A study of the relationship between acculturation and educational achievement among Spanish-surnamed university freshmen

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A STUDY OF THE RELATIONSHIP BETWEEN ACCULTURATION AND EDUCATIONAL ACHIEVEMENT AMONG SPANISH-SURNAMED UNIVERSITY FRESHMEN

A Thesis
Presented to
the Faculty of the Department of Mexican American Graduate Studies
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
Chicano Center
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A study of the relationship between acculturation and

by

Albert J. Moreno

June 1974
APPROVED FOR THE DEPARTMENT OF MEXICAN AMERICAN GRADUATE STUDIES

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[Signatures]
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Our system of public education has been a key element in enabling children of various ethnic backgrounds to grow and develop into full participants in American life.¹ That is, public education has been and continues to be an important socialization instrument of the dominant culture in society. This dominant culture is not only transmitted by the public schools, but is the basis for the philosophical assumptions of public education.² For example, the philosophical assumption of the "Melting Pot" theory, which has long been used to fashion educational policy, holds that all children (particularly those who are culturally different) should conform to the educational system. In fact, "The curriculum (the content, sequence, and method of instruction) is merely culture as defined by and found in the school."³ Consequently, current educational practices observably demonstrate a commitment to the philosophy of


Americanizing the culturally different. For the Mexican American, this process of Americanization has resulted in certain educational disparities.

Upon entering school, the Mexican American for the most part finds himself in a social system whose normative culture differs considerably from the subcultural elements by which he was socialized as a Mexican American. In other words, "Symbols which were once meaningful to him are either absent or have been assigned different meanings." 4 What is often the case is that, in effect, he becomes an agent of his own cultural erosion; that is, he denies his own culture and imitates the cultural symbols of the dominant group's culture. 5 Moreover, the conclusion is often reached that the Mexican American culture is a detriment to educational achievement and therefore must be eradicated rather than reinforced. 6

Consequently, the Mexican American is presented with a problem of adjustment which may necessitate either a re-structuring of his system of orientation or of the


educational system in which he is a student, or a combination of both. This does not imply that the Mexican American will never become identified with Anglo values or lifestyles, but may imply that he must do so at the expense of identifying with his ethnic group's culture.

The educational disparities between Mexican Americans and other citizens are quite evident—i.e., years of school completed, functional illiteracy rate, and so forth. Education as an institution of society is concerned with the issue of cultural differentiation (when people are brought together geographically but cultural differences tend to keep them apart) and the resulting handicaps it poses for Mexican Americans. The resulting handicaps are often manifested as detriments to achievement such as: chronic absenteeism, early withdrawal from school, non-continuance into higher education, and so on. To this day, the conflict of cultures in the Southwest is a continuing one that has not been satisfactorily resolved and is damaging to the Mexican American people. Consequently, educators are presently concerned with the question: Is identification by students with the ethnic group's culture an asset or a liability to

7 Cordova, loc. cit.
educational achievement. Moreover, some educators are exploring alternatives which may help do away with the detriments that prohibit educational achievement among Mexican Americans.

In this study, it is assumed that the investigation of the relationship of acculturation to educational achievement will provide significant information for educators and possibly suggest some means for overcoming barriers to achievement such as: the cultural barrier, the language barrier, the experience barrier, etc. However, existing conditions need to be investigated before modifications in educational practices and/or policies can be recommended.

Statement of the Problem

The purpose of this study is to assess the strength of the relationship between acculturation, as measured by the Urban Chicano Acculturation Scale, and educational achievement, as measured by the Sequential Tests of Educational Progress.

Importance of the Study

Many educators today are concerned with the problem of educational achievement among members of minority groups, particularly the Mexican American. Although many factors exist which may or may not be related to achievement, acculturation is commonly considered a factor directly related to the educational achievement of Mexican Americans.
In a recent study by Ignacio R. Cordova, the findings indicate that significant relationships exist between acculturation and achievement which have important implications for the education of Mexican Americans. Moreover, the particular circumstances of Mexican Americans in the public school system have and still continue to present special problems for educators. That is, educators must contend with a system of education that thus far has failed to maximize the full potential of Mexican Americans. From this, Cordova concludes that previous assumptions that acculturation is a cure-all for the educational problems of Mexican Americans are not accurate and thus are in need of new orientation. In other words, educators are again reminded to reassess their assumptions in terms of programs devised to assist ethnic minorities.

Therefore, research concerning the relationship of acculturation to educational achievement may reveal significant information that could benefit Spanish-surnamed university freshmen. For example, as new relationships between acculturation and educational achievement are identified, understanding of these correlatives is increased. Moreover, when existing relationships permit prediction of events (early withdrawal from school, chronic absenteeism, and non-continuance in higher education), control of the educational

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10 Cordova, passim. 11 Ibid., p. 180.
environment (counseling practices, educational techniques, and curricula) is extended so that modifications in educational practices and/or policy are possible, and thus a benefit to Spanish-surnamed university freshmen.

If research shows that identification with the ethnic group's culture is detrimental to the Mexican American's educational achievement, then educational practices and/or policies which support this premise will be called into question. On the other hand, if identification with the ethnic group's culture is found to be a significant ingredient of academic success, then the importance of cultural relevancy should be stressed in developing innovative educational programs for Mexican Americans.

**Delimitations**

This investigation was limited to fifty (50) Spanish-surnamed university freshmen enrolled in Humanities 96 during the fall semester of the 1973-74 academic year at San Jose State University. The fifty students represented the total enrollment in the class, which consisted of 27 female and 23 male students.

The population represents "normally not admissible" students who entered the university under the "two percent provision" policy of the California State Colleges and Universities and/or the recommendation of the Educational Opportunity Program counseling staff.

The *Urban Chicano Acculturation Scale* and *Sequential*
Tests of Educational Progress (Level II, Form A) were administered to the population as part of the curriculum established for the course.

There was no attempt to control for differences of generation within the population since the investigator was primarily concerned with determining the level of acculturation and not intergenerational differences versus levels of achievement. Furthermore, this study did not seek to establish a cause-effect relationship between acculturation and educational achievement.

Definition of Terms

The following terms used throughout this study were stipulatively defined for purposes of clarity.

Acculturation -- The term denotes a process which involves the borrowing of elements (e.g., attitudes, concepts, points of view) from other cultures or from other subcultures within a society, which subsequently results in a condition observable in terms of social distance between members of the urban Chicano population and members of other subcultures within the United States population. It is the extent to which urban Chicanos identify with the ethnic group's culture as opposed to identification with the majority subculture (White Anglo Saxon Protestant) within American society.

Educational Achievement -- The term denotes proficiency of performance on standardized achievement tests
which implies demonstration of acquired ability rather than inherent capacity. Achievement tests are designed to measure the progress made in the mastery of anything to be learned; in this study achievement tests measure mastery of reading and writing skills. Reading and writing proficiency were selected as criteria for educational achievement because the ability to read and write has become the basic requirement for success both in school and extramurally.

**Sequential Tests of Educational Progress** -- The term denotes the instrument used to generate educational achievement criteria and data for this study. The focus is on skill in solving new problems on the basis of information learned and provides for continuous measurement of skills so that the cumulative effect of instruction can be ascertained. The instrument assumes that the primary goal of the whole educational process is the development of the individual student. The tests are long enough and broad enough to provide data for sound individual interpretation.

**Urban Chicano Acculturation Scale** -- The term denotes the instrument used to generate acculturation criteria and data for this study. The scale measures acculturation on the basis of certain identified variables (e.g., behavior patterns, language, food habits) that appear to be a function of ethnicity—i.e., Chicano culture. The instrument was designed to control for socio-economic status so as to be able to measure acculturation both within a specific
socio-economic class and between socio-economic classes. All items of the instrument were determined significant discriminators between the Chicano and Anglo-American groups by means of statistical criteria.

**Reading Proficiency** -- The term denotes proficiency of performance on the Sequential Tests of Educational Progress according to established norms for grade placement and/or age group. Proficiency is demonstrated by means of the following criteria: (1) ability to understand direct statements; (2) ability to interpret and summarize passages; (3) ability to see motives of authors; (4) ability to observe organization of ideas; and (5) ability to criticize passages with respect to ideas and purposes of presentation.

**Writing Proficiency** -- The term denotes proficiency of performance on the Sequential Tests of Educational Progress according to established norms for grade placement and/or age group. Proficiency is demonstrated by means of the following criteria: (1) ability to think critically in writing; (2) ability to organize materials; (3) ability to write material appropriate for a given purpose; (4) ability to write effectively; and (5) ability to observe conventional usage in punctuation and grammar.

**Spanish-Surnamed** -- The term denotes any person of Mexican, Spanish, Indian, or Mestizo heritage either native born or immigrant, American citizen or alien, who is presently an urban resident of the United States. The term does
not necessarily imply the person is Spanish speaking. In addition, the terms Spanish-surnamed, Mexican American, and Chicano, which are used interchangeably, are synonymous.

Research Questions

This study poses three research questions for investigation. They are:

1. Is the relationship between acculturation as measured by the Urban Chicano Acculturation Scale and educational achievement as measured by the Sequential Tests of Educational Progress significantly correlated?

2. Is the relationship between acculturation as measured by the Urban Chicano Acculturation Scale and reading proficiency as measured by the Sequential Tests of Educational Progress significantly correlated?

3. Is the relationship between acculturation as measured by the Urban Chicano Acculturation Scale and writing proficiency as measured by the Sequential Tests of Educational Progress significantly correlated?

Hypotheses

The following hypotheses were formulated. The .05 level of significance was selected as the critical region of rejection.

$H_1$ There is no significant relationship between the level of acculturation as measured by the Urban Chicano Acculturation Scale and the level of educational achievement
as measured by the Sequential Tests of Educational Progress. 

$H_2$ There is no significant relationship between the level of acculturation as measured by the Urban Chicano Acculturation Scale and reading proficiency as measured by the Sequential Tests of Educational Progress.

$H_3$ There is no significant relationship between the level of acculturation as measured by the Urban Chicano Acculturation Scale and writing proficiency as measured by the Sequential Tests of Educational Progress.

Summary

The thesis of this study is that correlations between acculturation and educational achievement among Mexican Americans significantly demonstrate the importance of Bilingual-Bicultural education in the public schools. Moreover, subsequent modification of existing educational philosophies may help eliminate detriments that prohibit educational achievement.

In the succeeding chapter, the literature will be reviewed in order to provide background information for the design and analysis of the study as well as a collective point of reference in discussing and interpreting the findings.
Chapter 2

REVIEW OF RELATED LITERATURE

A review of the literature revealed that studies which attempt to relate acculturation to educational achievement invariably focus on one central issue: Is identification by students with the ethnic group's culture an asset or a liability to educational achievement. Information relative to this issue is very critical at the present. Evidence to this fact are such recent developments in California's educational philosophy as: (1) The Bilingual-Bicultural Education Act, (2) School Staff Preparation in the History, Culture, and Current Problems of Racial and Ethnic Minorities, etc. Consequently, research pertaining to the relationship of acculturation to educational achievement will perhaps come to determine whether these or other innovations in education will replace existing philosophies and educational programs responsible for the current dilemma in education.

Studies which suggest that Mexican Americans or Spanish-speaking students yield lower average scores on

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tests of ability, achievement, and intelligence than do Anglo-American or English-speaking students in the same school or school system are numerous.\(^2\) However, the question as to what is causing this apparent lack of educational achievement remained unanswered and thus became an issue of central concern to much of the subsequent research. The literature reveals that most investigators arrived at the conclusion that the essential problem is the Mexican American himself and, more specifically, his home environment and cultural heritage.\(^3\) The variables most often attributed to this issue were socio-economic factors,


cultural differences or inadequacies, and conflict of value orientation, all of which imply that acculturation is somehow related to educational achievement.

Although most of the studies which attempt to directly link acculturation and educational achievement appear to be of recent origin, mention of this relationship is often discussed in the concluding remarks of earlier studies investigating similarly related problems. For example, Martin Deutsch discusses

... the difficulty of all peoples to span cultural discontinuities, and yet make little, if any, effort to prepare administrative personnel or teachers and guidance staff to assist the child in this transition from one cultural context to another; the frustration inherent in not understanding, and not succeeding ... can so effectively attenuate confidence in his ability ever to handle competently any challenge in the academic area.4

In recent studies which attempt to relate acculturation to achievement, the literature revealed somewhat contradictory findings. The most recent study reviewed is that of Long and Padilla, in which the findings seem to suggest that acculturation is negatively correlated to achievement.5 The study consisted of two groups of Spanish-surnamed students who had attended the University of New Mexico: one

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group had succeeded in obtaining a graduate degree, while the other group had been unsuccessful and had dropped out of school. The groups were administered a questionnaire and their responses compared; the results showed that 94 percent of the successful but only 7.6 percent of the unsuccessful students reported having been raised in a bilingual environment. Most of the unsuccessful students had come from homes in which only English was spoken, which may indicate a high degree of acculturation. On the basis of this finding, Long and Padilla concluded that

The present finding of a very high rate of bilingualism in the sample of successful Spanish-American students suggests that these students may have been better able to interact readily with members of both their own culture and that of the dominant American culture. These individuals may simply be better adjusted members of both their cultures. The lack of bilingual background suggested in the sample of unsuccessful students may reflect the conflict of marginality often seen in members of ethnic minority groups.\(^6\)

On the other hand, Audrey J. Schwartz (1969) found that acculturation is positively correlated to achievement.\(^7\) The study focused on Mexican American and Anglo-American high school students from the Los Angeles area. Reading test scores were used as criteria for measuring achievement and value orientations as criteria for measuring acculturation.

\(^6\)Ibid., p. 273.

The results indicated that there were substantial differences in some special value orientations between Mexican American and Anglo-American pupils from similar socio-economic backgrounds. Moreover, the achieving Mexican Americans indicated that they were more independent from parental control than non-achieving Mexican Americans and also they had greater concern for peer than adult disapproval. Schwartz concluded that

By moving away from the strong influence of the family, the [Chicano] frees himself of the cultural ties which may inhibit his achievement, . . . and . . . as opportunities are presented to Mexican American youth for some acculturation to Anglo values, so are opportunities presented for greater educational achievement.8

Obtaining similar results to that of Schwartz, Harry G. Newton attempted to determine the relationship between aspects of acculturation and school adjustment of a randomly selected group of Texas junior high school students.9

School adjustment was defined in terms of standardized test scores, grades, attendance and behavior, and attitudes toward school. The variables measured against greater or lesser school adjustment were: socio-economic level, level of culture, value orientation, and contact with the Anglo culture. The findings suggest that of the variables

8 Ibid., pp. 52-53.

9 Harry G. Newton, "An Analysis of the Relationship between Certain Selected Aspects of Acculturation and the School Adjustment of Mexican American Students in the 7th Grade" (Doctoral dissertation, Texas Tech University, 1969).
measured, contact with the Anglo culture was the only significant factor positively correlated to school adjustment. Very similar in nature is the Neal E. Justin study, which attempts to determine the relationship of achievement to sociocultural variables (such as access to rewards of the dominant culture and exposure to the dominant culture) of Arizona high school seniors. The findings indicated that exposure to the dominant culture was the only variable positively correlated to achievement. 10

A recent study by Ignacio R. Cordova 11 of Spanish American sixth graders from New Mexico obtained findings which are somewhat different from those obtained by Schwartz, 12 Newton, 13 and Justin. 14 The results indicated that values and beliefs in the areas of politics and education were negatively correlated to a general feeling of alienation; thus, as there was an increase in the acceptance of the values and beliefs concerning education and politics, there was a decrease in their feelings of alienation. Also, as


12 Schwartz, op. cit. 13 Newton, op. cit.

14 Justin, op. cit.
acculturation in the areas of family and politics increased, the achievement of urban middle class students decreased. From this Cordova concluded,

These findings imply that previous assumptions that acculturation is a cure-all for educational problems of Spanish-American students is not accurate.\textsuperscript{15}

The Henderson and Merritt study\textsuperscript{16} reveals a different perspective on the relationship of acculturation to educational achievement. Two groups of Chicano mothers were given an interview which attempted to assess nine environmental process variables such as achievement press, academic guidance, and perception of practical values of education. One group was composed of mothers of high potential children, while the other group was composed of mothers of low potential children. The results showed that, as expected, the means on all environmental process variables were higher for the high potential group, thus indicating that children in the high potential group were exposed to a wider variety of stimulating experiences. Henderson and Merritt conclude that

The data seemed to refute the common assumption that children from families that are the most "Mexican" in their behavior and outlook will have difficulty in

\textsuperscript{15}Cordova, op. cit., p. 180.

school. It appears that high potential families may participate more fully than families of low potential children in both Anglo-American and Mexican American cultures.17

The studies reviewed more than adequately illustrate the complexity of researching the problem of the relationship of acculturation to educational achievement. Whereas Schwartz18 and Newton19 found that acculturation is positively correlated to academic achievement, Cordova20 and also Henderson and Merritt21 found the opposite to be true. In addition, Long and Padilla22 found, as did Schwartz,23 that acculturation is directly correlated to educational achievement; however, the findings of Long and Padilla24 suggest that the less acculturated student in fact attained greater achievement. These findings seem to indicate that possibly the marginality conflict experienced by ethnic groups plays an equally important role in the educational achievement of Mexican Americans.

Summary

Studies that attempt to relate acculturation to educational achievement in Mexican Americans invariably focus on one central issue: Is identification with the

\[17\] Ibid., p. 105.  \[18\] Schwartz, op. cit.
\[19\] Newton, op. cit.  \[20\] Cordova, op. cit.
\[21\] Henderson and Merritt, op. cit.
\[22\] Long and Padilla, op. cit.  \[23\] Schwartz, op. cit.
\[24\] Long and Padilla, op. cit.
ethnic group's culture an asset or a liability to educational achievement?

Schwartz,\textsuperscript{25} Newton,\textsuperscript{26} and Justin\textsuperscript{27} all found that acculturation is positively correlated to educational achievement; furthermore, Schwartz\textsuperscript{28} concluded that by moving away from the strong influence of the family, the Chicano frees himself of the cultural ties which may inhibit his achievement. Cordova,\textsuperscript{29} on the other hand, found the opposite to be true: that as acculturation increased, the achievement of urban middle class students decreased. In other words, acculturation is negatively correlated to achievement. Both the Schwartz\textsuperscript{30} and Cordova\textsuperscript{31} studies seemed to suggest that identification with the ethnic group's culture is a liability to educational achievement.

Henderson and Merritt\textsuperscript{32} yielded a different perspective on the relationship of acculturation to educational achievement; their findings seemed to refute the common assumption that children from families that are most "Mexican" in their behavior and outlook would have difficulty in school. It appeared that high potential families may

\textsuperscript{25}Schwartz, op. cit.  \textsuperscript{26}Newton, op. cit.
\textsuperscript{27}Justin, op. cit.  \textsuperscript{28}Schwartz, op. cit.
\textsuperscript{29}Cordova, op. cit.  \textsuperscript{30}Schwartz, op. cit.
\textsuperscript{31}Cordova, op. cit.
\textsuperscript{32}Henderson and Merritt, op. cit.
participate more fully than families of low potential children in both Anglo-American and Mexican American cultures. In other words, acculturation is not significantly correlated to achievement; therefore, identification with the ethnic group's culture may or may not be an asset or a liability to achievement.

In their study Long and Padilla\textsuperscript{33} found that acculturation is negatively correlated to educational achievement; their findings suggest that the less acculturated student actually attained greater achievement. In other words, identification with the ethnic group's culture is an asset to educational achievement.

With regard to the relationship of acculturation to educational achievement, the literature revealed somewhat contradictory findings. Whereas certain studies attempt to suggest that positive correlations do in fact exist, others found that acculturation and educational achievement are actually negatively correlated, while yet others found no significant correlations whatsoever. Consequently, the need for further investigation of this issue is obviously necessary, not only to gain further understanding of the possible causes for the apparent lack of educational achievement among Mexican Americans, but more importantly so that our children may reap the benefits of a quality education from such research.

\textsuperscript{33}Long and Padilla, op. cit.
Chapter 3

METHODS AND PROCEDURES

In the preceding chapters the problem to be considered was stated, hypotheses were set forth, and the literature reviewed. This chapter focuses on the methods and procedures used in the rationale, planning, and design of the study.

The major steps examined are: (1) methodology, (2) instruments used, (3) description of the sample, (4) collection of the data, and (5) statistical procedures.

Methodology

The two variables used for the study were (1) acculturation and (2) educational achievement. Correlations between these variables may be linked to detriments such as early withdrawal from school, chronic absenteeism, non-continuance in higher education, etc. Moreover, correlations between these variables may help determine modifications in present educational practices and/or policies to alleviate such detriments, and thus benefit Spanish-surnamed university freshmen.

The Urban Chicano Acculturation (U.C.A.) Scale was selected as a means of generating criteria that would enable determination of the level of acculturation of each of the
subjects in the sample. Likewise, the Sequential Tests of Educational Progress (S.T.E.P.) were selected as a means of generating criteria that would enable determination of the level of educational achievement of each of the subjects in the sample.

**Instruments Used**

The instruments used for this study were the U.C.A. Scale and the S.T.E.P.

**The Urban Chicano Acculturation Scale.** The U.C.A. Scale measures acculturation on the basis of certain identified variables that appear to be a function of ethnicity (i.e., Chicano culture). The instrument is not intended to measure acculturation only in terms of socio-economic mobility, inasmuch as this appears to be only part of the acculturation phenomena. It is designed to control for socio-economic status so as to measure acculturation both within a specific socio-economic class and between socio-economic classes.

Acculturation, in this instrument, has a two-fold definition: (1) the borrowing of elements from other cultures or from other subcultures (group, class) within a society, and (2) the social distance of members of urban Chicano population from members of other subcultures within the United States population. That is, acculturation is conceptualized as being the first phase in the more general
process of assimilation, while other phases of the assimilation process are best summarized under the term structural assimilation.¹

The U.C.A. Scale contains two major components: (1) cultural patterns (i.e., acculturation), and (2) social distance (structural assimilation). The indices of acculturation include frequency of stated preference for Chicano versus Anglo-American food, music, and language. The indices of social distance include stated preferences for Chicano versus Anglo-American parties, roommates, and close friends.

The instrument was developed systematically and under controlled conditions by Richard E. Lopez and Dr. Robert Clarke during the summer of 1969 at San Jose State University. Each of the original thirty-three questionnaire items were statistically treated to determine whether in fact they differentiated significantly between Chicanos and Anglo-Americans. The statistical criteria was a $t$ of 1.64; the computer recorded the responses as $t^2$ so only those items yielding a score of 2.69 were considered significant discriminators between the Chicano and Anglo-American group. There were nineteen of the original thirty-three items that proved significant; most of these items yielded scores

considerably above 2.69, while one-third of the items yielded scores in the 20's and 30's.

The reliability of the scale is above average. The original thirty-three items yielded a reliability coefficient of .67 by means of the Kuder-Richardson Reliability Index (K-R 20). The items selected for the scale yielded reliability coefficients of .68 for Anglo-Americans and .603 for Chicanos. With a different sample of Chicanos and Anglo-Americans, the scale yielded reliability coefficients of .76 for Anglo-Americans and .84 for Chicanos.

The validity of the scale is also above average. According to Lopez, examination of scale items shows that the content validity of the scale is still above average and certainly not outdated. The data on construct validity has been supportive of the scale; for example, a recent study using the scale obtained results consistent with past research.\(^2\)

Considering the alternatives one has for measuring the acculturation level of Chicano students, the U.C.A. Scale appears to be a good alternative for the following reasons: (1) it was developed from a strong theoretical tradition; (2) it was developed systematically, under controlled conditions and using sound statistical reasoning

\(^2\)Personal correspondence with Dr. Richard E. Lopez, March 14, 1974, in which reference is made to the study and its findings, and which points out that the findings were replicated in subsequent studies.
and criteria; (3) it has good reliability and validity data; and (4) it has held up under cross-validation and in fact internal consistency has increased in cross-validation.

The Sequential Tests of Educational Progress. The S.T.E.P. are a special kind of achievement test series measuring the broad outcomes of general education rather than the relatively narrow results of any specific subject-matter course. The S.T.E.P. focuses on skill in solving new problems on the basis of information learned rather than on ability to handle only "lesson material."

Moreover, the S.T.E.P. provides for continuous measurement of skills over nearly all the years of general education so that the cumulative effects of instruction can be ascertained. Most important, the series was built on the assumption that the primary goal of the whole educational process is the development of the individual student. The tests are long enough and broad enough to provide data for sound individual interpretation.

The reading test measures comprehensively the full range of skills involved in the process termed "good reading"; the skills measured are:

1. Ability to reproduce ideas. Comprehending subject-predicate, pronoun-antecedent, modifier-thing modified, and dependent-independent clause relationships; noting frequency of mention; and recalling sequences of ideas or facts.

2. Ability to translate ideas and make inferences. Identifying ideas found in the passage when they
are stated in language different from that of the selection; picking out the main idea; de-
ducing the meaning of figurative, technical, and obscure words, phrases, or sentences; link-
ing ideas to their preceding and following context; applying ideas to new situations; and making specific inferences.

3. Ability to analyze motivation. Analyzing the author's purpose and the attitudes, beliefs, experience, knowledge, etc., which influenced what he said.

4. Ability to analyze presentation. Recognizing and appraising literary devices and forms, "tone," logical structure, and other aspects of the ways selections are written.

5. Ability to criticize. Criticizing constructively the ideas presented, the author's purpose and motivation, and the presentation.

The writing test measures comprehensively the full range of skills involved in the process termed "good writing"; the skills measured are:

1. Organization. Reasonable ordering of ideas, events, facts, etc.

2. Conventions. Attention to syntax or sentence structure, diction in the sense of gross errors of word choice, punctuation, and spelling.


4. Effectiveness. Adequacy of emphasis, adequacy of development, exactness of expression, economy, simplicity, and variety.

5. Appropriateness. Choice of a level of usage suitable to purpose and reader; i.e., using the right "tone" and appropriate diction and employing tact where desirable.
Description of the Sample

The sample used for this study was the fifty (50) Spanish-surnamed university freshmen enrolled in Humanities 96 during the fall semester of the 1973-74 academic year at San Jose State University. The fifty students represent the total enrollment in the class, which consisted of 27 female and 23 male students.

The sample was selected on the basis that enrollment in the university was not determined by the subjects' level of educational achievement, and that the sample represented an urban Mexican American population. Moreover, the sample consisted of "normally not admissable" students who entered the university under the "two-percent provision" policy of the California State Colleges and Universities and/or the recommendation of the Educational Opportunity Program counseling staff.

The Spanish-surnamed population at San Jose State University was used because the university enrolls a relatively high concentration of urban Mexican Americans and because Mexican American students represent a very homogeneous group when compared to the general urban Mexican American population.

Collection of the Data

Data was collected for the study by means of two instruments: (1) the Urban Chicano Acculturation Scale and (2) the Sequential Tests of Educational Progress.
The investigator administered the two instruments, scored the instruments, and tabulated the resulting data. Both instruments were administered during the first week of the 1973 fall semester during the regularly scheduled class meeting. The S.T.E.P. was administered on Monday and Tuesday and the U.C.A. Scale on Thursday of the same week.

The U.C.A. Scale was used to collect numerical data representing levels of acculturation, and the S.T.E.P. was used to collect numerical data representing levels of educational achievement.

Statistical Procedure

Since the data is represented by two sets of scores (a set of scores for each of the variables), Pearson product-moment correlation coefficient was selected as the statistical procedure to assess the strength of the relationship between acculturation and educational achievement.

Product-moment correlation coefficient provides an accurate measure of relationship or degree of association when the two variables involved are measured on an interval or higher scale and when the relationship between them is linear. Linearity of the variables, when represented on a scatterplot diagram, provides a general idea as to the direction and degree of relationship between the variables.

In addition, Pearson product-moment correlation coefficient is such that when a perfect direct relationship
exists, the index takes on a value of +1.00; when a perfect inverse relationship occurs, the correlation becomes -1.00; and when no relationship exists, the value of the index is 0.00. To interpret a correlation coefficient properly, it is necessary first to note the numerical value, which indicates the degree of relationship, and then to note the algebraic sign, which indicates the direction of the relationship. In general, the larger the relationship, the closer the numerical value will be to one.\(^3\)

One additional and very important point to remember about the interpretation of a correlation coefficient is that it is a descriptive index and therefore must not be interpreted to mean causation.

In evaluating the two sets of data, product-moment correlation coefficient is defined as:

\[
R_{xy} = \frac{N(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[N \Sigma x^2 - (\Sigma x)^2][N \Sigma y^2 - (\Sigma y)^2]}}
\]

(where \(x_1\) is the set of scores for one variable and \(y_1\) is the set of scores for the other variable, and \(R_{xy}\) is the correlation coefficient). In short, the Pearson product-moment correlation coefficient is the average of the products of the standard scores on the two variables.

To test the null hypotheses at the .05 level of significance, the value of the correlation coefficient for the sample used in this study was .273.
Chapter 4

ANALYSES OF THE DATA

This chapter presents the results of the study and is reported in terms of analyses designed to test each of the three null hypotheses. The analyses of data collected consisted of the following procedure: (1) tabulation of raw data, (2) restatement of the hypotheses, (3) tabular and statistical analysis, (4) descriptive analysis, and (5) analyses of differences between male and female subgroups within the population relative to each of the hypotheses.

The data was first quantified and then recorded on a master data sheet (see Appendix A) in order to facilitate computer programming and processing of data, which was the selected method for statistical analysis.

A summary of the results for each of the following hypotheses is presented in a set of tables to facilitate reading of the data; in addition, a descriptive text of the analysis of the data for each hypothesis is also included.

Hypothesis 1 -- There is no significant relationship between the level of acculturation as measured by the Urban Chicano Acculturation Scale and the level of educational achievement as measured by the Sequential Tests of Educational Progress at the .05 level of significance.

Results of the first hypothesis tested are presented
in Table 1; the hypothesis was rejected at the .01 level of significance.

Table 1. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Educational Achievement among Spanish-Surnamed University Freshmen (N=50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>37.08</td>
<td>4.84</td>
<td>.657</td>
</tr>
<tr>
<td>Educational Achievement</td>
<td>550.98</td>
<td>32.15</td>
<td></td>
</tr>
</tbody>
</table>

of significance. Mean scores for the acculturation and educational achievement measures were 37.08 and 550.98 respectively. Furthermore, standard deviations for these scores were 4.84 for acculturation and 32.15 for educational achievement. Thus, the correlation coefficient between measures of acculturation and educational achievement was .657, indicating a significant positive correlation between the two variables. The linearity of the variables as represented in Figure 1 (see Appendix B) indicates the strength or degree of the relationship between acculturation and educational achievement among Spanish-surnamed university freshmen.

Results of the tests of significance for the male sub-group are displayed in Table 2; the hypothesis was rejected at the .01 level of significance. The mean score for
Table 2. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Educational Achievement among Male Spanish-Surnamed University Freshmen (N=23)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>35.78</td>
<td>4.23</td>
<td>.785</td>
</tr>
<tr>
<td>Educational Achievement</td>
<td>549.56</td>
<td>31.86</td>
<td></td>
</tr>
</tbody>
</table>

the acculturation measure was 35.78 and 549.56 the measure on educational achievement. And, standard deviations for each of the measures were 4.23 and 31.86 respectively. Thus, the correlation coefficient between measures of acculturation and educational achievement for the male subgroup was .785, indicating a significant positive correlation between the two variables. Linearity of the variables is represented in Figure 2 (see Appendix B).

Results of the tests of significance for the female sub-group are presented in Table 3; the hypothesis was rejected at the .01 level of significance. Mean scores for the acculturation and educational achievement measures were 38.18 and 552.18 respectively. Moreover, the standard deviation for the acculturation score was 5.13 and 32.95 for the educational achievement score. Thus, the correlation coefficient was .593 between measures of acculturation
Table 3. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Educational Achievement among Female Spanish-Surnamed University Freshmen (N=27)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>38.18</td>
<td>5.13</td>
<td>.593</td>
</tr>
<tr>
<td>Educational Achievement</td>
<td>552.18</td>
<td>32.95</td>
<td></td>
</tr>
</tbody>
</table>

and educational achievement for the female sub-group, indicating a significant positive correlation between the two variables. Linearity of the variables is represented in Figure 3 (see Appendix B).

**Hypothesis 2** -- There is no significant relationship between the level of acculturation as measured by the Urban Chicano Acculturation Scale and reading proficiency as measured by the Sequential Tests of Educational Progress at the .05 level of significance.

Hypothesis 2 was rejected at the .01 level of significance, as was Hypothesis 1. Means, standard deviations, and the correlation coefficient from testing Hypothesis 2 are shown in Table 4. The mean score for the acculturation measure was 37.08 with a standard deviation of 4.84, while the mean score for the measure in reading proficiency was 278.30 with a standard deviation of 18.28. Thus, the
Table 4. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Reading Proficiency among Spanish-Surnamed University Freshmen (N=50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>37.08</td>
<td>4.84</td>
<td>0.637</td>
</tr>
<tr>
<td>Reading Proficiency</td>
<td>278.30</td>
<td>18.28</td>
<td></td>
</tr>
</tbody>
</table>

correlation coefficient between measures of acculturation among Spanish-surnamed university freshmen and reading proficiency was .637, which indicates a significant positive correlation between the two variables. The linearity of the variables as represented in Figure 4 (see Appendix B) is an indication of the degree or strength of the relationship between acculturation and reading proficiency.

Results of the tests of significance for the male sub-group are displayed in Table 5; the hypothesis was rejected at the .01 level of significance. While the mean score for the acculturation measure was 35.78 with a standard deviation of 4.23, the mean score for the measure in reading proficiency was 278.86 with a standard deviation of 18.02. Thus, the correlation coefficient between measures of acculturation and reading proficiency was .732, indicating a significant positive correlation between the two variables.
Table 5. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Reading Proficiency among Male Spanish-Surnamed University Freshmen (N=23)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>35.78</td>
<td>4.23</td>
<td>.732</td>
</tr>
<tr>
<td>Reading Proficiency</td>
<td>278.56</td>
<td>18.02</td>
<td></td>
</tr>
</tbody>
</table>

Linearity of the variables is represented in Figure 5 (see Appendix B).

Results of the tests of significance for the female sub-group are presented in Table 6; the hypothesis was rejected at the .01 level of significance. Mean scores for

Table 6. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Reading Proficiency among Female Spanish-Surnamed University Freshmen (N=27)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>38.18</td>
<td>5.13</td>
<td>.625</td>
</tr>
<tr>
<td>Reading Proficiency</td>
<td>277.81</td>
<td>18.82</td>
<td></td>
</tr>
</tbody>
</table>
the acculturation and reading proficiency measures were 38.18 and 277.81 respectively. Furthermore, standard deviations for these scores were 5.13 for acculturation and 18.82 for reading proficiency. Thus, the correlation coefficient was .625 between measures of acculturation and reading proficiency for the female subgroup, indicating a significant positive correlation between the two variables. Linearity of the variables is represented in Figure 6 (see Appendix B).

**Hypothesis 3** -- There is no significant relationship between the level of acculturation as measured by the *Urban Chicano Acculturation Scale* and writing proficiency as measured by the *Sequential Tests of Educational Progress* at the .05 level of significance.

The testing of Hypothesis 3 revealed similar results to the other two hypotheses; it too was rejected at the .01 level of significance. Means, standard deviations, and the correlation coefficient from testing Hypothesis 3 are shown in Table 7. The mean score for the acculturation measure was 37.08 with a standard deviation of 4.84; the mean score for the measure in writing proficiency was 272.68 with a standard deviation of 15.30. Thus, the correlation coefficient between measures of acculturation among Spanish-surnamed university freshmen and writing proficiency was .618, which indicates a significant positive correlation between the two variables. The linearity of the variables
Table 7. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Writing Proficiency among Spanish-Surnamed University Freshmen (N=50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>37.08</td>
<td>4.84</td>
<td>.618</td>
</tr>
<tr>
<td>Writing Proficiency</td>
<td>272.68</td>
<td>15.30</td>
<td></td>
</tr>
</tbody>
</table>

as represented in Figure 7 (see Appendix B) indicates the strength or degree of the relationship between acculturation and writing proficiency.

Results of the tests of significance for the male subgroup are displayed in Table 8; the hypothesis was not rejected.

Table 8. Means, Standard Deviations, and Correlation Coefficients for Measures of Acculturation and Writing Proficiency among Male Spanish-Surnamed University Freshmen (N=23)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>35.78</td>
<td>4.23</td>
<td>.779</td>
</tr>
<tr>
<td>Writing Proficiency</td>
<td>270.69</td>
<td>15.15</td>
<td></td>
</tr>
</tbody>
</table>
rejected at the .01 level of significance. The mean score for the acculturation measure was 35.78 and 270.69 for the measure in writing proficiency. And, standard deviations for each of the measures were 4.23 and 15.15 respectively. Thus, the correlation coefficient between measures of acculturation and writing proficiency for the male subgroup was .779, indicating a significant positive correlation between the two variables. Linearity of the variables is represented in Figure 8 (see Appendix B).

Results of the tests of significance for the female subgroup are presented in Table 9; the hypothesis was rejected at the .01 level of significance. While the mean score for the acculturation measure was 38.18 with a standard deviation of 5.13, the mean score for the measure in

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$R_{xy}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>38.18</td>
<td>5.13</td>
<td>.501</td>
</tr>
<tr>
<td>Writing Proficiency</td>
<td>274.37</td>
<td>15.51</td>
<td></td>
</tr>
</tbody>
</table>
writing proficiency was 274.37 with a standard deviation of 15.51. Thus, the correlation coefficient between measures of acculturation and writing proficiency for the female subgroup was .501, indicating a significant positive correlation between the two variables. Linearity of the variables is represented in Figure 9 (see Appendix B).

In addition to the analyses performed to test the stated hypotheses, the data were further analyzed in terms of significant differences in means, standard deviations, and correlation coefficients on measures of educational achievement, and reading and writing proficiency between the male and female subgroups. A complete presentation of this data is included in Appendix C. An analysis of the significant differences between the male and female subgroups in terms of the relationship of reading proficiency to writing proficiency is also included.
Chapter 5

DISCUSSION

The purpose of this study was to assess the strength of the relationship between acculturation and educational achievement as a means of describing currently existing conditions in the public school system in terms of detriments and benefits to successful school experiences among Mexican Americans. Correlations between acculturation and educational achievement may or may not indicate that identification with the ethnic group's culture is either an asset or a liability to success in school. But possibly, current educational practices and/or policy could be modified accordingly in order to eliminate whatever detriments may prohibit educational achievement among this ethnic minority. In this light, then, this chapter presents a discussion of the findings and interpretations of the data, their implications, and recommendations for future research.

Findings and Interpretation

On the basis of the results there is sufficient evidence to conclude that a significant positive correlation exists between acculturation and educational achievement among Spanish-surnamed university freshmen. Results of the data suggest the same positive correlation exists between
acculturation and reading proficiency as tested in Hypothesis 2, and between acculturation and writing proficiency as tested in Hypothesis 3. Moreover, a positive correlation was indicated for both the male and female subgroups relative to each of the hypotheses as well. All the hypotheses concerning the relationship between these variables, and for both the male and female subgroups, were tested at the .05 level of significance; all the hypotheses tested were accepted at the .01 level of significance.

As indicated, then, the three hypotheses investigated in this study were confirmed by the findings. Although the findings were somewhat anticipated, the data produced some interesting results which were not anticipated and which warrant discussion. First of all, data pertaining to total scores on both the acculturation and the educational achievement measurements revealed an unusually tight-clustered pattern. That is, the frequency distribution of the data suggests little variability among the sample. The range in the Urban Chicano Acculturation Scale scores was small, as indicated by a standard deviation of only 4.84. These findings hold true for the Sequential Tests of Educational Progress scores, which produced a standard deviation of 32.15. These results can perhaps best be explained in terms of the very homogeneous nature of the group itself. As previously mentioned, the sample consisted of Spanish-surnamed university freshmen whose admission to the university was based upon
selective criteria established by the Educational Opportunity Program, and who enrolled in the Humanities Program as "normally not admissible" students and/or upon the recommendation of the Educational Opportunity Program counseling staff.

Another factor which may have influenced the clustered pattern of scores on the achievement measurement is the general ability level of "normally not admissible" students. Because admission to the university is based upon qualifying scores on aptitude scales in combination with grade point averages and other criteria, it is assumed that students who are accepted for admission possess minimal skill ability in terms of educational achievement as defined by the university. And it is further assumed that "normally not admissible" students possess below average skill ability in terms of educational achievement, again as defined by the university. Understandably, the general ability level of the students in the sample would create the clustering effect which the instrument produced. As would be expected, the scores ranged in the lowest quartile according to the established norms for the instrument. It should be noted, however, that this effect would more than likely not occur for students normally admissible to the university, whose skills by definition would produce a normal distribution effect.

The clustered pattern of scores on the acculturation
measurement may be due to any number of variables, one of which may be the testing situation. This factor is mentioned in view of the range of scores produced in Richard Lopez' study on the relationship between stages of acculturation and anxiety level of E.O.P. students. The students in the Lopez sample were drawn from essentially the same population as were the students in the present study. However, the Lopez study produced greater variability in the range of scores for the sample and demonstrated more of a normal distribution curve than did the scores of the students in the present sample. It appears that perhaps the differences which occurred within essentially the same population are attributable to the testing situation. Perhaps the crucial difference is that the Lopez sample did not utilize participants who were in a special program designed for incoming E.O.P. students. Moreover, perhaps the Chicano orientation and general feeling generated throughout the Educational Opportunity Program produced a "Chicanismo" effect (that is, an ethnicity effect) upon the sample. In this light, the program itself may have somewhat influenced responses on the acculturation scale--i.e., instead of responding "Agree," students may have chosen to respond "Strongly Agree." However, the influence of the ethnicity

effect on the differences produced is not significant to the degree of distorting the approximate acculturation level of the sample.

Results of the data further indicate that females generally scored higher on both the instruments of acculturation and of educational achievement. These findings can best be explained in terms of cultural restrictions which prohibit certain types of behavior on the part of Chicanas, engendered by such things as family, custom, tradition, and cultural mores. Among Chicanas there is much more emphasis placed on the acquisition of a primary education since, by and large, they normally do not participate as primary wage-earners. This may explain higher achievement scores but does not necessarily explain the higher acculturation scores. The difference between the mean scores of males and females was small (2.40) for acculturation and also for educational achievement (2.62). While there is not any substantial difference between the male and female subgroups, higher acculturation scores for the female subgroup may be attributed to any number of factors which necessarily predicate additional study. Since the design of this investigation did not address itself to the exploration of these factors, further discussion is withheld.

Differences in scores between the male and female subgroups in reading proficiency were such that no significant difference was indicated. Scores in writing proficiency,
however, indicated definitely higher scores (mean difference of 3.68) for the female subgroup. Although the difference is not statistically significant, higher scores in writing proficiency may support the premise that Chicanas generally develop a stronger basic skills foundation, as has previously been suggested.

Results of the data on both males and females further indicate that scores in reading proficiency were generally higher than scores in writing proficiency. These findings can best be explained in terms of sequential learning of basic skills. That is, the reading activity is developed primarily and is viewed as a foundation upon which writing skills are then developed. For example, a student's word-recognition vocabulary, which is drawn upon in the reading process, is generally greater than the students "active" vocabulary, as utilized in the writing activity. Moreover, the differences in the mean scores between reading and writing proficiency were small (5.62), thus minimizing further discussion.

Looking at the results of the analyses and subsequent interpretation of the findings, the evidence appears sufficient to suggest that significant positive correlations exist between acculturation and educational achievement among Spanish-surnamed university freshmen. Furthermore, because of imposed limitations such as differences in samples, methods, and materials, comparisons between results
of this study with other acculturation studies are almost impossible. In this regard, the Lopez study produced results which substantiate certain basic assumptions upon which the present study is founded and subsequent conclusions drawn. On the other hand, Lopez' findings, unlike the present findings, showed that students in the sample were in many stages of acculturation. Moreover, demographic investigation of his sample showed that most of the parents (67 of 74) were from the lower socio-economic class, which lends support to the rationale that acculturation does occur within socio-economic class. As in the Lopez study, most parents (47 of 50) of students in the present sample were also from the lower class.

Ignacio R. Cordova presents somewhat contradictory findings; the suggestion is that socio-economic variables may be of central concern to correlations between acculturation and educational achievement. Cordova's findings indicate that for middle-class Spanish-surnamed students, acculturation to family values was negatively related to achievement. What is suggested is that the relationship of acculturation (with respect to family values) to academic performance is linked to socio-economic class. Perhaps for the Cordova samples, acculturation was negatively related to achievement in middle-class students but was positively related in those of the lower class. Or, as acculturation in middle-class students increases, attitudinal changes
occur with respect to education and politics which may turn students off; thus achievement decreases.\(^2\)

Other contradictory results are those of the Long and Padilla study and also those of Henderson and Merritt. The Long and Padilla findings indicate that acculturation is negatively correlated to achievement; that is, the less acculturated student actually attained greater achievement. The suggestion is that the marginality conflict (identity crisis) experienced by acculturated Chicanos may play an equally important role in the educational achievement of Mexican Americans.\(^3\) The findings of Henderson and Merritt, on the other hand, refute the common assumption that children from families "most" Mexican in their behavior and outlook will have difficulty in school. The suggestion is that high-potential families may participate more fully than low-potential families in both Anglo and Mexican cultures; that is, children of high-potential families are exposed to a wider variety of stimulating experiences, thus effecting achievement more so than does acculturation.\(^4\)

Analyses of external relationships by means of reference to relevant results of other studies has served to further isolate possible design or procedural deficiencies which may exist within the present study. In light of this,

\(^2\)Cordova, op. cit. \(^3\)Long and Padilla, op. cit.

\(^4\)Henderson and Merritt, op. cit.
the achievement test validity issue may also be critical here. In most of the studies reviewed, achievement in school was defined in terms of performance on standardized achievement tests. Unacculturated Chicanos would be expected to perform poorly on these tests because a traditional orientation to family values is usually correlated with lack of acculturation in areas most commonly measured by these instruments. However, since success or achievement is defined by the schools in terms of performance on these tests, if Chicanos are to succeed or achieve under existing conditions in the public school system, they must currently do so on the basis of these tests.

The studies reviewed above emphasize the complexity of investigating acculturation as related to educational achievement. The purpose of this review was to identify variables which may possibly have been unaccounted for in the present study.

In conclusion, the findings suggest that a general statement regarding the relationship of acculturation to educational achievement among Mexican Americans is tenable. Furthermore, the evidence is sufficient to conclude that as the level of acculturation among Mexican Americans increases, so does the level of educational achievement. Conversely, as Mexican Americans tend to identify with their ethnic group's culture, the level of educational achievement decreases.
The findings for the present sample suggest that perhaps identification with the ethnic group's culture is a liability in terms of educational achievement as defined by the school system. Although the findings indicate no cause-effect correlation, they may or may not be interpreted to suggest that under existing educational conditions, identification with the ethnic group's culture could possibly be a liability to educational achievement. In this regard, if existing educational conditions were modified to reinforce cultural pluralism, then identification with the ethnic group's culture might be an asset to educational achievement.

Implications

The findings of this study indicate that significant correlations which have important implications for the education of Mexican Americans exist between acculturation and educational achievement. Moreover, the overall results suggest that these correlations are somewhat meaningless when viewed in general terms. That is, most educators would accept without question or doubt that as opportunities are presented to Mexican Americans for some acculturation to Anglo values, so are opportunities presented for greater educational achievement. It is not until these variables are examined independently and then in relationship to each other that their educational implications become meaningful.

The findings of this study revealed that Spanish-surnamed university freshmen in the sample were not highly acculturated. The implication is that Mexican American
students have managed to maintain many of the societal and cultural norms of their ethnic group. In light of this, Anglo-American insistence on cultural assimilation (values, attitudes, beliefs, etc.) of ethnic minorities as instrumented by the public school system has had detrimental effects on Mexican American students. The problem is that Chicanos have not followed the standard pattern of socio-cultural assimilation, at least as viewed by the school system. The implication is that the educational system must modify currently existing educational programs, curricula, and teaching methods to reinforce cultural pluralism as a means of resolving the "conflict of cultures" in the schools.

The findings also indicated that Mexican American university freshmen scored in the lowest quartile on tests for educational achievement, reading proficiency, and writing proficiency. The implication is that Chicanos are below average ability in the variables measured when compared to other university freshmen, at least as viewed by the educational institution. Evidence in support of these findings is abundant: a survey of the number of Mexican Americans in remedial programs, special education classes, and various other educational enhancement programs will bear this out. Only recently, however, have educators questioned the

validity of such instruments for measuring achievement or ability among Mexican Americans.\textsuperscript{6}

Achievement tests are not the only criteria of achievement as defined by the school system; other criteria are measured by the student's performance in currently existing educational programs and common culture curricula. The implication is that the educational system must redefine its criteria for measuring educational achievement so that cultural pluralism can be reinforced in the educational program in order that all students may share equally in opportunities for educational achievement.

Recommendations

Results of the study suggest that much uncertainty yet remains concerning the relationship of acculturation to educational achievement. Much of this uncertainty stems from variations in methodology and criteria established for measuring acculturation among Mexican Americans, compounded with conflicting definitions of educational achievement.

The findings of this study indicate a need for enlightened research relevant to the issue of acculturation—specifically, to develop acculturation scales that adequately measure stages of the acculturation process. Also, these scales should be standardized and normed for both urban and

rural populations. Finally, appropriate consideration should be given to such variables as linguistic differences, culturally-biased items, age differences, etc. The need is surely evident in view of currently existing institutions of society which continue to follow the inappropriate model of assimilation into mainstream middle-class America as a criterion for determining stages of acculturation.

Results of the study suggest a need for extensive investigation of how milieu and socio-economic class interact with acculturation to affect educational achievement—specifically, to investigate the different milieus such as urban, rural, or regional differences which may interact with acculturation to affect achievement. Also to be investigated would be whether socio-economic factors may affect achievement more so than does acculturation and whether stages of acculturation are identifiable within socio-economic class.

Finally, there is critical need for extensive studies and research concerning existing criteria of achievement as presently defined by the school system. They should be directed toward (1) reformulation of existing educational programs, curriculum, and extra-curricular activities so that aspects of cultural pluralism are reinforced in the educational process and (2) modification of the existing monocultural criteria of achievement to bicultural criteria.
Chapter 6

SUMMARY

This study investigated the relationship of acculturation to educational achievement among Spanish-surnamed university freshmen. The Urban Chicano Acculturation Scale and the Sequential Tests of Educational Progress were the instruments utilized to measure acculturation and educational achievement.

Three null hypotheses were investigated: (1) there is no significant relationship between the level of acculturation and the level of educational achievement, (2) there is no significant relationship between the level of acculturation and reading proficiency, and (3) there is no significant relationship between the level of acculturation and writing proficiency.

A total of 50 Spanish-surnamed university freshmen attending San Jose State University during the fall semester, 1973, were used as the sample.

On the basis of the results there was sufficient evidence to conclude that significant positive correlations exist between (1) acculturation and educational achievement, (2) acculturation and reading proficiency, and (3) acculturation and writing proficiency. Product-moment correlation coefficient was selected as the statistical procedure to
assess the degree of relationship between the variables. All three hypotheses were tested at the .05 level of significance; all the hypotheses tested were rejected at the .01 level of significance. The correlation coefficients for each of the hypotheses were: (1) .657 for Hypothesis 1, (2) .637 for Hypothesis 2, and (3) .618 for Hypothesis 3.

Results of the study indicate that as the level of acculturation among Mexican Americans increases, so does the level of educational achievement. Conversely, as Mexican Americans tend to identify with the ethnic group's culture, the level of educational achievement decreases. The findings appear to indicate that identification with the ethnic group's culture is a liability in terms of educational achievement as defined by the school system.

The implication is that (1) the educational system must modify currently existing educational programs, curricula, and teaching methods to reinforce cultural pluralism as a means of resolving the conflict of cultures in the schools, and that (2) the educational system must redefine its criteria for measuring educational achievement so that cultural pluralism can be reinforced in the educational program in order that all students may share equally in opportunities for educational achievement.
BIBLIOGRAPHY


Evans, Francis B. "A Study of Sociocultural Characteristics of Mexican Americans and Anglo Junior High Students and the Relation of These Characteristics to Achievement." Doctoral dissertation, New Mexico State University, 1969.


APPENDIXES
### MASTER DATA SHEET

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APPENDIX B

SCATTERPLOTS REPRESENTING RELATIONSHIP OF VARIABLES INVESTIGATED
Figure 1. Scatterplot Representing the Relationship between Acculturation and Educational Achievement among Spanish-Surnamed University Freshmen
Figure 2. Scatterplot Representing the Relationship between Acculturation and Educational Achievement among Male Spanish-Surnamed University Freshmen
Figure 3. Scatterplot Representing the Relationship between Acculturation and Educational Achievement among Female Spanish-Surnamed University Freshmen
Figure 4. Scatterplot Representing the Relationship between Acculturation and Reading Proficiency among Spanish-Surnamed University Freshmen
Figure 5. Scatterplot Representing the Relationship between Acculturation and Reading Proficiency among Male Spanish-Surnamed University Freshmen
Figure 6. Scatterplot Representing the Relationship between Acculturation and Reading Proficiency among Female Spanish-Surnamed University Freshmen
Writing Proficiency

Acculturation

Figure 7. Scatterplot Representing the Relationship between Acculturation and Writing Proficiency among Spanish-Surnamed University Freshmen
Figure 8. Scatterplot Representing the Relationship between Acculturation and Writing Proficiency among Male Spanish-Surnamed University Freshmen
Figure 9. Scatterplot Representing the Relationship between Acculturation and Writing Proficiency among Female Spanish-Surnamed University Freshmen.
APPENDIX C

ANALYSES OF DIFFERENCES BETWEEN THE MALE AND FEMALE SUBGROUPS IN THE SAMPLE

78
ANALYSES OF DIFFERENCES BETWEEN THE MALE AND FEMALE SUBGROUPS IN THE SAMPLE

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APPENDIX D

THE URBAN CHICANO ACCULTURATION SCALE
THE URBAN CHICANO ACCULTURATION SCALE

1. If I were to go to a party, it would probably be comprised of White people entirely.
   A. Strongly agree       C. Disagree
   B. Agree               C. Strongly disagree

2. If I were to have a roommate, he would probably be Mexican-American.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

3. I have had close friends that were Mexican-American.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

4. My experiences with White people have been less meaningful than with Mexican-American people.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

5. Although I like black hair, I am partial to blond hair.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

6. If I did want to go dancing, I would prefer to go to a Mexican-American dance.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

7. I have fewer White friends than Mexican-American friends.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree

8. Although I am not prejudiced against Mexican-Americans, I still would hesitate before asking one over to my parents' home.
   A. Strongly agree       C. Disagree
   B. Agree               D. Strongly disagree
9. If I had dated, I would have dated fewer Whites in my life than Mexican-Americans.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

10. If I did eat bread or tortillas, I would probably eat bread less often.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

11. Most of my close friends are White people.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

12. If I were to speak Spanish, it would probably be at school while in a classroom.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

13. I have dinner with White people less often than with Mexican-Americans.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

14. If I were to speak Spanish, I would probably speak it at home and at school while in a classroom.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

15. Although I am not prejudiced against Mexican-Americans, I do feel a bit uneasy around too many of them.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree

16. If I were to speak Spanish, it would probably be at home.
   A. Strongly agree   C. Disagree
   B. Agree           D. Strongly disagree
17. Although I wouldn't mind having Mexican-American friends, I think I would be satisfied just having all White friends.
   A. Strongly agree  C. Disagree
   B. Agree          D. Strongly disagree

18. If I were to go to parties, I would probably enjoy Mexican-American parties more than White parties.
   A. Strongly agree  C. Disagree
   B. Agree          D. Strongly disagree

19. If the opportunity presented itself, I would lend a Mexican-American money.
   A. Strongly agree  C. Disagree
   B. Agree          D. Strongly disagree