A COMPARISON OF ANGLO AND MEXICAN-AMERICAN STUDENTS

ATTENDING THE SAME UNIVERSITY*

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A survey of 148 Monolingual (Anglo) and 153 Bilingual (Mexican-American) students attending the same University and selected by a stratified random sample indicated significant statistical (.05 level of confidence) differences between the two groups. Anglos had higher social class standing, received higher hourly wages, and had fathers who received higher yearly salaries. Mexican-American students were more financially autonomous, had more siblings, and used more Spanish in all settings. They also rated themselves higher in Spanish capability and lower in English capability than the Anglo students. Further differences were the Mexican-American students felt a better grade of Spanish was being used locally and that they had made more effort to improve both their English and Spanish skills. Similarities included age, level of aspiration, percentage of working students, number of hours employed, and percent in receipt of loans, scholarships and grants.

Mexican-Americans in Higher Education. Mexican-Americans comprise the second largest minority group in the United States, representing approximately 2.6 percent of the nation's population according to the 1970 census. Although they are only 2.6 percent of the total U.S. population, they make up 12.3 percent of the population of the five Southwestern states [Arizona, California, Colorado, New Mexico and Texas] (U.S. Census Bureau, 1972). Yet, there are relatively few Mexican-American students attending our nation's institutions of higher learning. As an example, the Carter study (Carter, 1970) disclosed that in 1958, only 518 or 3.3 percent of the 15,333 undergraduates at The University of Texas at Austin were Spanish surnamed. Almost a decade later (1967) the total enrollment at the same school climed to 22,559 students while the Spanish-surnamed

population increased to only 634, resulting in an overall decline to 2.8 percent of the total student body.

A similar nation-wide study (Crossland, 1971) attempted to assess the extent of involvement of minority groups in higher education. The author estimated that in 1969 there were 470,000 Black Americans and 50,000 Mexican-Americans enrolled in the nation's colleges and universities. These numbers represented 5.8 and 0.6 percent, respectively, of the total student enrollment in that year. Crossland concluded that minority groups in general, and Mexican-Americans in particular, were underrepresented in higher education.

The year 1966 has been heralded as the beginning of a major effort to encourage members of ethnic minorities to continue their education beyond the high school level (Newman, et al., 1971). In spite of this apparent commitment, however, few attempts were made at assessing the extent of change, if any, which was brought about. Concerned with this problem, the Ford Foundation Task Force (Newman, et al.) recommended that:

1. dissemination of the modest amount of information now available on members of minority groups be initiated;

2. an immediate effort be made to collect more data, evaluate practices, estimate costs, and develop more effective programs for minority group students;

3. a major national study of minority group participation in higher education be conducted.

In summary, it can be said that Mexican-Americans are grossly underrepresented in higher education. Further, information about this group remains relatively scanty, despite the nation's apparent interest in ethnic minorities. It is clear that more information concerning these students is needed so that effective programs can be developed, assessed, and modified to meet their needs.

Mexican-Americans at The University of Texas at El Paso and Surrounding Area. The University of Texas at El Paso enrolled approximately 10,500 students during the fall of 1969. Of this total approximately 30 percent of 3,150 students were Spanish-surnamed. Situated on the U.S./Mexican border, U.T. El Paso has been described as being one of the most bilingual/bicultural of any senior institution in all fifty states. Yet, prior to 1968 little had been done to evaluate and assess the nature of the student population in any comprehensive or organized manner.

The City and County of El Paso, Texas have one of the largest urban percentages of Spanish-surnamed people in the entire country. The 1960 census revealed 46 percent and 44 percent Spanish-surnamed individuals in the city and county respectively. A decade later, these percentages had jumped significantly.[1] In 1970 the County of El Paso classified 56.8 percent of its population as persons of Spanish language or Spanish surname, and 58.1 percent of the city's population included persons in this category (U.S. Census, 1972).

It can be safely concluded, therefore, that at least 50 percent of the local population have a Mexican ethnic heritage.

The University of Texas at El Paso, a public institution, was in 1969 the only degree granting institution in the County. Fall, 1969 enrollment figures showed 6,380 full-time unmarried students, 1,266 full-time married students and 2,833 part-time students. Of these, approximately 30 percent had Spanish surnames (a figure which deviates markedly from the probable 50 percent with Mexican heritage who were residing in the immediate area).

Neither tuition nor scholastic standards appear to be formidable obstacles to University access for prospective students. Tuition for state residents in 1969 was $50 per semester in addition to a $35 building use fee. Admission was, and continues to be, based upon a combination of SAT score and high school rank, but students not able to obtain the minimal score on the SAT can be admitted in the summer or spring terms following their graduation from high school. The only condition for such admission is that they achieve a 2.0 average for twelve or more hours (based on a scale of 4.0). Applicants who graduated from high school five or more years previously are admitted regardless of their SAT score.

The University is primarily a commuter campus. Less than 23 percent of the full-time enrollment in 1969 consisted of out-of-town students, and there was dormitory space for less than 12 percent of the campus student population. Thus the University has the following characteristics: a locality where more than 50 percent of the population are of Mexican heritage, a significant enrollment of students with Spanish surnames (30.1) percent, a low tuition rate, relative lenient admission standards and a student body which is largely local and native to the area.

Background of the Study. Given the above environment, coupled with an awareness of the dearth of information about Mexican-Americans in higher education, the authors launched a rather comprehensive investigation in 1969. An interdisciplinary team of researchers was formed, involving a sociologist, an educator, and a linguist,[2] as well as other faculty and students who expressed interest and concern as the study progressed. The original thrust of the project was, first, to establish the beginnings of a data bank which might provide new information and insights on the Mexican-American student. The collection of local data was seen as the first step, with the long-range goal of compiling and integrating similar data as they become available through other interested researchers. This paper summarizes some of the results of the first stage--local findings and implications.

Methodology. In the fall semester of 1969, the team of researchers developed the Sociolinguistic Background Questionnaire (SBQ),[3] a 100-item instrument which was designed to elicit relevant demographic and linguistic information about university students. Following a process of pre-test and revision, the SBQ was administered to a stratified non-proportional random sample of students. Using a Table of Random Numbers, 480 full-time unmarried, undergraduate students were selected from the fall, 1969 enrollment roster, with an approximately equal number of males and females, Anglos and Mexican-Americans.[4] Likewise, the sample included relatively equal numbers of students in each class, freshman through senior. Nearly sixty-three percent of the sample

responded to a telephone request and participated in the study by completing the SBQ. A total of 301 students (148 Anglos and 153 Mexican-Americans) were surveyed in this manner.

Subsequent to the data collection process, questionnaires were coded and the information transferred to key-punched cards to facilitate computational procedures. Comparisons between Anglos and Mexican-Americans were statistically analyzed using non-parametric statistical techniques described by Siegel, 1956). Differences were accepted as being significant at the .05 level of confidence.

The Questionnaire attempted to measure social class by combining scores on two scales, a revised and modified Hollingshead and Redlich educational scale (Hollingshead and Relich, 1958) and an original occupational scale based upon Duncan's Socio-Economic Index--SEI (Duncan, 1961). Hollingshead and Redlich's scale was revised and modified by reversing the scale numbers and using somewhat different categories of educational training. Unlike the Hollingshead and Redlich system, the lowest educational attainment was scored as one, the next two, etc. An eighth point was added for a professional degree (M.D., L.L.B., Ph.D., etc.). A substitution of 7-8 grade was made for the original "junior high" category and 6 grade for the original "less than seven years of school" category. Many of the respondents' parents were believed to have attended school in Mexico where elementary school ends at the sixth grade. Thus, the revised system of categories allowed for a differentiation between those who finished school in that grade and those who went on in school. Duncan's SEI gives a number ranging from 1-100 to each recorded occupation. These scores were arbitrarily divided into eight categories with one representing the lowest range of scores on the Duncan Index, two the next highest, etc.

It is believed that this procedure establishes a better Social Class Index than Hollingshead's occupational scale which was patterned on the occupational divisions used in the census. For example, with Hollingshead's scale one must decide whether a Nurse is a major professional, scale rating "one" (the highest), a lesser professional, scale rating "two" (next to the highest), or a semiprofessional, scale rating "three". In the Duncan Index, Nurse has a SEI rating of 70 which places him or her in the revised index with a score of 6, two positions from the top. This seemed to be a more simplified procedure, rather than relying on separate value judgments for each profession. Table 1 indicates the scale scores for education and occupation that were followed.

Once scores were obtained for each subject's father, each was assigned to an appropriate social class. A five-point social class interval was utilized as follows: Lower-Upper, Upper-Middle, Lower-Middle, Upper-Lower, and Lower-Lower. As suggested by Warner (1960), the Upper-Upper class was deleted, since this is generally identified by old-family lineage and wealth ("old money" is better than "new money"). Since El Paso has only recently become heavily populated, it seems reasonable to assume that those elements which, according to Warner, constitute the Upper-Upper class, were not present in the population under study. (Only 35, or 10 percent of the total number of students in the study were from out of town. It is doubtful that these would have qualified for Upper-Upper class designation.)

RESULTS

Anglo and Mexican-American students were compared on a number of sociological, educational and linguistic variables; results indicated several differences, as well as similarities. The results can be summarized as follows.

Analysis of Differences. A marked difference was found between the social classes of Anglo and Mexican-American students, significant beyond the .001 level of probability. As shown in Table 2, there were practically no Lower-Lower class Anglos, while 24 percent of the Mexican-American respondents were so classified. Similarly, only 18 percent of the Anglos were labeled Upper-Lower class, as compared with 37 percent of the Mexican-Americans at that level. There were, on the other hand, significantly more Anglo respondents who were Lower-Middle, Upper-Middle and Lower-Upper than Mexican-Americans, the respective percentages being 32 to 28 percent, 37 to 9 percent and 12 to 2 percent. In short, although each social class was represented by each ethnic group, more than 60 percent of the Mexican-American respondents were categorized in the two lowest classes as compared with only 19 percent of the Anglos found in those classes.

These data lend support to the hypothesis that children of lower class Mexican-Americans are following the American dream and indeed, utilizing a university education as a means of upward socio-economic mobility. Education has come to be highly valued by the Mexican-American population, particularly within the last decade. This may be partially due to larger numbers of Mexican-American teachers in the public schools, serving as models for Mexican-American children. The recent Chicano movement, too, may have provided an added sense of identity and emotional support for lower class Mexican-Americans who might not have considered a college education previously. Of local import, too, data indicate that Lower-Upper class parents do send their children to this University even though they could presumably afford to send them out of town!

However, the data also raise some interesting questions. Does the small number of Lower-Lower class Anglos mean that the community has few Anglos in this category or does it mean that Lower-Lower class Anglos do not use the University as a means of social mobility? Do these percentages reflect the percentages of Anglos and Mexican-American surnames in the various social classes of the community or are they substantially different from the community considered as a whole?

Another interesting question relates to the availability of jobs for local high school graduates. It is a well-known fact that it is becoming increasingly more difficult for today's youth to secure employment. Perhaps Anglo students in the lower classes, because of superior skills and training, or a higher level of employment motivation, or both, become employed immediately upon graduation from high school. Ethnic discrimination might also be a factor to be considered. Nevertheless, could it be possible that lower class Mexican-American youth are enrolling in college because they cannot find adequate employment? Only further research can answer these questions.

Given the social class differences of Mexican-American and Anglo students it is not surprising to discover that there was a significant difference between Mexican-American students' father's salaries and Anglo students' father's salaries. Income is, of course, an indicator of social class but there is some doubt as to whether it reveals social class as well as other indices, i.e., occupation, education, and residence. Social class is more than affluence or lack of affluence; it is or should be an index of life style. It is for this reason that sociologists have steered away from using income as a sole determinant of social class.

Fathers' salaries were, therefore, not used as an indicator of social class in the current study. Not only may they be a poor indicator of social class, but it is apparent that many students did not know this information since they left this question blank (91 of the 301 subjects). Consequently, it was felt that it would have been inaccurate to utilize student estimates of father's salary to determine social class. Table 3 presents the data for father's salaries, as reported by students, showing a close relation to social class. These data should be considered speculative, however, since those who responded may not have been representative of the total sample, nor may they have been reporting accurately.

The issue of financial support for education was also examined. Subjects were asked to indicate the percentage of college costs which they were assuming: all, three-fourths, half, one-fourth, or none. Most students in the sample assumed some of their college costs (72%). However, there were far more Anglo than Mexican-American students who indicated they assumed none of their college expenses (38% to 18%). Table 4 presents a summary of the differences.

Only twenty-nine of the students in the sample indicated they were veterans and of those only twenty-three reported they were receiving G.I. Bill benefits for going to school. Of the twenty-three, only four (3% of all Anglo students) were Anglos and the other nineteen (12% of all Mexican-American students) were Mexican-Americans. Of the comparatively small number of students attending school and receiving G.I. Bill benefits, the Mexican-American students clearly outweighed the Anglos by almost four to one. It should be pointed out, however, that the original sampling procedure excluded all married students, which may have significantly affected veteran and related G.I. Bill status. These data may not, therefore, be representative of the campus as a whole.

Similar results were found upon investigating student work-study assistance. Again only a very small number of students in the sample were receiving this type of aid (25 of the 301, or 8%). However, of these twenty-five, only six were Anglo (4% of all Anglo students) while nineteen were Mexican-American (12% of all Mexican-American students). Table 4 presents these findings.

All other analyses relating to financial assistance (loans, scholarships and grants) showed no appreciable differences between Mexican-American and Anglo students. In fact, it was surprising to note that comparatively few students in the sample received any of these aids.

Perhaps the best explanation of the fact that more Mexican-American students than Anglo students received work-study and G.I. Bill aid and that

more Anglo students than Mexican-American students assumed none of their college costs is the social class differences between these two groups. Following that line of thinking, one would assume that students whose fathers were classified in the upper range of the social class scale (based upon a combination of education and occupation) would be more able to attend school with full parental support than would those with fathers at the lower end of the scale. In addition, assuming that family income is at least partially related to social class, it would follow that more students with lower socio-economic status would qualify for work-study than would their socio-economic superiors.

An explanation in regard to the use of the G.I. Bill by Mexican-Americans is that students in the University in 1969 may have been drafted at a time when it was more common for lower classes to be drafted than middle classes due to the college deferment option. Since these data indicate that there are more lower class Mexican-Americans in the sample, it follows that more of them would have been drafted and therefore, more would be eligible for the G.I. Bill.

Another interesting finding was related to differences in student wages. Of the 144 students who indicated they worked, 135 provided information about their hourly rate of pay. As Table 5 indicates, there was a startingly large wage differential between Anglos and Mexican-Americans. Mexican-American students on the whole were clustered at the lower end of the pay scale in larger percentages than Anglos.

Mexican-American students who work might simply be less knowledgeable about higher paying jobs, thereby finding themselves in relatively lower paying positions. Knowledge of the world of work and employment opportunity is undoubtedly related to social class. It might follow, therefore, that because many Mexican-American students come from the lower social classes they lack information about higher paying jobs. As a result, these students, taken as a group, work for lower hourly wages than do their Anglo counterparts.

If, on the other hand, one assumes that college students as a group have about the same level of skills and knowledge of job opportunities, a case could be made for ethnic discrimination. Mexican-American students are simply not paid the wages of Anglo students, despite the recent laws regarding equal employment opportunity. Whether Mexican-American students work for lower hourly wages because their social class position gives them less access to higher paying jobs or because they are discriminated against cannot be decided by this paper. It can be stated, however, that working Mexican-American students in the present sample did, in fact, receive a larger percentage of the wages at the lower end of the scale than did Anglo students.

Another fact about differences between Mexican-American and Anglo working students was discernable from the study. Mexican-American students, as might be predicted, used a great deal more Spanish at work than did Anglos (Table 6). It is interesting to note, however, that many Anglos used some Spanish at work and many Mexican-Americans used none, which attests to the bilingualism of the El Paso community.

Is this perhaps another explanation for the lower hourly rates of Mexican-American students? Given two findings, (1) more Mexican-American students have low paid jobs than Anglos, and (2) more Mexican-American students speak Spanish at work than Anglos, one might speculate on the relationship. Are the lower paying jobs also Spanish speaking jobs? What are these jobs? One might hypothesize that they are factory, clerical or sales jobs rather than computer or drafting jobs, for example, but this cannot be stated definitely without added investigation.

There were a number of residential and educational differences between Anglo and Mexican-American students. Twice as many Mexican-American students were born in El Paso compared to the number of Anglo students in that category (78% to 39%), which probably indicates that Mexican-Americans are less mobile than Anglos. This again may be related to social class. Since Mexican-American students were found more often in the lower social classes than Anglo students, more of them should be resident natives. This was indeed the case.

Following the classification of elementary schools and secondary schools in three categories, namely: (1) those attended by predominantly Mexican-American students, (2) those attended mostly by Anglo students, and (3) those attended by approximately equal numbers of Anglo and Mexican-American students, significant differences between groups become apparent. Public schools in El Paso are neighborhood schools and therefore reflect the nature of the population served. A glance at Table 7 indicates that by percent more Anglo students attended predominantly Mexican-American elementary and secondary schools than did Mexican-American students attend predominantly Anglo schools (elementary school 28% to 21%; secondary school 20% to 16%). The table also indicates that there were fewer of each outside group attending respective Anglo and Mexican-American secondary schools than were in attendance in the elementary schools. Some of the differences in enrollments between the percentage of Anglos and Mexican-Americans enrolled in alien elementary and secondary schools may be due to changes in neighborhoods from the time the student graduated from the elementary school and the time data were assembled. The median date of graduation from elementary school was 1962-63; the median date of graduation from secondary school was 1966-67. The secondary schools would probably not only change more slowly, but in addition may draw from relatively more neighborhoods than do the elementary schools; therefore, local ethnic mobility might not affect them as rapidly as elementary schools.

A related area of investigation was the relationship between the nature of preparatory education and grades earned in college. Unfortunately grade point averages were not available for all students. Nevertheless, for those that were recorded, no statistically significant differences were found between grade point averages of Mexican-Americans attending predominantly Mexican-American elementary and secondary schools and Anglos attending predominantly Anglo schools (Table 8). In other words, Mexican-American students attending predominantly Mexican-American schools did as well on overall grade point average as did Anglos attending predominantly Anglo schools. Evidently the University admission procedures eliminated the "non-performers" from both groups, thus equalizing the performance levels.

Further study indicates that Mexican-American students from predominantly Mexican-American secondary schools had grade point averages more like the total sample of Anglo students than did Mexican-American students who attended predominantly Anglo or mixed schools. This finding strongly implies the need for additional research with regard to the nature and quality of academic preparation which students receive in the local school system.

As indicated in Table 9, the Mexican-American students in the sample had significantly more siblings than did the Anglo students. This may merely be another evidence of social class differences since lower social classes have larger families than do the middle and upper social classes (Pitts, 1964).

Another significant factor which is no doubt related to the above is the relatively strong influence of the Catholic Church upon a high percentage of Mexican-American families. El Paso may have a rather unique situation, in that one arm of the Church, located in neighborhoods largely populated by lower class Mexican-Americans, remains almost totally Mexican in tradition. Priests are Mexican, and even Spanish in some cases, and the Mass is said in Spanish. In these places of worship, birth control methods are certainly not condoned, and most probably not even mentioned. Thus, the Church may in part account for larger families among the Mexican-American students, as compared with the Anglos included in this study.

Another cluster of difference between Mexican-American and Anglo students appeared in the general area of language assessment. First, students were asked to assess their Spanish capability, by assigning themselves a rating in one of the following categories: (1) Formal, educated style, (2) Informal, everyday style, (3) Southwest dialect, (4) Border slang, or (5) Cannot handle. As shown in Table 10, significant differences were apparent between the Anglo and Mexican-American subgroups.

As one might have expected, Mexican-American students, as a whole, rated their Spanish capability as being at a significantly higher level than did their Anglo counterparts (88% Mexican-Americans in the top two categories, compared with 36% of the Anglos). Similarly, 46 percent of the Anglos reported that they could not handle Spanish, as compared with only one Mexican-American respondent who rated himself at that level!

Students were then asked to appraise their English capability with the same system of classification. All but two students, both Anglo, answered only in the upper two choices, "Formal, educated style" or "Informal, everyday (Table 11)." Although 78 percent of the total sample responded with the top category, the breakdown between Anglos and Mexican-Americans was 82 percent to 73 percent respectively. On the other hand, only 16 percent of the Anglos said their English capability was "Informal, everyday," or less, while 27 percent of the Mexican-Americans answered in this category. A Chi Square comparison yielded a significant statistical level which was <.05, but >.02.

Similarly, students were asked the judge the type of Spanish used in the area (Table 12). Unlike the previous evaluation of English usage, students responded in each of the four categories, ranging from "Border slang" to "Formal, educated style." It is signficant to note that only

2 percent of the total sample believed that the type of Spanish used locally was the "Formal, educated style." The most popular overall view was "Border slang" (41%), with 51 percent of the Anglos and 31 percent of the Mexican-American students selecting this designation. The second most popular choice was "Informal, everyday;" chosen by 37% of the entire sample. However, for this category Mexican-Americans had the higher percentage (40% as compared with 32% for Anglos). The remaining students chose "Southwest dialect," and again this was favored by more Mexican-American students than Anglo students (24% to 17%).

It appears that Anglos and Mexican-Americans, in general, agreed with a broad evaluation of the type of Spanish spoken in the area. The disagreement appeared primarily in assigning specific categories, a factor which might be accounted for by the fact that Anglos are not as familiar with spoken Spanish and, perhaps, less able to arrive at an accurate evaluation than are Mexican-Americans. Nevertheless, most Mexican-American students were also doubtful that a formal educated style of Spanish was used in the area.

Mexican-American students, on the other hand, may not be familiar with formal, educated Spanish. They speak, and perhaps even write, the style of Spanish which is used by their family and those with whom they have contact in the immediate environment. When asked to assess the "type of Spanish used in the area," they may be at a loss in arriving at an informed judgment. As a result, their responses may have been significantly influenced by comments of other people, i.e., Spanish teachers, individuals who for one reason or another have made comments on the subject.

Although some Anglos reported that they had made some effort to improve their English, most indicated they had not (39% who had, compared to 61% who said they had not). In comparison, a slight majority of Mexican-American students indicated they had made an effort to improve their English (52% said they had; 42% said they had not). As shown in Table 13, there was a significant difference between the two groups.

Perhaps the Anglos, after having been reared in English-speaking homes and educated in English-speaking schools, saw little room for improvement Mexican-Americans, on the other hand, particularly those whose families speak only Spanish, might have recognized a deficiency and taken steps to improve their English. Although English might not have been the primary language in their immediate environment, they no doubt recognized its importance in allowing an individual to effectively interact in the American mainstream.

A similar question was then asked relating to students' efforts to improve in knowledge and use of Spanish. In a bilingual community one would think that Anglo students would try to improve their Spanish and that Spanish-speaking students would not be overly concerned with this matter. Quite the opposite appears to be true. A vast majority (75%) of the Mexican-American students said they had made an effort to improve their Spanish, while less than a third (32%) of the Anglo students reported that they had made the same kind of effort (Table 14).

On the basis of these data, it appears that Mexican-American students at the college level are more aware of language than their Anglo counterparts. That they should strive to improve their English ability is not surprising considering the disdain that most Americans have for foreign languages and the economic, social and educational advantages of knowing English. What is surprising is that substantially more of them made an effort to improve their Spanish! This might be related to ethnic pride or perhaps the influence of their Spanish teachers, their homes or all three. On the other hand, it might be possible that the same factors (pride, cultural commitment, etc.) led them to respond affirmatively to that question, whether or not they had made a conscious effort to improve their Spanish. Further investigation is needed to determine not only the validity of this finding, but also the motivational factors behind this phenomenon.

It is noteworthy that over 30 percent of the Anglos reported making some effort to improve their language skills in both Spanish and English. Is this a border influence? Would students in middle America indicate a larger or smaller degree of interest in improving their English and/or some foreign language? Questions also arise as to the concern of other hyphenated Americans with English and their ethnic language. One study (Bossard, 1945) shows that some foreign students in the East were sufficiently concerned with English so that they (1) worked to correct their foreign accent, (2) were acutely aware of their language problems, and (3) resented their parents' lack of ability in English.

It is gratifying to note that some of the students in the present study made an effort to improve their language skills, but it is a rather sad commentary that these students were overwhelmingly a part of an ethnic American subculture. In the opinion of the authors, it would be far better if most college students, regardless of ethnic background, made efforts to improve their language skills, both in English and in other languages.

Analysis of Similarities. Anglos and Mexican-Americans were found to be strikingly similar in many regards. Table 15 presents these similarities in a rather brief, encapsulated manner.

Without belaboring the point, the two groups ranged in age from 18 to 57 years, with the average computed at approximately 21. It appears from an analysis of the current sample that students enter the University and proceed through the traditional four years of undergraduate education at approximately the same rate. This finding seems to disprove the often-stated point of view that minority group students must interrupt their study in order to maintain financial solvency. It might also be suggested that the tuition charges at U.T. El Paso are within reach of all students.

When student aspiration level was rated on a continuum from 1 to 5, with "1" representing Very Low and "5" representing Very High, equivalent average ratings of 2.5 for both Anglos and Mexican-Americans were obtained. Similarly, the most common goal of both groups was that of obtaining a Master's Degree. It appears that although the group as a whole was rated as having a below average level of aspiration (based on future career goals and earnings expectations), there were no significant differences between the Anglo and Mexican-American subgroups.

In general it can be stated that approximately 50 percent of the subjects included in the study were employed, working an average of twenty hours per week. No significant differences were noted between the two groups on those variables (although, as previously reported, wage differentials between the two groups did exist).

Although some differences relating to financial assistance were apparent and discussed previously (percent of college costs assumed by students, work-study assistance and G.I. Bill benefits), there appeared to be no major discrepancies in other areas of financial aid. The factor which stands out rather markedly is that relatively small percentages of all students were receiving the benefit of loans, scholarships and grants. It might be predicted that current legislative efforts toward providing financial assistance for ethnic minorities in higher education might alter these figures drastically. It would certainly be an important topic to be researched if evaluation and assessment are considered important to this vast national commitment.

Recommendations. Since a review of the literature revealed that very little research has been directed toward an analysis of the Mexican-American student in higher education, and in light of the relatively recent national concern for the fate of minority groups in colleges and universities, it is recommended that additional studies of a similar nature be conducted. Hopefully, a central data bank can be established wherein all relevant studies and findings might be collected, synthesized and disseminated. In that manner, institutions might become more knowledgeable and responsive to the special characteristics and needs of Mexican-American students.

It should be pointed out that this study intentionally selected approximately equal numbers of students from each of the four University grade levels. The results, therefore, may not present an accurate picture of the "typical" Anglo and Mexican-American student on a college campus. These students (particularly those at the junior and senior levels) represent ones who have "made it", who have adequately functioned in the system. A great deal more must be done in studying the special needs and characteristics of students who did not flourish and who were not able to survive, finding it necessary to withdraw for whatever reason or reasons.

The current study presents a profile of the Anglo and Mexican-American student at the University of Texas at El Paso. It represents only a modest beginning, with a great deal of additional research and analysis yet to be completed. It is hoped, however, that other researchers who have the fortunate opportunity to interact with Mexican-American students will find this a most promising area of study and investigation. Through a process of cooperative, mutually-shared concern, we should be able to more successfully realize the goal of more complete and empathic understanding of the total population of American college students.

Footnotes

[1]This was no doubt caused by the manner in which the 1970 census classified people of Mexican heritage, in contrast to the 1960 census. The 1960 census used only Spanish surname, while the 1970 census used Spanish surname or Spanish heritage. The 1970 definition follows: "Persons of Spanish mother tongue <u>and all other persons in families in which the head or wife reported Spanish as his or her mother tongue</u> (U.S. Census Bureau, 1970)." [Underlining provided by the authors]

[2]Dr. Jacob Ornstein, the linguist on the team, investigated the linguistic capabilities of a sub-sample of Mexican-American students drawn from the sample. His preliminary results and conclusions are reported in the paper, entitled "Relational Bilingualism--A Socio-Educational Approach to Studying Multilingualism Among Mexican-Americans," prepared for the IXth International Congress of Anthropological and Ethnological Sciences, August 23-September 8, 1973, Chicago, USA.

[3]Copies may be made available upon request by contacting the Cross-Cultural Ethnic Study Center, Box 13, El Paso, Texas 79968.

[4]The use of the word Anglo in this paper refers to someone who does <u>not</u> possess a Spanish surname; Mexican-American refers to an individual <u>who</u> has a Spanish surname.

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  1970b General Social and Economic Characteristics, PC(1)-C45,
      Washington, D.C.: Superintendent of Documents, (April): p. App. -7.

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Table 1

Scale Scores for Education and Occupation

Scale Score	Education (Revised Hollingshead)	Occupation (Duncan SEI)
8	Ph.D. or Equivalent	100-90
7	Post Graduate (MA)	89-80
6	College Graduate	79-70
5	Some College	69-60
4	High School Graduate	59-50
3	Some High School	49-40
2	Elementary School (7-8)	39-30
1	Elementary School (1-6)	29-0

Table 2

Social Class Distribution of a Sample of
U.T. El Paso Students by Ethnicity, 1969-1970

Social Class	Anglos		Mexican-Americans		Total	
	No.	%	No.	%	No.	%
Lower-Lower	1	1%	31	24%	32	12%
Upper-Lower	24	18%	48	37%	72	28%
Lower-Middle	41	32%	36	28%	77	30%
Upper-Middle	48	37%	12	9%	60	23%
Lower-Upper	15	12%	3	2%	18	7%
Total Reporting	129	100%	130	100%	259	100%
(Social Class Not Reported)	19		23		42	
Total in Sample	148		153		301	

p $< .001$ (Kolmogorov-Smirnov one-tailed test)

Table 3

Father's Yearly Salary

Salary Range	Anglos No.	Anglos %	Mexican-Americans No.	Mexican-Americans %	Total No.	Total %
Less than $3,000	1	1%	3	3%	4	2%
$3,000 to $4,999	0	0%	12	11%	12	6%
$5,000 to $6,999	15	15%	32	28%	47	22%
$7,000 to $8,999	9	9%	30	27%	39	18%
$9,000 to $10,999	22	23%	18	16%	40	19%
$11,000 to $14,999	22	23%	10	9%	32	15%
$15,000 to $24,999	9	9%	1	1%	10	5%
$25,000 to $29,999	1	1%	0	0%	1	1%
$30,000 +	5	5%	2	2%	7	3%
Totals	98	100%	112	100%	210	100%

$p < .001$ (Kolmogorov-Smirnov one-tailed test)

Table 4

University Costs of University Students

Financial Aid Category	Anglos No.	Anglos % of all Anglos (N=148)	Mexican-Americans No.	Mexican-Americans % of all M/A's (N=153)	Total No.	Total % of all Students (N=301)
No Costs Assumed by Students*	56	38%	28	18%	84	28%
G.I. Bill Benefits**	4	3%	19	12%	23	8%
Work-Study Assistance***	6	4%	19	12%	25	8%

*$p < .0001$
**$p < .0001$
***$p < .0001$

Table 5

Hourly Wages Paid to Students

Hourly Wages	Anglos		Mexican-Americans		Total	
	No.	%	No.	%	No.	%
$0.99 or below	0	0%	1	1%	1	1%
$1.00 to $1.59	10	16%	25	34%	35	26%
$1.60	13	21%	19	26%	32	24%
$1.61 to $1.74	1	2%	2	3%	3	2%
$1.75 to $1.99	13	21%	9	13%	22	16%
$2.00 to $2.49	10	16%	8	11%	18	13%
$2.50 to $3.99	12	19%	7	10%	19	14%
$4.00 to $4.49	0	0%	1	1%	1	1%
$4.50 to $4.99	0	0%	0	0%	0	0%
$5.00+	3	5%	1	1%	4	3%
Totals	62	100%	75	100%	135	100%

$p < .01$ (Kolmogorov-Smirnov one-tailed test)

Table 6

Students' Use of Spanish at Work

Use of Spanish	Anglos		Mexican-Americans		Total	
	No.	%	No.	%	No.	%
Usually	3	5%	12	16%	15	11%
Frequently	1	1%	35	46%	36	25%
Occasionally	25	38%	23	30%	48	34%
Never	37	56%	6	8%	43	30%
Totals	66	100%	76	100%	142	100%

$p < .001$ (Kolmogorov-Smirnov one-tailed test)

TABLE 7

ELEMENTARY AND SECONDARY SCHOOL ATTENDANCE
BY ETHNICITY OF SCHOOL

Students	Elementary School Attended**						Secondary School Attended***					
	Mostly Mexican-American		Mostly Anglo		Mixed		Mostly Mexican-American		Mostly Anglo		Mixed	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Anglos	40	28%	33	79%	30	60%	22	20%	56	84%	45	52%
Mexican-Americans	104	72%	9	21%	20	40%	90	80%	11	16%	42	48%
Totals	144*	100%	42*	100%	50*	100%	112*	100%	67*	100%	87*	100%

*Many students in the sample did not attend elementary or secondary school, or both, in El Paso which accounts for the smaller sample numbers.

**p < .001
***p < .001

TABLE 8

GRADE POINT AVERAGE OF MEXICAN-AMERICAN
AND ANGLO STUDENTS BY PREVIOUS SCHOOL ATTENDANCE

	Elementary School*				Secondary School**			
University GPA	Anglos in Anglo School No.	%	Mexican-Americans in Mexican-American School No.	%	Anglos in Anglo School No.	%	Mexican-Americans in Mexican-American School No.	%
0.0 to 0.5	1	3%	0	0%	1	2%	0	0%
0.6 to 1.0	0	0%	4	4%	0	0%	4	5%
1.1 to 1.5	3	9%	6	7%	2	4%	2	2%
1.6 to 2.0	4	13%	18	20%	8	15%	15	19%
2.1 to 2.5	7	22%	26	29%	15	28%	23	28%
2.6 to 3.0	9	28%	20	22%	15	28%	20	25%
3.1 to 3.5	6	19%	14	15%	11	21%	14	17%
3.6 to 4.0	2	6%	3	3%	1	2%	3	4%
Totals	32	100%	91	100%	53	100%	81	100%

*$p > .50$, $< .70$ (Median Test)
**$p > .90$, $< .95$ (Median Test)

Table 9

Number of Siblings of University Students
By Ethnicity

Number of Siblings	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
0	13	9%	5	3%	18	6%
1	33	22%	16	11%	49	16%
2	43	29%	26	17%	69	23%
3	29	20%	33	22%	62	21%
4	12	8%	19	12%	31	10%
5	9	6%	24	16%	33	11%
6	0	0%	8	5%	8	3%
7	4	3%	9	6%	13	4%
8+	5	3%	12	8%	17	6%
Totals	148	100%	152	100%	300	100%

$p < .001$ (Kolmogorov-Smirnov one-tailed test)

Table 10

Students' Self-Evaluation of Spanish Capability

Spanish Capability	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
Formal, educated	21	14%	48	31%	69	23%
Informal, everyday	32	22%	87	57%	119	40%
Southwest dialect	6	4%	14	9%	20	7%
Border slang	18	13%	3	2%	21	7%
Cannot handle	69	47%	1	1%	70	23%
Totals	146	100%	153	100%	299	100%

$p < .001$ (Kolmogorov-Smirnov one-tailed test)

Table 11

Students' Self-Evaluation of English Capability

English Capability	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
Formal, educated	121	82%	112	73%	233	78%
Informal, everyday	24	16%	41	27%	65	22%
Southwest dialect	1*	1%	0	0%	1	0%
Border slang	0	0%	0	0%	0	0%
Cannot handle	1*	1%	0	0%	1	0%
Totals	147	100%	153	100%	300	100%

*X^2 figured without two respondents

$p < .05, > .02$ (Kolmogorov-Smirnov one-tailed test)

Table 12

Students' Evaluation of Type of Spanish
Used in the Area

Type of Spanish Used in Area	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
Formal, educated	0	0%	7	5%	7	2%
Informal, everyday	46	32%	62	40%	108	37%
Southwest dialect	24	17%	36	24%	60	20%
Border slang	72	51%	48	31%	120	41%
Totals	142	100%	153	100%	295	100%

$p < .001$ (Kolmogorov-Smirnov one-tailed test)

Table 13

Students' Reported Efforts to Improve English

Efforts to Improve English	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
Have made an effort	58	39%	79	52%	137	46%
Have not made an effort	90	61%	73	48%	163	54%
Totals	148	100%	152	100%	300	100%

p $<.05, >.02$ (Kolmogorov-Smirnov one-tailed test)

Table 14

Students' Reported Efforts to Improve Spanish

Efforts to Improve Spanish	Anglos No.	%	Mexican-Americans No.	%	Total No.	%
Have made an effort	48	32%	114	75%	162	54%
Have not made an effort	100	68%	38	25%	138	46%
Totals	148	100%	152	100%	300	100%

p $<.001$ (Kolmogorov-Smirnov one-tailed test)

Table 15

Analysis of Similarities Between
Anglos and Mexican-Americans

Variable	Average Anglo Student	Average Mexican-American Student	Overall Average
Age	21 yrs.	21 yrs.	21 yrs.
Highest Degree Expected	Master's	Master's	Master's
Total Aspiration Score*	2.5	2.5	2.5
Percent of Subgroup Employed	46%	50%	48%
No. of Hours Employed Per Week	20 hrs.	20 hrs.	20 hrs.
Percent of Subgroup Receiving Loans	13%	16%	15%
Percent of Subgroup Receiving Scholarships	8%	7%	7-8%
Percent of Subgroup Receiving Grants	6%	10%	8%

*Based on a scale of 1 - 5, with "1" representing Very Low and "5" representing Very High.