ethnicity and language.

Academic Achievement and School Performance

There is clear evidence that academic achievement is lower among students who are less proficient in English. Differential achievement can obviously be attributed to a variety of individual and institutional variables, and we will defer our interpretation of these group differences in achievement until a subsequent portion of this review. Let us turn now to a more detailed look at studies relevant to this issue.

The National Center for Education Statistics (1978) provides data showing that language minority status is a very strong predictor of grade retention. Indeed, their data suggest that language minority status may be a more important determinant of achievement than ethnicity. For example, the percentages of students in grades 5-8 who were at least two years behind their expected grade level, when the

students were classified according to ethnic background, were as follows: Anglo background, 8%; non-Anglo, non-Hispanic background, 10%; and Hispanic Anglo background, 12%. When the classification is performed according to language, rather than ethnicity, the figures change dramatically: 8% of students usually speaking English were at least two years behind their expected grade level; 25% of non-English, non-Hispanic language background youngsters fell into this category; and 32% of Hispanic origin Spanish-speakers fell into this category. Similar results are found for youngsters in grades 9-12: 9% of those usually speaking English were at least two years behind in expected age grade levels; 29% of non-English, non-Hispanic language background fell into this category; and 33% of Hispanic language background students were this far behind. The survey included 51 independent state samples for a total of approximately 160,000 households.

Several studies have examined the relationship between language proficiency and family language usage and school achievement. The results point to the clear conclusion that students who enter school without proficiency in English, and whose proficiency does not improve over time, are exceedingly likely to fail in school. Anderson and Johnson (1971), in their study of 163 junior and senior high school students in the southwest, find that English usage in the family is a significant predictor of high school English grades. DeAvila and Duncan (1980) find that English language proficiency is a significant predictor of performance in language arts among young students. It is also the single best predictor of reading skills. Moreover, these researchers find that differences between ethnic groups are attenuated dramatically when English language proficiency is taken into account. The ethnic groups studied in this survey of 900 students from grades 1, 3, and 5 included urban Mexican-Americans, rural Mexican-Americans, Puerto Ricans, Cuban-Americans, Chinese-Americans, Franco-Americans, Navajos, White Americans and Mexicans. White students were most proficient, followed by Cuban and French youngsters in terms of English proficiency. The latter is particularly significant in regard to

Cubans who are Hispanic, from non-English-speaking backgrounds and, often, recent arrivals to the U.S. Although they possess all three of the characteristics predictive of dropping out, Cuban-Americans are the best and most highly educated Hispanics. No correlations, however, have been made between their levels of English proficiency and their higher levels of educational attainment.

More direct evidence on the relationship between language usage and school performance is provided by Linn (1965). This researcher examined the language performance of children from various language/cultural environments. Three groups of students were studied: Spanish and English speaking (i.e., bilingual) Mexican-American children; English-only White children; and English-only Mexican-American children whose parents spoke both Spanish and English. Thirty students in each category were studied. The students were then matched on non-language intelligence, age, grade, sex, and socioeconomic status. Students were assessed on silent reading vocabulary and comprehension, mechanics of English, spelling, general or total language development, oral reading accuracy and comprehension, phonemic discrimination, articulation and inflection. In general, it was found that children who spoke only English when they entered kindergarten, regardless of ethnic background, excelled over the Mexican-American children who spoke both English and Spanish before entering kindergarten. Significan. differences were found on silent reading comprehension, mechanics of English, oral reading accuracy and comprehension and articulation. This researcher also reported that the language handicap of bilingual children does not diminish as children progress through school. Furthermore, he suggests that reading comprehension might worsen with age for those youngsters.

A study by Majoribanks (1979) provides further support for the notion that language is an important determinant of academic performance. This researcher studied families from five groups in Australia: Middle-class White families; lower-class White families;

English families; Greek families; and Southern Italian families. Subjects were 11-year-old urban school children, who were tested on cognitive abilities and various achievement tests. In addition, measures of the family environment were taken; these measures included pressure to learn English, parental aspirations for their child, and satisfaction with the child's schooling. Significant differences were found among the groups on family environment and the achievement measures, but not on the measures of cognitive abilities. Furthermore, while measures of cognitive abilities were related to achievement measures, both were relatively unrelated to the family environment measures. The author suggests that low pressure to learn English in non-White families acts as an environmental barrier, attenuating the effects of favorable family variables and high cognitive ability on academic performance.

On the other hand, there is a growing body of research that substantiates the fact that knowing two languages may be cognitively more enriching (Cummins, 1976; Doebler & Mardis 1981; Feldman, & Shen. 1971; Kessler and Quinn, 1980). Lerea & Laporta (1971) and Palmer (1971) find that bilinguals have better developed auditory memories. In an earlier study Slobin (1968) finds that bilingual individuals are more skilled at intuiting the meanings of words. In a study of low-income, bilingual children, Feldman and Shen (1971) found that these youngsters were better able than their low-income, monolingual peers at learning new labels. Similarly, Peale and Lambert (1962) also concluded that the ten-year olds they studied who spoke both French and English were much better at language abstraction than their monolingual contemporaries. In view of these studies, knowing two languages enhances those skills that are required in reading and verbal activities. Additionally, evidence now also seems to indicate that bilingualism positively effects science problem solving abilities (Kessler & Quinn, 1980). Thus, while the Linn and Marjoribanks studies do suggest that children from backgrounds where two languages are used are, to different

degrees, handicapped in their reading and cognitive achievements, bilingualism per se, cannot be implicated directly as a factor for the worsening inability of bilingual children to read, write or speak as they get older.

Perhaps the most important study of the role of language usage as a predictor of educational attainment is that of Veltman (1976). This researcher studied one group of youngsters between the ages of 6 and 13, and another between the ages of 14 and 17. Six ethnic/linguistic groups were represented: White; Black; Spanish-speaking; English-language/Spanish (Spanish background, English monolingual households); non-English-language/residual (other minority households); and Anglo-residual (minority background, English monolingual). In the 6- to 13-year old group, Spanish-speaking children had the lowest mean educational attainment, with other group attainments, in ascending order, being White, Spanish, Black, non-English-language/residual, and White residual. Among the older students, Spanish-speaking student attainment was almost a third of a grade behind for their age, and was the lowest across all six groups. Next in attainment at this age were Black, Anglo-Spanish language, White, non-English-language/residual, and White residual. An important implication of these findings is that minority language background per se need not necessarily depress educational attainment, since the non-English-language/residual and White residual groups were the highest along this outcome measure. Minority youngsters who were not Spanish-speaking were not at a disadvantage, even if they were not English-speaking. Putting this finding in other terms, Veltman's study suggests that there is a special disadvantage associated with speaking Spanish that is connected not merely with not speaking English or with being Hispanic. The data for the Veltman study were drawn from the Survey of Income and Education (1976).

School Experiences

It is widely believed that the nature of the school experience of non-English speaking students is significantly different from that of their peers. Since negative experiences in school and differential treatments by school personnel have both been linked to dropping out, it is important to examine these variables with respect to the differential treatment of language minority students. Hernandez (1973), in her review of the literature on variables affecting achievement of middle school Mexican-American students, concludes that one of the main factors affecting Mexican-American achievement is the lack of responsiveness on the part of the educational system to the needs of Mexican-Americans and other minority groups. It is highly probable that this state of affairs is exacerbated for students who do not speak English. Hernandez writes that little individualization of instruction is reported to take place during the schooling of minority youngsters. Examples of similar shortcomings in the educational system are inflexible curricula which do not account for different levels of student readiness; little variation in approaches to teaching English; and teacher perspectives that see cultural or language differences as deficiencies.

Many of the differences in the school experiences of language minority and White youngsters are manifest in teacher/student interactions in the classroom. Laosa (1977), for example, studied on teacher-student interactions in ethnically mixed kindergarten and second grade classrooms in Los Angeles. This researcher focused on the influences on teacher and student behavior as well as teacher-student interaction of variables such as language preference, grade, and sex of the student. Students were classified as English-dominant or English non-dominant on the basis of scores on the English and Spanish test of the Carrow Test for Auditory Comprehension of Language. Subjects were grouped by threes according to ethnic background and language dominance (Anglo/English dominant; Mexican-American/English dominant; and Mexican-American/non-English dominant). These threesomes were then

matched on sex, occupational status of the child's household, and reading and mathematical achievement scores. This procedure yielded 51 such matched triads. Both ethnicity and language dominance were found to be the significant factor eliciting teacher disapproval. Moreover, as disapproving responses from teachers increased toward Mexican-Americans, the amount of non-evaluative, academically-related information transmitted to these youngsters decreased. The author suggests that this pattern, if continued in the higher grades, may provide one explanation for the lower achievement and higher drop-out rates of Mexican-American youngsters. The behavior of students varied as well, with English dominant White students most often attempting to obtain the teachers' attention, followed by English speaking Mexican-American students and, finally, by Spanish-speaking students. Unfortunately, the author does not provide information on the relationship between student behavior and teacher behavior. It is hence not clear whether the differential behavior on the part of teachers towards students is in response to differential behavior on the part of the students, or in response to some other attribute (e.g., ethnicity or language dominance) of the students.

School Factors: The Role of Bilingual Education Programs

Almost no research exists as to what factors influence early school leaving among LMYs. An easy way around this would be to use the impact of bilingual education programs as a proxy for determining the in-school performance, and hence school completion rates, of LMYs. The effectiveness of bilingual education, however, is still a subject of debate (Alatis, 1980; Center for Applied Linguistics, 1977). Research on the effectiveness of bilingual education tends, therefore, to be somewhat polarized. Additionally, an inordinately large number of studies are suspect due to the lack of controls in SES and initial language factors. Data, in most instances, are insufficient with no baseline comparisons or control group (Dulay & Burt, 1978). In the majority of cases where large scale investigations are conducted, most

of the studies on the effectiveness/non-effectiveness of bilingual education are found to be inadequate. The Center for Applied Linguistics, for instance, surveyed 150 evaluations but found only seven useful for the development of their master plan for the San Francisco School District (Grey, 1977). Dulay and Burt found use in only three evaluations out of 179 and nine studies out of a total of 38 that they had surveyed. Further corroboration is seen in Zappert and Cruz's (1978) selection of only four studies that they felt met the research criteria for acceptability for their study.

Methodological difficulties aside, research on the effectiveness of bilingual programs leans slightly toward the positive side. Dulay and Burt (1978) surveyed nine studies and three evaluations that met their established criteria, sixty-six findings were extrapolated out of which 58% viewed bilingual education favorably, 41% were neutral and 1% was negative (Dulay & Burt, 1978). The effectiveness of bilingual education lies, inevitably, in the quality of a program as demonstrated in studies by Cohen et al., 1976; Cohen & Laosa, 1976; Covey, 1973; Leyba, 1978; Plante, 1977; Rosier & Farella, 1976; Saldate & Misha, 1978; and Troike, 1978.

When non-English speaking students are required to make the transition into a different language environment, i.e., English, is also crucial. Although the research on this matter seems polarized, Skutnabb-Kangas and Tuokoma (1976, 1977) found that Finnish children who had been permitted to acquire the first six years of their education in their native language were far better able to continue their education later in Swedish than those who had been placed in a Swedish speaking environment in their earlier years of schooling. According to Troike (1978), anecdotal evidence seems to suggest a parallel phenomenon among Mexican-American youngsters from Mexico who emigrated to the U.S. As mentioned previously, contrary evidence also indicates that Mexican-American youths entering U.S. schools at the junior high school level and speaking only Spanish are more likely to encounter greater

difficulties with school rather than doing better for having mastered one language before embarking on a second. A possible explanation, of course, may lie with the question as to what kinds of education Mexican-American children recieved in Mexico prior to their immigration to the U.S. Those from rural areas where standards of education are minimal are far more likely to be underequipped to face the demands of American education than those from larger cities who attended private or better schools.

On the negative side, a study by Cervantes and Bernal (1977) for the National Institute of Education (NIE), however, came up with different findings. These researchers conducted a four-year evaluation of a bilingual/bicultural education program employed in six school districts. Comparisons were made between the six schools under investigation (four elementary, one middle, one high school) and two elementary schools, one middle, and one high school matched with these six schools on pupil enrollment, pupil/teacher ratio, pupil and faculty ethnicity, economic characteristics, and previous year's academic achievement. The researchers did not find that the bilingual/ bicultural program was effective in improving student self-concept or achievement skills. Only three differences were observed, and these were short-termed and disappeared over time.

The problem with attempting to link the success or failure of bilingual programs with dropping out among LMYs is that the criteria that are used for determining program success have never been directly corroborated with school completion. Troike (1978), for instance, cites twelve successful programs. The most consistently used criteria for sucess are high reading and computational scores among language minority children in K-7. Little or no evidence is available, however, as to what impact bilingual programs have on high school LMYs and what role these programs play in preventing dropping out. Paulston (1977) seems to suggest that the bilingual/bicultural High School program at Chicago's Little Big Horn reduced the dropout rates significantly, while

Covey (1973) found improved reading scores (though not mathematics scores) and attitudes in a bilingual junior high school program for Mexican-American youths in Phoenix. However, absentee rates were also significantly affected, according to Cohen's study (1973) of the bilingual program in Redwood City. To the extent that bilingual programs at the high school level are able to reduce students' sense of alienation by providing a more hospitable environment, thus helping to maintain low absenteeism, they can be considered as having an impact on preventing LMYs from dropping out. To what extent these programs represent a "pull in" factor for LMYs in terms of promoting higher academic expectation, and hence school continuance, is still not known.

Summary

Exceedingly little research has been conducted to date on the schooling of language minority youth. Existing studies do indicate, however, that premature school exit is more common among students who are not English-speaking, and that this phenomenon is not entirely attributable to the likely influence of socioeconomic status and ethnic background. The limited data at hand suggest that three factors contribute to a greater school-leaving tendency among language minority youngsters:

1. Early academic failure. Youngsters who do not speak English begin their schooling with distinct academic disadvantages. They do not read as well as their peers, given that the language of instruction is almost always English. They also do not perform as well on school achievement tests, since such tests are likely to be administered in English. Because so much of the subsequent learning in the elementary and secondary school years hinges on reading ability, the academic disadvantage of non-English-speaking youngsters worsens over time. Furthermore, because achievement tests are given in English, language minority youngsters are probably more likely to be placed in school tracks characterized by a climate which engenders alienation from the school. Early academic failure has been shown repeatedly to be predictive of premature school leaving.

2. More negative interaction with teachers and school personnel. There is some evidence that teachers interact more negatively with minority and non-English-speaking students. Language minority

youth are less likely to receive affirming behaviors from their teachers and are thus not likely to receive the sort of support that encourages learning. Whether the more negative interaction of teachers toward language minority youngsters initially precedes, or follows, these youngsters' poorer academic performance is not known. It is likely that the two factors work to reinforce each other, and thus exacerbate the likelihood of early school-leaving.

3. Lack of fit between language minority youth needs and school programs. Although direct evidence of a lack of fit between the needs and abilities of non-English-speaking students and the programs and curricula provided by the schools is scant, the picture that emerges from the body of related studies, taken together, and from research on the school experiences of ethnic and racial minorities in general, is that a mismatch exists between language minority youngsters and their schools. Whether this mismatch is due to a failure of language minority youngsters to accommodate themselves to the policies and procedures of school in which English is the language of instruction, or to the failure of schools to accommodate to the needs of students who do not speak English is an important question. At this point, however, the question is more philosophical than empirical. Whatever the cause, a gap exists between the school needs of language minority youngsters and institutional programs of education.

V. HISPANIC BACKGROUND, LANGUAGE MINORITY STATUS, AND SCHOOL-LEAVING

Perhaps the most puzzling and challenging question raised in this review of the literature is why dropping out is disproportionately prevalent among language minority Hispanics than among other language minority subpopulations. We are able to suggest four explanations. These explanations are by no means mutually exclusive, and should be viewed as tentative alternatives since data are not available to test these alternatives. First, it may be the case that dropping out is more prevalent among language minority Hispanic youngsters because they are, characteristically, more likely than other youngsters to be from lower socioeconomic backgrounds. They are, therefore, more subject to the adverse effects of coming from both low SES and language minority backgrounds. A possible explanation for the higher dropout rate among Hispanics than among Asian youngsters from non-English speaking backgrounds is that those Asian youngsters who have been included in education studies have, thus far, tended to come from middle class backgrounds. However, despite the low income background of large numbers of Asians from non-English-speaking backgrounds, the long standing tradition of achievement through education has enabled many Asians to capitalize on their non-verbal skills in mathematics and science to the extent where these abilities compensate for the limited-English skills (see Hsia, 1981, on the wide discrepancies between Verbal and Mathematics SAT Scores of Asian-American students). In recent years, however, large numbers of Asian families from lower socioeconomic backgrounds have immigrated to this country, and subsequent studies of school-leaving should focus on this group in order to find out the independent effects of SES on school completion of other language minority groups.

Among American Indians, a parallel situation exists of language minority status, low SES and high dropout rates. To date, however, no studies have been conducted on American Indian youths to determine how the interplay between language and SES affects school practices.

A second possible explanation is that as an effort to preserve their ethnic identity, Hispanic communities are motivated to maintain elements of their culture and language. The press to maintain Spanish as the dominant language, for instance, is especially strong in Hispanic families and in the Hispanic community. Attinasi (1979), for example, reports that, in a sample of over 90 adult residents of the Puerto Rican barrio in East Harlem, New York, over two-thirds of those sampled considered the Spanish language as an important, or very important, element of being Puerto Rican. Over half felt that speaking Spanish was necessary in order to maintain a New York Puerto Rican identity. Consequently, accommodation to the instructional demands of English-dominant schools may be slower and more difficult for Hispanic, Spanish-speaking youngsters. A corollary to this is that very little is known about what the press to learn English or to assimilate into an English speaking culture is in Hispanic communities. How Koreans (who are one of the fastest growing groups of recent arrivals to the U.S.) with their current press for Korean language maintenance (see Kim, Lee & Kim, 1981, for further details) will fare in comparison in the next few years is a question that may lend credence to the theory that the press for native language maintenance may indeed be detrimental in the terms of achievement in school.

A third set of explanations of Hispanic youngsters' higher dropout rate focuses on institutional forces which differentially impede the progress of Hispanic youngsters. There is little data on this proposition, but we suspect that prejudice against Hispanic youngsters on the part of school personnel is widespread. Data on the comparative prejudicial treatment of Hispanic and other minority youth is tentative and a few preliminary studies indicate that the magnitude of cultural differences could affect teacher expectations (Cherry, 1978) and student performance (Bannai, 1979; Au, Joesting & Jordan 1982; Fernandez et al., 1975). We do know, however, that teachers are less likely to use praise and positive interaction techniques in dealing with Mexican-American youngsters than

they do in dealing with White youngsters. We also know that teachers respond to resources, and know about school activities that keep youngsters interested and involved in school, but do not make them accessible to Hispanic youngsters. There is also no evidence as to the possibility that institutional discrimination is greater for Spanish-speaking youngsters than for non-English-speaking youngsters from other language backgrounds, and there is certainly no data as to how youngsters deal specifically with discriminatory acts by their superiors, teachers, and school peers.

Finally, the apparently higher dropout rate of Hispanic language minority youngsters may be a statistical artifact due to the confounding of ethnicity, language usage, and circumstances surrounding immigration to the United States. If it is the case that language minority status is more of a barrier for students entering school at a later age (when, for example, learning is virtually entirely dependent on understanding English), dropout rates for Hispanics will be much higher than for other groups, since their immigration has been steady and across all age groups for quite some time. The importance of English proficiency to school completion is, however, still key to the success or failure of language minority children at all levels of schooling.

Dropping Out as a Dynamic Process.

The causes of dropping out are multiple, cumulative, and multiplicative. We doubt very much that there is either one reason why students drop out of school, one factor which cuts across all ethnic and socioeconomic groups, or even one critical turning point which makes a difference in the life of an individual youngster. Rather, we adopt the view that dropping out is a final step, the culmination of a very long process. It is less important to focus on determining which single factor is the most important determinant of dropping out, than to examine how a variety of factors interact in influencing a young person toward this decision. It is thus crucial that both school and non-school factors be examined. In other words, the question we should raise is how familial,

peer, cultural, socioeconomic and language factors interface with school factors (teacher attitudes, availability of special programs, institutional demands, etc.) to produce the phenomenon of dropping out.

The number of studies which attempt to predict dropping out on the basis of one or more attributes of school leavers at some point in time is overwhelming in comparison to the number of studies which have attempted to understand how these attributes interact to influence early school-leaving. This imbalance is especially unfortunate. Studies which merely identify characteristics of students who are more or less likely to leave school early provide no basis for action for policy makers and educators who are concerned with ameliorating the dropout problem. Although it is helpful to be able to identify early those students most at-risk for dropping out, not understanding the dynamics of dropping out, i.e., the interaction of those characteristics that predispose youngsters toward this endpoint, will inevitably prevent the effective intervention of this phenomenon at its most crucial points. Similarly, one of the key reasons that studies focusing on students of different ages have turned up different variables as more or less powerful predictors of school-leaving is that researchers have not adopted a process-oriented perspective. Thus, while academic achievement scores are predictive of school failure (which leads to dropping out), it makes sense that studies focusing on early elementary school youngsters will identify achievement as an exceedingly powerful predictor of dropping out. Studies of older students, however, point instead to the role of school failure. Had youngsters been followed from elementary school through high school or, alternatively, had data been collected retrospectively for the entire educational career of a youngster, using the same criteria throughout a youngster's school life, apparent contradictions in the findings, we suspect, would be substantially reduced.

Dropping out as a process rather than an outcome should be the focus of research on dropping out among LHYs. Studies that examine the changing role, over time, of language usage as it influences school performance are essential, as are studies which examine, over time, influences of the

family on language usage and on school performance. For example, a study by Hayes (1981) indicated that declines in school performance of minority youngsters relative to White youngsters during the elementary school years may be more attributable to what takes place during the summer months than during the school year itself. The researchers found that, during the school year, changes in school achievement scores for White and minority youngsters were comparable. However, when a youngster's school achievement scores were examined the following September, it became clear that minority youngsters lost ground relative to their peers during the summer months. Perhaps a similar strategy should be adopted in examining the impact of language minority status on school achievement.

The Ecology of School Learning

A comprehensive understanding of dropping out includes an understanding of variables operating on each of several levels of a youngster's life. In each of the settings which make up a youngster's world (the nature of the relationships with each other, social structures, socio-cultural norms, etc.), we may find forces which serve to hold youngsters in school and forces which serve to draw, or push, them out.

Influences of Immediate Settings

School factors. Most studies that have focused on contextual influences on dropping out have concerned variables in the school environment which promote school-leaving. It is just as important, however, to understand why youngsters remain in school as it is to understand why they choose to leave. It may be the case that a youngster drops out of school because there are insufficient reasons for him or her to stay there; instead of being pushed out of the school environment, a student may be drawn away from school by something more attractive without. Variables in the school which may be associated with dropping out, therefore, fall into two general categories: Those reflecting factors which serve to "push" the student out of school and those which have what we might term "holding

power." In the former group are variables such as:

- Negative interactions with teachers or other school personnel;
- Negative and/or prejudicial attitudes on the part of teachers toward students;
- Prejudicial or inappropriate tracking decisions;
- A dangerous or unattractive physical environment;
- A dangerous social environment, including frequent victimization experiences; and
- Overcrowded and/or understaffed schools.

In the category of factors that fail to hold students in school we could include factors such as:

- The absence of sufficient extracurricular opportunities, either in a real sense, or in terms of whether the student has access to these opportunities;
- The absence of instruction in a language or at a level that is comprehensible to the student; absence of instructional material that is meaningful in terms of a student's background;
- A general lack of resources which make schooling and school attendance attractive or interactive; and
- The absence of a sufficient variety of educational options such as vocational programs, career education, and honors programs.

More than simply identifying those school factors associated with premature school exit, future research needs to be involved in the identification of how these factors interface with language minority status to produce early school-leaving. Future research is needed in order to better understand how 1) the day-to-day school experience of LMY differs from those of their English-speaking peers, and 2) the overall school environment of LMY differs from the environment of English-speaking students. Once these differences are systematically documented, researchers can then turn their attention to how these differences influence dropping out.

Family factors. We may identify four potential ways through which the family of a language minority youngster may influence his or her school leaving or continuance: (1) Through their influence on language usage and language development; (2) through the communication of values and attitudes that either reinforce or detract from the school experience; (3) through the encouragement of behaviors that are congruent with expected school behaviors; and (4) through the family's interaction with the school and school system.

Some researchers suggest that Spanish language usage in the home may impede youngsters' school performance while others suggest the contrary. How this actually influences/does not influence dropping out is still not understood at all. For example, it is not clear whether the relationship between language usage in the home and school performance is attributable to some other third variable that has not been identified in research on this subject. Furthermore, it is not known whether parental press for Spanish language usage in the home is deliberate or if it results from parents themselves not being able to speak English. Finally, and most importantly, we do not yet know if multiple language usage functions do indeed attenuate school performance.

Parental attitudes toward education in general are likely to play an important role, not so much in drawing a youngster out of school, but in preventing a youngster who is considering leaving from actually doing so (note earlier reference on parental encouragement among Asian Americans). It is, therefore, important to ascertain what the individual parents' views are toward schooling and toward education in the specific school which their child attends. Parents who convey the idea to their child, either implicitly or explicitly, that future success in the adult world can be achieved without formal schooling, or that formal schooling is less valuable than work or some other non-school activity, or even that the sorts of information and skills being taught at their youngster's school are not valued, communicate to their child the overarching belief that school attendance is not essential. Much of this, we suspect, is related

to parental beliefs that school attendance has some short- or long-term payoff, a belief which is, no doubt, shaped by the parents' own experiences in school and in the world of work (see Espinosa et al., 1977; Kimball, 1968; Taylor, 1970). We have no data on how any of these variables are related to language minorities, or if attitudes differ from one ethnic group to the next.

In terms of family socialization, we do not know whether the parents of language minority youngsters rear their children in ways which either depress or foster their school performance. Although there is some indication in the literature that Mexican-American parents engage in child-rearing practices that are more likely to foster dependency, which is thought to be in conflict with the style necessary for schooling (e.g., Anderson & Evans, 1973, 1976; Farris & Glenn, 1976), the data on this are by no means unequivocal, and more importantly, no studies have examined socialization practices as a function of language usage, independent of ethnicity.

A fourth set of factors concerns not so much parenting practices or parental beliefs and attitudes toward education, but rather, parental involvement in school-related matters such as school activities and the child's studies. Although we have no direct research linking parental involvement in the school and dropping out, it is likely that parental involvement in school is associated with higher school performance on the part of children. It is, therefore, important to ask whether the parents of language minority youngsters are less involved in school, less aware of school activities, or less knowledgeable about the policies and procedures practiced in their home school district than perents of English-speaking youngsters. We suspect that this may be the case, because parents of language minority youngsters may themselves not be proficient in English and, therefore, be less likely to be involved in school matters. If, in fact, it were the case that parents of LMYs were less involved in school matters than other parents, research should be undertaken to explore how this minimalized involvement affects school-leaving.

The adolescent's peers. Studies of peer influence during the adolescent years teach us two lessons that are important to our present concern:

1. the influence of peers on adolescent decision-making is greater during the early adolescent years than it is during childhood or during late adolescence; and

2. the influence of peers, at least in the United States, appears to mitigate the attitudes and values of adults.

Thus, to the extent that the individual adolescent is in a social environment where he or she is likely to be influenced by peers, the peer subculture will, in all likelihood, disparage the value of formal schooling or school attendance. Consequently, the young person is likely to drop out of school early.

The process of peer influence, like that of adult influence, is complex. Friends influence each other through direct advice and admonitions; they also influence each other indirectly by serving as models and shapers of behavior through positive and negative sanctions. It is not uncommon, especially among adolescents living either in certain areas, or from certain ethnic groups, for young people to develop a strong identification with an adolescent peer group. Over time, norms, values, and attitudes are transmitted from older peer group members to younger ones, and we suggest that in peer groups where the leaders are older youth who are not in school, negative impressions of schooling and formal education are passed down from one group of peers to the next. It is not unusual for young adolescents to form extremely strong identifications with older teenagers who serve as role models and mentors. The extent to which the older youths in the community (who are themselves school dropouts) influence younger adolescents is still unknown. How these young people establish contact with younger adolescents, who might be influenced to follow a course of action similar to their own, is an additional area that is also virtually unexplored, especially in language minority communities.

Although there is some indication in the literature that youngsters who drop out of school are more likely to either have peers who themselves perform poorly in school, or who have lower educational aspirations (and are therefore also more predisposed to premature school-leaving) we neither know how the process of peer influence operates, nor do we know when the influence of peers on school behavior begins. We are, likewise, ignorant of the structure, function, and nature of peer groups among LMYs, particularly with regard to the critical variables of language usage patterns, strength of influence vis-a-vis parents, contact with older, out of school youth, and values regarding schooling and education.

The workplace. Research suggests that extensive involvement in the part-time labor force may promote premature school-leaving. We have no studies, however, on (a) the direct impact of part-time employment on dropping out; (b) whether youngsters who are, by virtue of other attributes or experiences, more likely to drop out of school to seek part-time employment; (c) whether LMYs are more or less likely to seek part-time employment than their peers; (d) whether employment affects the school behavior and school-leaving among language minority youth in a different way than it affects other students. Furthermore, we do not know whether the influences of the school, the family, the peer group, and the workplace all interact in promoting school-leaving. We suspect that, if jobs in a given community are available, LMYs might be especially likely to seek work on the bases of their family's economic circumstances and their having had more negative experiences in school. Since we know that the negative impact of increased employment on school performance and school involvement is accentuated for those students who are already less involved and performing less well in school, part-time employment ought to be incorporated as a variable in future studies of school-leaving among language minority youngsters.

Community Factors

The family, school, peer group, and workplace are contained within a social structure that influences their form and composition. For our purposes, one of the most important social structures impinging on the daily lives and decisions of school-going youngsters is the community in which they live. It comes as no surprise to anyone familiar with the literature on dropping out that the phenomenon is more common in some communities than in others. A host of variables can be implicated in the preceeding sections: Social class, ethnicity, and economic status, for example. At the same time, however, there are several variables which differentiate communities that are similar along economic, ethnic, and class lines. These variables may be important in influencing school leaving. Five such factors come to mind: Prevailing attitudes and values toward schooling and education; the centrality of school and community life; the transportation system in the community and the accessibility of the school in relation to public transportation; the current economic conditions in the community, including the rate of unemployment; and the proportion of community members who themselves drop out of school before graduation. An examination of these factors will shed some light as t' how they might be related to language minority status.

Community attitudes toward school. A youngster's attitude toward school and education are not only affected by the significant persons in that youngster's life, i.e., parents, friends, and teachers, but they are also molded, in a more indirect way, by the attitudinal atmosphere in the home or school community. While it is, of course, likely that an individual parent's attitudes toward school are consonant with the prevailing attitudes in the community, it is by no means always the case. Community attitudes and values can, therefore, either act to reinforce those attitudes and values communicated to the child by his or her parents, or they can act to counteract familial influence. It is not known whether community attitudes toward schooling or education are different in communities characterized by a high proportion of language minority

families, or whether youngsters bused into, or out of, such communities in order to attend school are affected in a way that would increase or decrease the likelihood of school-leaving.

Centrality of the school. In nearly every community there is a focus of community life. This focus can be a gathering place in a concrete sense if it can function more as a mechanism through which information is exchanged among community members. In some communities such a focal point is a neighborhood store or shopping area; in others it might be a church. In many communities it is the school.

When a community comes to depend on the school and its attendant organizations, both as a source of community information as well as a central, cohesive, unifying force, families come to have a vested interest in keeping their children in school. Their children serve as a connection between them and other families. Information is exchanged, not directly between adult members of the community, but via their children's exchanges, which often take place in school. Furthermore, school activities that involve parents, such as PTA meetings or school board meetings, provide opportunities for community members to interact with each other. In communities where the school is an essential force, school attendance reaffirms the young person's sense of belonging to the community environment.

It is not known whether schools are more or less likely to serve as community foci in areas populated by non-English-speaking residents. Research is needed to determine whether the centrality of the school in such communities is lessened or if this phenomenon is associated with higher rates of school-leaving. In addition, there is still no notion as to whether the school generates other kinds of community interest in large minority communities.

Community economics. Economic conditions prevailing in the youngster's community will also have an impact on school-leaving behavior. While some of these economic factors will influence school-leaving behavior

through their impact on the school itself, the family, and the workplace, others will have a more overarching influence.

Economic conditions affect the school itself in several ways. First, they undoubtedly influence school resources; we suspect that when a community lacks the resources to maintain school environments which are attractive to their students, this exacerbates the dropping out problem. Second, resources are required in order for schools to provide alternative educational programs that are designed to attenuate dropping out among youngsters from "high-risk" populations. Communities that are economically impoverished are, therefore, doubly vulnerable to high rates of school-leaving: Economic conditions in such communities shape a school environment into one which pushes youngsters out early; the lack of economic resources prevents the community from implementing programs that can work against such "push out" forces.

The impact of a community's economic environment on family functioning and family finances is yet another way in which economics influences school-leaving behavior. Family poverty is likely to lead to dropping out in two ways: First, when families lack financial resources, their youngsters have to work in order to contribute to the family income. Thus, poor families may be more likely to ask their youngsters to leave school early in order to enter the labor force (Cardenas, 1977). Such a pattern is well-known and well-documented in historical accounts of family life and schooling during economically depressed periods such as the Great Depression (Elder, 1974).

The other way in which a family's economic circumstances may influence a youngster's decision to leave school is more subtle, though no less important. Families who live under impoverished conditions are less likely to psychologically "invest" in a future oriented system. They may wonder whether the long years of formal schooling are indeed a guarantee of future status or social mobility. Caught in the pressures of present needs, they may see compulsory schooling not as a means of insuring their child's

achievement, but rather as an economic drain on the family. When such attitudinal forces are operative--and we do not suggest that this is the case in all economically disadvantaged families, but only that it is more likely to be the case among the disadvanteged than among the more fortunate--parents may communicate to their children that a long term investment in schooling is not as valuable as school personnel would lead them to believe. Thus, economically disadvantaged parents may, owing to their own priority systems, be more likely to accept a decision on the part of their child to leave school.

Economic factors also operate, in a more global, Durkheimian sense. Economic instability (in the form of high unemployment rates, rapid labor force turnover, job loss, community decay, and high crime rates) creates and maintains a condition of anomie. The condition is no doubt associated with feelings of frustration, despair, depression, and helplessness. Individuals living in communities under such conditions feel pessmistic about the future, disenfranchised from society's mainstream, and are cynical toward institutions planned and operated by those who are seen as part of the privileged class. The school is clearly a transmitter of middle-class values and attitudes: The tacit promise is that individuals who accept these attitudes and values and assimilate into society's mainstream will be more likely to succeed economicelly and occupationally. Such a promise may be viewed with a large dose of skepticism on the part of individuals for whom that promise seems unreal. Skepticism also weakens the perceived value of formal schooling and participation in the programs of such institutions, and is widespread, we suspect, in communities characterized by economic impoverishment. Youngsters, many of whom are at the impressionable age, are exposed to such skeptical attitudes at home, on the street, and in various community centers.

Descriptive statistics on the community characteristics of areas inhabited by a high proportion of non-English-speaking residents are hard to come by compared to communities where there are less variations in socioeconomic status and ethnicity. For this reason, we do not know

empirically whether economic conditions in a community, especially as they may affect the school behavior of residents' children, are related to the resident proportion of language minority individuals.

Transportation to and from the school. The physical design and plan of a community can very dramatically influence school attendance and school retention. The more difficult it is for a youngster to travel from his or her home to the school each day, the less likely he or she will be to continue to attend that school. When other factors make school attendance unattractive, the likelihood that he/she will go to school drops even further. We do not propose that transportation is a primary determinant of school-leaving, but rather that, when added to a host of other factors, the lack of accessibility of school may be enough to force a youngster to leave school early. Research on the special transportation problems of language minority youth is non-existent. We suspect that this may be of particular importance in understanding school-leaving among language minority American Indians who, anecdotally, often have to walk several miles from reservations to their schools.

Cultural Factors

Our review indicates that the role of cultural factors in influencing school-leaving is likely to be profound. Because culture is so closely linked to language use, the two are often confounded in research on dropping out. Although we suspect that it would be profitable to try to isolate the two variables in research on school-leaving, we are not optimistic about this strategy, since cultural values may prove stronger, or operate more powerfully, in families that retain their minority language.

We can suggest at least three different categories of attitudes and values that are likely to be influenced by cultural factors and associated with language usage. School-leaving decisions can be made, therefore, on

the basis of cultural attitudes toward:

- Education;
- Schooling as a means of achieving education;
- Schooling as a means of professional achievement and social mobility; and
- Adolescence as a period of the life cycle.

Cultures place diverse values on different types of education. To some cultures it is important that children be well educated and well schooled; to others it is more important that they be socialized in terms of a specific system. With regard to cultural attitudes and values toward formal schooling, we suggest that even among cultural groups that value education equally there is disagreement over whether formal schooling is a means to achieve such an education.

Still less is known about how language minorities view education as a means of professional achievement and social mobility. We do not know, for instance, to what extent such a perception is built into a particular culture or, given the absence of economic pressure, whether education would be perceived as a viable investment toward professional and social achievement.

A culture's view of adolescence as a period in the life cycle will also influence youngsters' schooling behavior. Many ethnic groups view individuals who have passed the age of 13 or 14 as capable of handling adult responsibilities. Compared with other societies, Americans tend to prolong the period of childhood and economic dependency. A lengthy adolescence--it is not uncommon in this society for youngsters to be totally dependent economically on their families into their early or mid 20s--is likely to be perceived as unnecessary, or even bizarre, by individuals who are socialized in a cultural milieu where adulthood begins much earlier. In such ethnic groups, a prolonged schooling may seem frivolous and wasteful. We suspect that this view may be especially

widespread among individuals who have recently immigrated to this country from areas where adulthood responsibilities are assumed by young people at a fairly early age.

A few words are also in order on the subject of sex differences in the socialization of adolescence and the implications of such differential socialization for school-leaving behavior. It has been noted in the literature on school-leaving among Mexican-Americans that dropping out is more common among girls than boys. Differential attitudes toward the sexes ultimately affects schooling patterns. In Mexican-American culture, and in some families, women's roles are defined in terms of their being wives and mothers. In certain instances, families see little reason to educate their daughters past a junior high, or early high school level. It might be suggested that for women in certain cultures or subcultures, leaving school early is related to that culture's perception of women as wives, and mothers, and not as out of the home workers.

Separating the effects of culture and language usage is a formidable task facing any researcher studying dropping out among LMYs. Even if the two variables can be separated by comparing youngsters within the same ethnic group who have (or have not) retained their minority language, or whether the cultural forces and pressures are more powerfully operative within the language minority subgroup, is a question that will remain unresolved. Research is needed, therefore, on the correlations between language usage patterns and adherence to cultural values and attitudes. If a researcher wanted to determine the relative influence of culture and language usage--but we do not feel that this would be a particularly profitable strategy--a potentially more fertile methodology would be to devise separate measures of acculturation and language usage, collect data on each of these variables on an individual basis, and statistically separate their influence in the prediction of school-leaving. Such analyses would, necessarily, have to be performed separately for each ethnic group studied.

Other research strategies which we endorse would focus on determining whether, in fact, adherence to cultural attitudes and values is stronger within families of language minority status and on how those cultural values and attitudes operate to promote early school-leaving.

VI. AGENDA FOR RESEARCH ON SCHOOL-LEAVING AMONG LANGUAGE MINORITY YOUTH

Most of what has been postulated in this review remains speculative at best. Unfortunately, research directly addressing the experiences of LMYs in school is severely lacking. Many studies which are pertinent to the issue at hand are either methodologically flawed or statistically confounded to the point of limited usefulness. For example, we find no studies which independently assess the influences of social class, language usage, English language proficiency, and ethnicity. It is thus not possible to tease apart the effects of each of these variables. We find few studies on influences outside the school on school-leaving behavior. As noted earlier, we find no research on youngsters from non-Hispanic backgrounds who are not proficient in English and who are from economically disadvantaged families.

Most importantly, we find few studies which view dropping out of school as part of a long, cumulative process, and not an isolated event to be predicted by a set of variables at some earlier point in time.

The research agenda we propose departs from previous investigations on dropping out in three ways:

- First, it is proposed that the phenomenon of dropping out can only be understood when the perspective taken is one which casts the problem as a dynamic rather than static one, and which focuses attention on dropping out as a process, rather than as an outcome.
- Second, researchers must take a more ecological stance, i.e., one that focuses on settings outside the school and on the broader ecology in which the student lives.
- Third, researchers must move away from designs which attempt to predict dropping out on the basis of "personal" or "environmental" characteristics; focus should be directed instead, to designs which focus on person-environment interaction.

This orientation is especially important in regard to future studies on the relationship between dropping out, school experiences, and the language minority student.

Finally, most studies tend to be lopsided in their focus where dropouts are concerned. In almost all cases, the dropout himself/herself represents the central focus.

It is extremely important, however, to study the "push out" and "holding" factors in the school as well, particularly as they pertain to the LMY. Much of the school experience is based on white middle class norms; how these norms interact/do not interact with the language minority status to precipitate dropping out is important subject matter for future study. It is also critical that schools, rather than solely the dropouts themselves, be seen as being at least a part of the problem, and hence equally subject to rigorous scrutiny and policy changes where appropriate.

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