ABSTRACT
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analyzed on 102 junior high school students and their families.
Factor analysis techniques and Guttmen Scaling were used to generate
a series of measures that describe the achievement training and
independence training that the child experiences in the home, his
self concept, and achievement value orientations. The
Mexican-Americans studied apparently experienced much less
independence training than did their Anglo peers. Mexican-American
boys in particular were granted little autonomy in decision making;
had little confidence in their ability to succeed in school, and were
fatalistic about the future despite the high level of achievement
training to which they are exposed in the home. Results suggest that
direct attempts to encourage greater academic effort on the part of
the student may actually inhibit academic performance. In contrast,
parental independence training results in significant gains in
achievement among both groups. This is accomplished by increasing the
student's confidence in coping with his physical and social
environment, especially with the classroom situation where students
are expected to perform independently. (Author/JMB)

FAMILY SOCIALIZATION AND EDUCATIONAL ACHIEVEMENT IN TWO CULTURES: MEXICAN-AMERICAN AND ANGLO-AMERICAN[1]

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ABSTRACT

The study has examined variations in family socialization practices among Anglo-Americans and Mexican-Americans and the affect of these practices on achievement values, self-concept, and educational achievement.

Data were collected and analyzed on 102 junior high school students and their families. Factor analytic techniques and Guttman scaling were used to generate a series of measures that describe the achievement training and independence training that the child experiences in the home, his self-concept, and achievement value orientations.

The Mexican-Americans studied apparently experienced much less independence training than did their Anglo peers. Mexican-American boys in particular were granted little autonomy in decision making. In addition, these same students were found to have little confidence in their ability to succeed in school and to be somewhat fatalistic about their future despite the high level of achievement training to which they are exposed in the home.

The results of a path analysis suggest that direct attempts to encourage greater academic effort on the part of the student may actually inhibit academic performance. In contrast, parental independence training results in significant gains in achievement among both groups of students. This is accomplished by increasing the student's confidence in coping with his physical and social environment especially the classroom situation where students are expected to perform independently.

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Family structure has been shown to be one of the most important deter-
minants of achievement motivation and educational attainment.[2] Achievement
orientation appears to be the result of two types of family socialization
practices; achievement training which occurs in the home when parents set
high goals for their children and communicate to them expectations for high
achievement; and independence training which occurs when parents encourage
self-reliance by granting their children enough autonomy to make their own
decisions and to accept responsibility for success or failure. Though achieve-
ment training,parents attempt to foster the desire in their children to do
things well; through independence training, they encourage them to do things
on their own initiative.[3]

McClelland concluded as a result of his studies of achievement moti-
vation that:

> The data we have to date strongly support the hypothesis that
>
> achievement motives develop in cultures and in families where
>
> there is an emphasis on the independent development of the
>
> individual. In contrast, low achievement motivation is
>
> associated with families in which the child is more dependent
>
> on his parents and subordinate in importance to them.[4]

As a result of this socialization the child develops his self-concept.
Self-concept, variously called self-image or self-esteem, is a personality
factor that evolves out of one's sociocultural milieu. An eight-year study
conducted by Coopersmith indicated that the important factors related to

high self-esteem were the closeness of the relationship between the child and his parents and the type of control or discipline employed by the parents.[5] Coopersmith also reported that youngsters who had high self-esteem set higher standards for themselves and come closer to achieving these standards than did youngsters with low self-esteem.

Additional evidence of family influence on self-concept of ability is provided by several other studies. Jourard and Remy demonstrated that self-appraisal by children is highly related to their perception of their parents' appraisal of them.[6] Also, Ausubel found that the level of children's aspirations, their frustrations, their ideational independence from their parents, and the maturity of their personalities were all related to the children's perceptions of their parents' valuation of them.[7] Brookover and Thomas also found self-concept of ability to be significantly related to the perceived evaluation of themselves by significant others, notably parents.[8]

A number of studies have documented the relationship between the child's self-concept and his performance in school. Studies by Jersild,[9] Reeder,[10] Stevens,[11] Shaw and others,[12] and Brookover and Thomas[13] all demonstrate a significant relationship between student achievement and positive self-image.

Rosen found the achievement syndrome to be highly related to ethnicity and to social class.[14] His comparative study of the cultures of six ethnic groups in the United States revealed a number of important differences in value orientations among white protestants, Jews, Greeks, southern Italians, French-Canadians, and Negroes. Also studies by Saunders,[15] Kluckhohn and Strodtbeck,[16] Demos,[17] Manuel,[18] and Schwartz[19] have revealed important differences in motivation, value orientations, and aspiration levels between Mexican-Americans and the dominant Anglo culture.

When social classes are compared on achievement orientation, again important differences are observed. Hyman states that lower class families appear to place less stress on success in achieving traditional goals related to social mobility.[20] Miller and Reissman corroborate these differences in value orientations between working class and middle class families.[21] They characterize the working class as desiring stability and security, and as pragmatic and anti-intellectual. Sewell, Haller, and Straus, also found the levels of educational and occupational aspirations of high school seniors to be positively related to socioeconomic status even when intelligence was con- trolled.[22]

The present study was undertaken in order to explore differences in achievement orientation and achievement between Mexican-American and Anglo- American students. Also, it has attempted to ascertain the extent to which these differences are a function of family socialization practices related to ethnicity and to social class.

Causal Model

If we focus on the process by which family socialization practices affect achievement values, self-concept, and ultimately educational achievement, a causal model can be explicated. The hypothesized structure is outlined in Figures 1 and 2 for Anglo-Amierican and for Mexican-American students respec- tively.

FIGURE 1

FIGURE 2

Research cited earlier indicates that educational achievement is highly affected by the student's self-concept of his ability.[23] This factor is in turn affected by the student's achievement value orientation, in particular whether or not he believes in the efficacy of manipulating his physical and social environment to his advantage.[24] Value orientations, however, result largely from socialization practices such as achievement training and independence training that occur in the cultural setting of the home.[25] Finally Elder has demonstrated that these child-rearing practices vary with the family's socioeconomic and ethnic status as well as with the child's sex.[26] Rosen also found achievement values to be highly related to ethnicity and social class.[27] It is this causal structure that is depicted in Figures 1 and 2.

The figures depict linear, additive, asymmetric causal-relationships hypothesized to exist among a set of variables. All but the first four variables are considered to be endogenous and as such to be completely determined by variables included in the model as well as by a residual variable. This residual variable represents the effects of all other variables not included in the model that cause variation in an endogenous variable. The residual variable is assumed to be uncorrelated with the other variables that determine the endogenous variable. Path coefficients shown along side of each arrow in Figures 1 and 2 are standardized partial regression coefficients. Double headed arrows link the three exogenous variables, namely, sex, father's education, and language usage. No attempt is made to account for variation in these variables since they are considered to be influenced by other variables outside of the system.

Methodology

Las Cruces, New Mexico was chosen as the site for this study. Since this city of over 47,000 is located fifty miles from the Mexican border, about forty percent of the population residing there are of Mexican origin. Despite the fact that the educational level of Mexican-Americans in Las Cruces is about the same as in the rest of the southwest, twenty percent of the Mexican-American males in the labor force are employed in professional, managerial, and administrative occupations, about double the proportion falling into this category in the southwestern states as a whole. At the same time three-fourths of the Mexican-American males in the labor force occupy jobs as unskilled and skilled labor, about the same proportion as for other urban areas of the southewst.[28]

For purposes of this study a population of all families who had at least three children in the public schools, one at each level, was identified. Such a population permitted the introduction of a control for family size which would have otherwise differed markedly between Anglo-American and Mexican-American families. Such a control was important because studies by Rosen[29] and Elder[30] indicate that independence training and achievement motivation are highly influenced by size of family.

After this population had been stratified according to nationality and language usage, a stratified random sample of 163 families was drawn. In addition to a family interview, school age children from these families were asked to complete a questionnaire. Scores from the Iowa Test of Basic Skills which was administered in the Spring of 1968 by the school system were also recorded. The present study was restricted to data obtained from the junior

high school students in the sample. In all, complete data were obtained on 102 students; 69 Mexican-Americans, 33 Anglo-Americans.

Scales were developed by separate principal components analysis of the sets of questions designed to measure family language usage, self-concept of ability, parental achievement training, and achievement value orientations.[31] All but two of these concepts were found to be unidimensional. The questions used to measure achievement training were found to load on four separate factors: parental stress on academic achievement, parental assistance with schoolwork, parental stress on finishing high school, and stress on attending college. The first factor score was used as a measure of achievement training in this study.[32] Similarly, the achievement value orientations were found to load on the following four underlying factors: fatalism versus activism, occupational primacy, planning, and striving orientation. The fatalism-activism factor score was used as a measure of the student's confidence in dealing with his physical and social environment.

Independence training was measured by a Guttman scale developed by Elder.[33] Father's education was used as a measure of social class. The composite score on the Iowa Test of Basic Skills was used as a measure of achievement. Tables 1 and 2 contain the means, standard deviations and correlations for each variable for Anglo-American and Mexican-American students, respectively.

TABLE 1

TABLE 2

Findings

Path coefficients were estimated for Anglo-American and for Mexican-American students separately. The results are shown in Tables 3 and 4. Variables included in the model account for 46 percent of the variation in achievement among Anglo-American junior high school students. In the case of Mexican-American students 34 percent of the variation in achievement is accounted for by variables in the model. This suggests that other variables not included in the model, such as school related variables, have more of an influence on the achievement of Mexican-American students than they do on Angl -American students. Such an interpretation is supported by the findings of the Equality of Educational Opportunity study.[34]

TABLE 3

TABLE 4

Zero order correlations can be interpreted as the total effect of an independent variable on a dependent variable.[35] This total effect is composed of a direct effect as measured by the path coefficient; an indirect effect through other variables, for example, father's education affects independence training which in turn affects achievement; and a joint or spurious effect that arises out of the mutual correlation of the dependent and independent variables with other variables that precede them in the model.[36] Tables 5 and 6 provide breakdowns for Anglo-American and Mexican-American students, respectively, of the total effect of each exogenous and endogenous variable in the model on achievement.

TABLE 5

TABLE 6

Self-concept of ability is seen to have a large direct effect on achievement for both groups of students. Path coefficients are .55 and .43 for Mexican-American and Anglo-American students, respectively. Moreover, Tables 1 and 2 reveal that the mean self-concept scores for these two groups of students are significantly different. The confidence of Mexican-American students in their ability ot succeed in high school and college and their estimate of their own ability in comparison to their peers was found to be significantly below that of their Anglo-American classmates.

These differences in self-concept are probably the result of family environment and school experiences. Coopersmith found self-esteem to be related to the type of discipline employed by parents.[37] An examination of the path coefficients in Tables 3 and 4 partially supports this finding. Among Anglo-American students the path coefficient for independence training and self-concept is .37 indicating that among this group of students that student self-concept is enhanced by parental independence training. In contrast among Mexican-American families self-concept is enhanced by achievement training while independence training has a small negative effect on this variable. Also self-concept is higher among Mexican-American students who are confident of their ability to manipulate the environment to their advantage. The path coefficient linking activism-mastery to self-concept is .33.

This suggests that encouraging minority students to work independently may not be enough to prepare them for experiences in the school that result from their ascribed minority group status and the difficulties and frustrations of attempting to compete with their Anglo-American peers. A study by McDavid suggests that success in school may result in a more positive

self-image which in turn may lead to increased success in the school.[38]
Schwartz found the gap between the self-esteem of Mexican- and Anglo-
American students to be greater at the senior high school level than at
the junior high level.[39] She interpreted this finding as suggesting that
Mexican-American students suffer a loss of self-esteem as their awareness
of their minority group status increases.

Value orientations also as hypothesized effect student achievement. In
both instances confidence in the ability to manipulate the environment to
ones advantage as indicated by activism-mastery scores results in higher
levels of achievement in the school. In the case of Anglo-American students
this effect is largely direct. The path coefficient is .14. Among Mexican
American students the effect of this value orientation is to raise self-con-
cept of ability with an attendant effect on achievement. The indirect effect
in this case is .13.

Differences between the two groups of students in value orientations
also exist. Mean scores on activism-mastery from Tables 1 and 2 reveal that
Mexican-American students are more fatalistic about the future than their
peers. This finding may very well indicate a hiatus between aspirations
and expectations among Mexican-American students.

While there appears to be little difference between Anglo-American and
Mexican-American families in the amount of achievement training that the
child experiences in his home, overt achievement training appears to neg-
atively effect achievement among both groups of students. Path coefficients
for Anglo-American and Mexican-American students are -.07 and -.21, respec-
tively. Apparently too much emphasis on attaining good grades in school

may be deleterious to the student's performance in school. At the same time
independence training appears to enhance achievement but in quite different
ways for the two ethnic groups. An increase in independence training results
in increased self-concept of ability among Anglo-American students. This
accounts for most of the indirect effect of .24 of this variable on achieve-
ment. The same emphasis on independent effort in Mexican-American families
has a direct effect of .30 on achievement. These findings agree with those
of Elder who found that independence training inculcates a desire within
students to achieve and produces independent effort on their part to learn.[40]

The large direct effect of this variable on achievement may reflect
fundamental differences between the structure of the classroom and the
Mexican-American family as suggested by Anderson[41] and Evans and Anderson.[42]
In most classrooms the norm of independence is reinforced by confronting
children with a sequence of tasks designed to encourage independent action
on the student's part.[43] Students who have been socialized by their families
to be somewhat independent perform well in classrooms structured in such a
way as to require and reward independent student effort.[44] Since Mexican-
American students receive considerably less independence training from their
parents than their Anglo-American peers (see Tables 1 and 2), this variable
may be a critical factor in how well they perform in school.

The degree to which English is spoken in the home also affects achieve-
ment both directly and indirectly. Achievement scores for Mexican-American
students increase with the amount of English spoken in the home. Since these
tests are administered in English and require a high degree of fluency on
the part of the student, this result is not too surprising. The effect
of this variable on self-concept inforces the effect of

language on achievement. The student's self-concept of his own ability appears to be enhanced by increased use of English in the home. This is quite understandable since increased exposure to the language in which he is taught and tes.ed in the school prepares him to compete at less of a disadvantage with his classmates. As his self confidence rises so do his scores on achievement tests.

Social class as predicted affects student achievement. The direct effect of this variable for both groups of students is positive. However, the direct effect is strongest among Anglo-American students. Indirect effects on achievement are also positive and of the same magnitude for the two ethnic groups. However, for Anglo-American students an increase in father's education, the measure of social class for this study, results in an increase in student's self-concept of ability. Independence training is enhanced by the father's educational level among Mexican-American students, however. In both cases higher levels of achievement result. ·

Male Anglo-American students out performed their female peers on the achievement test. The path coefficient is -.15 while indirect effects are negligible. Among Mexican-American junior high school students females out performed males. This appears to be a result of differential independence training since the effect in this case is totally indirect. Female Mexican-American children appear to receive a greater amount of independence training at this age than males. As a result their achievement in school in enhanced.

Schwartz's study of the Los Angeles public schools also found Mexican-American girls to be independent of family authority but to be more dependent upon peer approval when compared to Mexican-American boys and Anglo-American

boys and girls.[46] This lack of independence training that Mexican-American

boys experience may have severe consequences for their academic performance

expecially if it results in inhibiting their identification with new re-

ference groups. Such identification is important for the acquisition of

new values and behavior that is important to social mobility and to future

achievement.[47]

Discussion

While the results of this study confirm the findings of previous research

that family socialization practices strongly influence both achievement values

and achievement, they indicate that the nature of this effect is quite different

in the two ethnic groups. Direct attempts to encourage and reward greater

academic effort on the part of the student appear to attenuate achievement

if they have any effect at all, a conclusion that Elder also reached in

studies of adolescents in North Carolina and Ohio.[48] On the other hand

active independence training results in significant gains in achievement

for both ethnic groups.

Among both groups of junior high school students this is accomplished

through changes in the students confidence in dealing with his physical

and social environment. Students' feelings of mastery of this environment

and its responsiveness to them appears to be greatly enhanced by parental

independence training, especially for Anglo-American students. Also among

this group of students their self-concept of their own ability in comparison

to their peers increases as they are encouraged to do things on their own.

For Mexican-American students the results of independence training in

the home are far more direct. Even when social class, language usage,

self-concept of ability and other variables are taken into account, independence training results in a significant increase in achievement. Earlier it was suggested that such training may be critical if Mexican-American students are to perform in classrooms structured in such a way as to require students to work largely on their own initiative.

It is important to note that while large differences in independence training exist between Mexican-American and Anglo-American families, the level of achievement training to which students are exposed is essentially the same for both groups. This finding suggests that attributing the lack of success of Mexican-American students in the school to a lack of motivation on the part of the students and their parents, as educators are prone to do, is seriously in error.

Socialization practices in turn appear to be strongly influenced by social class as other studies have found. It is interesting to note that while both independence training and achievement training increase with father's education, it is the former that is most affected in Mexican-American families and the latter that is most influenced in Anglo-American families.

[1] This research was partially supported by the Mathematics Education Program of the Southwest Educational Development Laboratory, Austin, Texas.

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[13]Brookover and Thomas, "Self-concept of Ability."

[14]Bernard C. Rosen, "Race, Ethnicity and the Achievement Syndrome," American Sociological Review, 24 (1959), pp. 47-60.

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[46]Schwartz, "Affectivity Orientations and Academic Achievement."

[47]Results from a social distance scale not reported here support this inter-
pretation. Mexican-American students expressed reservations regarding close
association with persons with other religious convictions. Furthermore,
scores on this social distance index were negatively related to achievement.

[48]Elder, Adolescent Achievement.

Figure 1:   Path Model for Anglo-American Students[a]

[a]Path coefficients and the corresponding arrows for values of .10 or less

have been omitted in order to simplify the diagram.

ACHIEVEMENT

SELF-CONCEPT

ACTIVISM-MASTERY

INDEPENDENCE TRAINING

ACHIEVEMENT TRAINING

SEX

FATHER'S EDUCATION

R_a .98

R_b .94

R_c .71

R_d .95

R_e .73

.54

.74

-.15

.37

.48

.45

-.77

-.15

.15

.18

.15

.32

.17

.16

.22
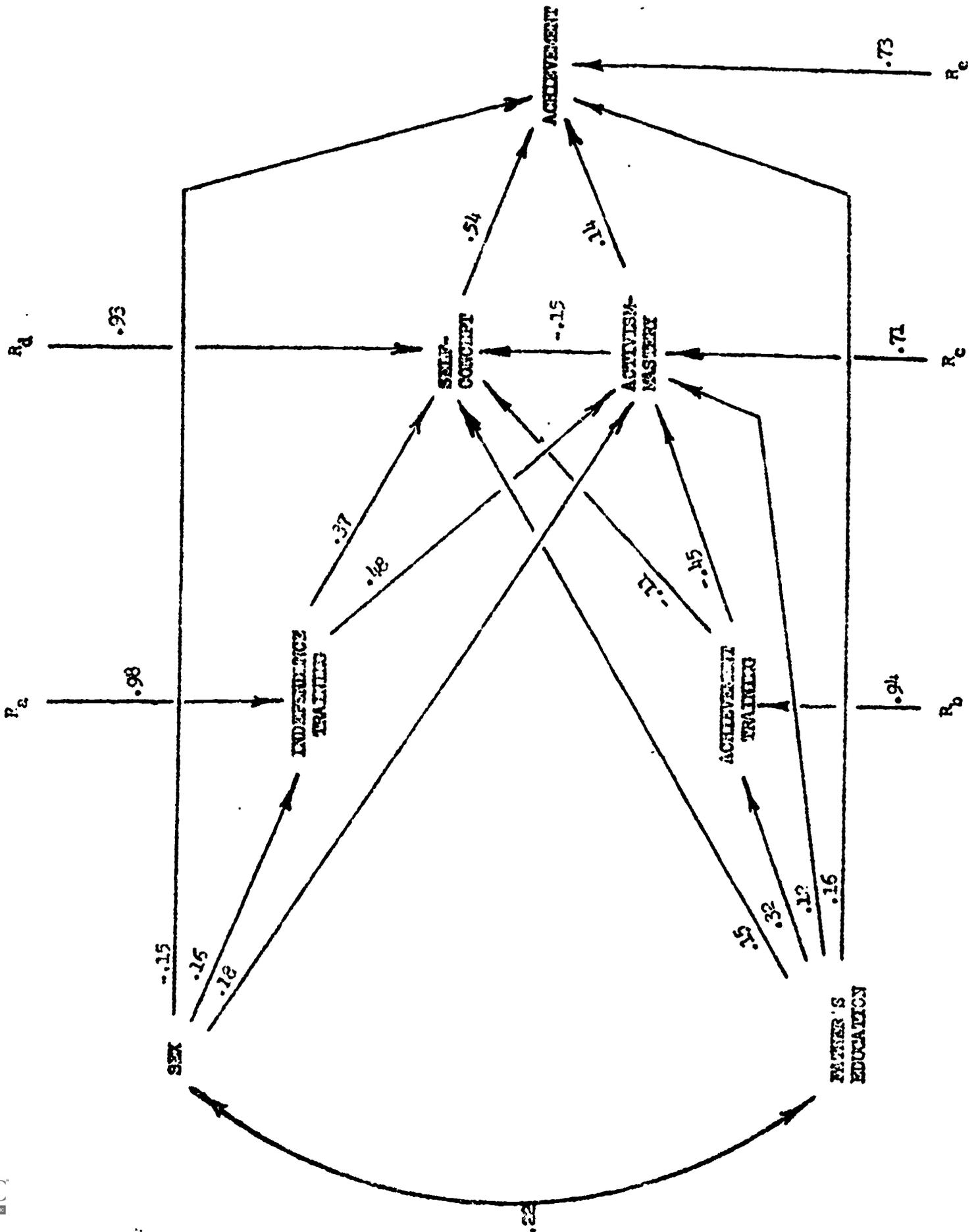
Figure 2: Path Model for Mexican-American Students[a]

[a]Path coefficients and the corresponding arrows for values of .10 or

less have been omitted in order to simplify the diagram.

ACHIEVEMENT

SELF-CONCEPT

ACHIEVEMENT TRAINING

ACTIVISM-MASTERY

INDEPENDENCE TRAINING

SEX

FATHER'S EDUCATION

LANGUAGE USAGE

R_d .94

R_b .96

R_c .96

R_e .90

R_a .92

.43 -.21 .23 .30 -.17 .32 .17 .30 .77 .15 -.24 .24 .23 .26 .11
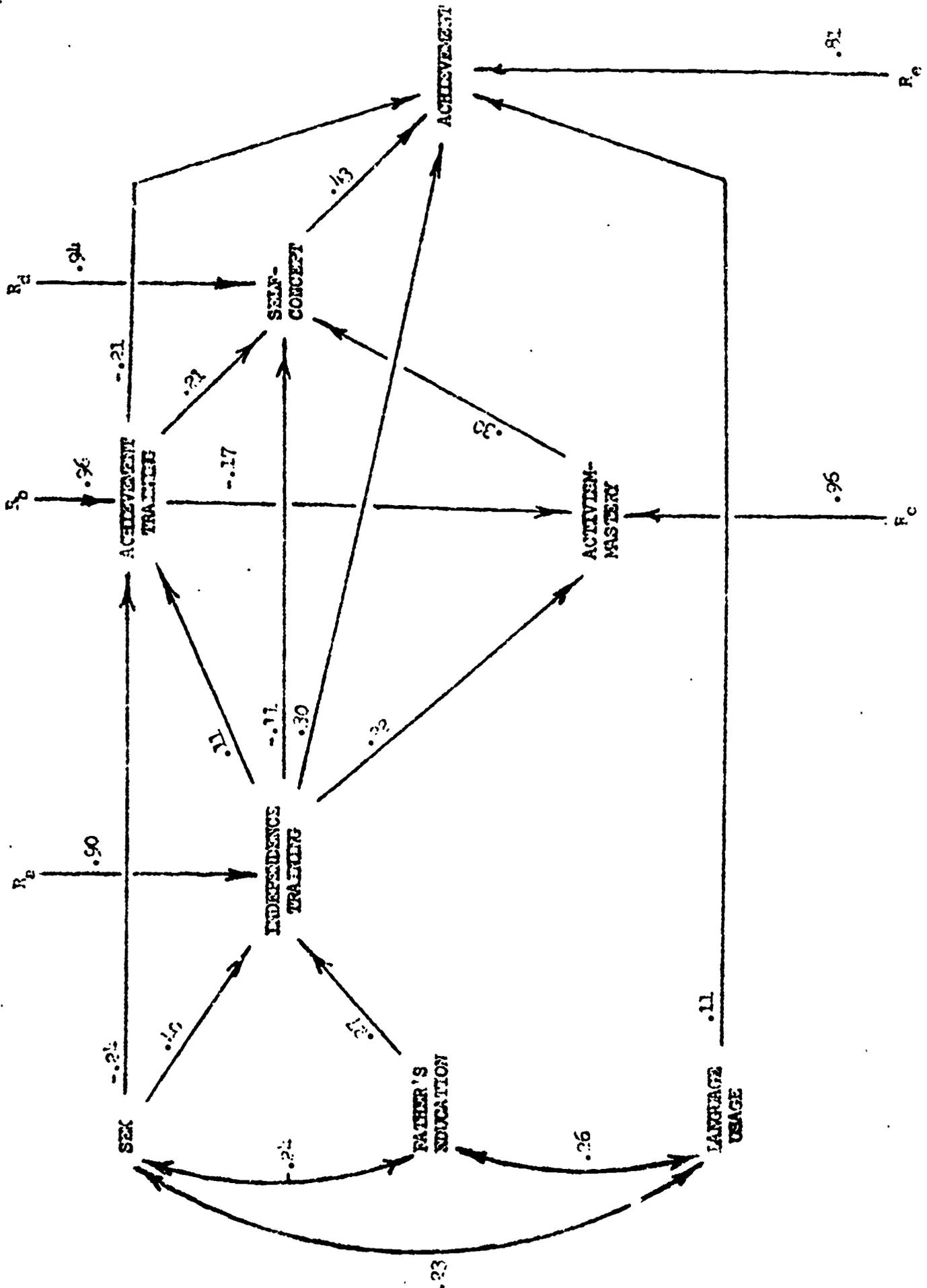
Table 1

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS FOR ANGLO-AMERICANS

N=33

VARIABLE		X_1	X_2	X_4	X_5	X_6	X_7	X_8
X_1	Sex	1.00						
X_2	Father's Education	- .22	1.00					
X_4	Independence Training	.14	.06	1.00				
X_5	Achievement Training	.02	.30	- .06	1.00			
X_6	Activism-Mastery	.21	- .03	.54	- .45	1.00		
X_7	Self-Concept-	.08	.16	.30	- .03	.08	1.00	
X_8	Achievement	- .19	.26	.30	- .11	.22	.62	1.00
MEAN		0.55	5.12	7.12	0.00	0.49	0.36	53.48
STANDARD DEVIATION		0.51	2.04	2.53	.94	0.77	0.80	10.61

Table 2

MEANS, STANDARD DEVIATIONS, AND
CORRELATIONS FOR MEXICAN-AMERICANS
N=69

VARIABLE		X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
X_1	Sex	1.00							
X_2	Father's Education	- .24	1.00						
X_3	Language Usage	- .23	.26	1.00					
X_4	Independence Training	.32	.20	.08	1.00				
X_5	Achievement Training	- :22	.17	.02	.05	1.00			
X_6	Activism-Mastery	.12	- .07	.06	.20	- .18	1.00		
X_7	Self-Concept	- .09	.08	.12	- .03	.17	.24	1.00	
X_8	Achievement	.06	.17	.21	.31	- .11	.24	.42	1.00
MEAN		.49	1.87	- .53	5.88	- .02	- .27	- .20	41.71
STANDARD DEVIATION		.50	1.66	.67	2.48	.96	.76	.86	10.38

Table 3

MULTIPLE CORRELATION COEFFICIENTS
AND PARTIAL REGRESSION CCEFFICIEMS

ANGLO-AMERICANS

DEPENDENT VARIABLE	INDEPENDENT VARIABLE	MULTIPLE CORRELATION COEFFICIENT	STANDARDIZED PARTIAL REGRESSION COEFFICIENT
Achievement			
	Sex	.68	- .15
	Father's Education		.16
	Independence Training		.07
	Achievement Training		- .07
	Activism-Mastery		.14
	Self-Concept		.54
Self-Concept			
	Sex	.36	- .07
	Father's Education		.15
	Independence Training		.37
	Achievement Training		- .11
	Activism-Mastery		- .15
Activism-Mastery			
	Sex	.70	.18
	Father's Education		.12
	Independence Training		.48
	Parental Stress on Achievement		- .45

Table 3
(Continued)

Achievement Training

Sex	.32	.10
Father's Education		.32
Independence Training		- .10

Independence Training

Sex	.15	.16
Father's Education		.10

Table 4

MULTIPLE CORRELATION COEFFICIENTS
AND PARTIAL REGRESSION COEFFICIENTS

MEXICAN-AMERICANS

DEPENDENT VARIABLE	INDEPENDENT VARIABLE	MULTIPLE CORRELATION COEFFICIENT	STANDARDIZED PARTIAL REGRESSION COEFFICIENT
Achievement			
	Sex	.59	.00
	Father's Education		.09
	Language Usage		.11
	Independence Training		.30
	Achievement Training		- .21
	Activism-Mastery		.03
	Self-Concept		.43
Self-Concept			
	Sex	.36	- .01
	Father's Education		.06
	Language Usage		.09
	Independence Training		- .11
	Achievement Training		.21
	Activism-Mastery		.30
Activism-Mastery			
	Sex	.29	.01
	Father's Education		- .10
	Language Usage		.07
	Independence Training		.22
	Achievement Training		- .17
Achievement Training			
	Sex	.28	- .24
	Father's Education		.10
	Language Usage		- .07
	Independence Training		.11
Independence Training			
	Sex	.44	.40
	Father's Education		.27
	Language Usage		.10

Table 5

EFFECT OF VARIABLES ON ACHIEVEMENT
ANGLO-AMERICANS

VARIABLE	TOTAL EFFECT	DIRECT EFFECT	INDIRECT EFFECT THROUGH OTHER VARIABLES	JOINT OR SPURICUS EFFECTS
Self-Concept	.62	.55	--	.07
Activism-Mastery	.22	.14	- .08	.16
Achievement Training	- .11	- .07	- .09	.05
Independence Training	.30	.07	.25	- .02
Father's Education	.26	.16	.07	.03
Sex	- .19	- .15	.01	- .05

Table 6

EFFECT OF VARIABLES ON ACHIEVEMENT

MEXICAN-AMERICANS

VARIABLE	TOTAL EFFECT	DIRECT EFFECT	INDIRECT EFFECT THROUGH OTHER VARIABLES	JOINT OR SPURIOUS EFFECTS
Self-Concept	.42	.43	--	- .01
Activism-Mastery	.24	.04	.13	.07
Parental Stress on Achievement	- .11	- .21	.06	.04
Independence Training	.31	.30	- .03	.04
Language Usage	.21	.11	.09	.01
Father's Education	.17	.09	.07	.01
Sex	.06	- .00	.14	- .08