Determining the earning patterns of two major Southwestern groups—Anglos and Chicanos—the study assessed the relative values of higher education to each group. Male alumni between the ages of 22 to 55 from New Mexico State University were studied. Of the 30% response return in December 1972, approximately 89% were from Anglos and 11% from Chicanos. Data were compared for average salary according to age and year of entry into the university. The study found that recent Chicano graduates were earning less than Anglo graduates, although the difference disappeared in less than 10 years. It also concluded that less than a 4-year college education provided the Chicano with only marginal economic benefits, since those with 1 to 3 years of college earned only 10% more than high school graduates. Much of this might be explained by a dual labor market and low salary expectations, although evidence suggested that the financial ill effects of discrimination disappear with job experience. (KM)
A COLLEGE EDUCATION: DOES IT SIGNIFICANTLY ENHANCE THE ECONOMIC ACHIEVEMENT OF CHICANOS?

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Center for Business Services

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A COLLEGE DEGREE: DOES IT SUBSTANTIALLY ENHANCE THE ECONOMIC ACHIEVEMENT OF CHICANOS?

A Working Paper

by

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Presented at
Southwestern and Rocky Mountain Division
American Association for the Advancement of Science
Lubbock, Texas
April 19, 1973

CENTER FOR BUSINESS SERVICES

CIRCASIONAL PAPER NO. 503
Introduction

A number of extremely significant conditions appear to be simultaneously affecting young adults who are involved with higher education. Many entered institutions of higher education expecting to use their college degree as a stepping stone to economic success. In reality, recent graduates are finding many labor markets and job specialties glutted with graduates.

The case of New Mexico is certainly no exception. A recent study by the Governor's Advisory Committee on Employment\(^2\) showed that New Mexico is able to absorb only 25\% of its college graduates under ideal conditions. In 1972, 24\% of the graduates of New Mexico colleges and universities found employment in the state. Another 24\% found positions requiring a college degree outside of the state. In other words, slightly less than fifty percent of New Mexico's college graduates were able to find positions requiring a college degree.

To the typical student such figures must be alarming even if he or she does not perceive a college education in terms of its economic potential. However, to the minority students, these figures must be especially distressing. For the first time in United States history, significant numbers of minority students

\(^2\)Governor's Advisory Committee on Employment, Employment Problems of New Mexico Graduates, 1972, pp. 2-3.
are enrolling in four year institutions in significant numbers relative to their share of the overall population. The number of Chicanos in institutions of higher education now exceeds 100,000 for the first time in history. In addition, the number of Chicanos in the 1972 freshmen class is approximately twice as large as the number in the 1968 freshmen class. The vast majority of these students are enrolled in colleges and universities in the five Southwestern states with substantial Chicano populations: Arizona, California, Colorado, New Mexico and Texas.

In brief, at a time when Chicanos are on the verge of entering labor markets requiring a college education, the markets appear to be glutted with college graduates. But, an additional confusing issue is that there is a supposed shortage\(^2\) of college educated minority students. Also, stories abound of the high salaries being offered by various agencies and corporations to qualified minorities. In essence, the labor markets apparently are transmitting conflicting signals. One signal is that a college education is an \textbf{economic} mistake, but a contradictory signal indicates that preferential hiring of minorities may immune college educated Chicanos -- and other minority students -- from these unfavorable market conditions.

Yet, recent policy statements by a wide range of organizations seem to be taking the experience of the general population as a

\(^2\)It is reasonable to believe that the shortage is real in the case of Chicanos since only 1.6% of the Chicano population possesses a college degree.
gauge for all groups within the economy -- including blacks and Chicanos. Recent recommendations by the Governor's Advisory Committee (New Mexico) stated that "alternatives to college -- and manpower needs that do not require college training -- should receive greater emphasis and recognition."\(^3\)

Although such a policy may be appropriate for the relatively well-educated Anglo majority, it is not clear that such a recommendation is a sound policy for Chicanos at a time when they may finally be entering skilled jobs in significant numbers. Yet, it seems reasonable to speculate that the appeal for more vocational training may have the greatest appeal to minorities whose families have not developed traditions of college education.

One way to focus attention on this issue is to consider the expected economic value of a higher education to a minority student relative to the economic value of less education. In addition, it might be useful to compare the economic performance of Chicanos to that of Anglos to see if recent assertions regarding preferential treatment of Chicanos is valid. In brief, the purpose of this study was to determine the earning patterns of the two major groups in the Southwest -- Anglos and Chicanos and to assess the relative value of higher education to each. Finally, the study was designed to assess the relative value of college education to the Chicano.

An examination of these issues may be useful not only for the minority individual anticipating a college career, but it might also provide useful information for those individuals making long run plans for state educational agencies and institutions in the Southwest. It may be that funds should be redirected away from colleges to vocational schools in order to enhance minority group economic success. Likewise, it may be that high school administrators and counselors should be directing minority students toward vocational programs rather than toward college-oriented programs.

Methodology

In an attempt to determine the answers to some of these issues, the authors decided to examine the economic performance of the ex-students (Chicano and Anglo) of a single institution of higher education. By concentrating on one institution, it was possible to avoid problems encountered in similar studies which sought to focus on the benefits of education. That is, studies dealing with black education have had difficulty controlling for differences in the quality of educational institutions. In these studies, it was found that blacks normally attend black institutions in the South and whites attend predominantly white colleges located throughout the United States. Since all-black colleges are found to be of
highly variable quality, it was difficult to make a valid assessment of their contribution to economic achievement.\textsuperscript{4}

Our study of Chicanos drew on the economic performance of the alumni of New Mexico State University -- a university with a substantial Chicano enrollment. Data dealing with this performance were gathered from a questionnaire sent to these alumni in December 1972.\textsuperscript{5} By concentrating on this rather homogeneous group, the problem noted above, and others not mentioned, were avoided.

This group included the 9,500 known alumni of the University. Our analysis focused on approximately one-half of these 9,500 alumni. The group selected from the population for analysis included only males between the ages of 22 and 55. In essence, the study ignored all females and all men who were approaching retirement age. Women were excluded because of their erratic rate of entry into the labor market. Additionally, our sample of Chicanas was too small for meaningful analysis. In the case of men over age 55, it was found that substantial numbers were retired or semi-retired, and in many cases it was not possible to determine their degree of labor market participation. Hence, they were excluded.

\textsuperscript{4}These observations are taken from a paper by Johnny Campbell entitled "Black Colleges and Rates of Return on Black Education" presented at the National Science Foundation Summer Institute (Brown University, August 1972).

\textsuperscript{5}See Appendix A for a copy of the questionnaire.
The return rate from the group selected for analysis was estimated to be approximately 30%. 89% of these responses were from Anglos and 11% from Chicanos. These figures appeared to be representative of the relative distribution of the two ethnic groups within the alumni population. All the data gathered from the two groups reflect economic and career development as of December, 1972.

**Issues Examined:** In an attempt to discern the contribution of higher education to Chicano economic achievement, the data were evaluated in three different ways. First, a comparison was made of the average present salary of Anglos with the same measure for Chicanos controlling for the number of years of education received. This calculation would provide an indication of the impact of additional education on economic achievement. However, such a summary figure including alumni of many different ages might provide a distorted picture of the true contribution of education. To clarify this issue, an analysis was made of the present salaries of Chicanos and Anglos, grouped according to age. Finally, an examination was made of the present salary structure of Anglos and Chicanos, grouped according to "year of entry" into the University.
Findings

The findings with regard to this three-way analysis of salary are included in the sections below.

Present Salary and Number of Years of College: Table 1 shows the number of years of college attained and the average salary for the 1,500 graduates. Several observations are warranted on the basis of the data. First, in general there does not appear to be significant economic returns to graduate education. Second, the data tend to indicate that there is no blatant economic discrimination against Chicanos since there is no major divergence between Anglos and Chicanos who possess the same level of education. However, such an observation may not

<table>
<thead>
<tr>
<th>Years of Education</th>
<th>Anglo Average</th>
<th>Chicano Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>18,600</td>
<td>16,200</td>
</tr>
<tr>
<td>5</td>
<td>17,400</td>
<td>17,800</td>
</tr>
<tr>
<td>6</td>
<td>15,300</td>
<td>13,900</td>
</tr>
<tr>
<td>7</td>
<td>17,900</td>
<td>19,400</td>
</tr>
<tr>
<td>8</td>
<td>21,900</td>
<td>15,000</td>
</tr>
<tr>
<td>9</td>
<td>16,500</td>
<td>17,500</td>
</tr>
<tr>
<td>10</td>
<td>16,200</td>
<td>15,200</td>
</tr>
<tr>
<td>more than 10</td>
<td>17,400</td>
<td>21,000</td>
</tr>
<tr>
<td>Overall average</td>
<td>17,750</td>
<td>17,125</td>
</tr>
</tbody>
</table>
be warranted when the data from the questionnaires are evaluated from a slightly different perspective. **Age and Present Salary:**

Table 2 provides a summary of the relationship between the ages of the alumni and their average present salary for both Anglos and Chicanos. The evidence implies that there is a positive relationship between years in the labor market and average annual salary. That is, more job experience generates higher annual earnings for both Anglos and Chicanos. Also, it appears that age (and implicitly experience) is a more important determinant of earnings than is education.

Finally, the data indicate that on the average young Chicanos entering the labor market are not receiving salaries in excess of

**Table 2: Age and Present Earnings: Anglos and Chicanos**

<table>
<thead>
<tr>
<th>Age</th>
<th>Anglo Average</th>
<th>Chicano Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-25</td>
<td>11,000</td>
<td>9,600</td>
</tr>
<tr>
<td>26-28</td>
<td>12,300</td>
<td>10,300</td>
</tr>
<tr>
<td>29-31</td>
<td>15,000</td>
<td>15,720</td>
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<tr>
<td>32-34</td>
<td>15,720</td>
<td>18,700</td>
</tr>
<tr>
<td>35-37</td>
<td>18,680</td>
<td>18,400</td>
</tr>
<tr>
<td>38-40</td>
<td>19,300</td>
<td>17,720</td>
</tr>
<tr>
<td>41-43</td>
<td>19,560</td>
<td>17,860</td>
</tr>
<tr>
<td>44-46</td>
<td>20,600</td>
<td>21,280</td>
</tr>
<tr>
<td>47-49</td>
<td>24,000</td>
<td>23,800</td>
</tr>
<tr>
<td>50-52</td>
<td>23,360</td>
<td>15,880</td>
</tr>
<tr>
<td>53-55</td>
<td>23,340</td>
<td>16,300</td>
</tr>
</tbody>
</table>
their Anglo counterpart. That is, it appears that preferential hiring practices -- to the extent that they exist for minorities -- are not serving to provide high earnings.

Year of Entering College and Present Salary: the third table shows the earnings of New Mexico State University alumni in terms of the year in which they entered the University. These data are provided for both Anglos and Chicanos. As might be expected, there tends to be a positive relationship between average salary and the number of years since entering college. This trend existed for both ethnic groups. Again, it should be noted that recent Chicano graduates entering the labor market are not doing well relative to their Anglo classmates. Such a divergence between Anglo and Chicano earnings reinforces the observations made with respect to Table 2.

Table 3: Year Entering the University and Present Salary: Anglo and Chicano

<table>
<thead>
<tr>
<th>Year of Entry</th>
<th>Anglo Average</th>
<th>Chicano Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946-1948</td>
<td>23,600</td>
<td>22,000</td>
</tr>
<tr>
<td>1949-1951</td>
<td>20,300</td>
<td>18,200</td>
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<tr>
<td>1952-1954</td>
<td>19,600</td>
<td>18,100</td>
</tr>
<tr>
<td>1955-1957</td>
<td>20,800</td>
<td>17,100</td>
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<tr>
<td>1958-1960</td>
<td>17,100</td>
<td>15,700</td>
</tr>
<tr>
<td>1961-1963</td>
<td>14,400</td>
<td>16,000</td>
</tr>
<tr>
<td>1964-1966</td>
<td>12,300</td>
<td>11,600</td>
</tr>
<tr>
<td>1967-1969</td>
<td>11,800</td>
<td>8,000</td>
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</tbody>
</table>
An Analysis of the Findings

A number of important conclusions appear to be warranted on the basis of the evidence cited above. First, it would appear that recent Chicano graduates are not receiving inordinately high salaries relative to their Anglo peers. In fact, the opposite is the case. For some reason recent Chicano graduates are earning less than the recent Anglo graduates though the difference does disappear in less than ten years. This finding is substantiated by examining the starting (rather than present salaries) salaries of recent graduates. In the most recent three year period, Chicano starting salaries were only 86% of the Anglo average starting salaries. For the fourteen year period prior to that, the average was 95%.

How can the apparent salary -- starting and present -- differential between Anglos and Chicanos be explained. One explanation might involve the working of a dual labor market. A dual labor market is characterized by conditions in which certain workers have behavioral traits to operate efficiently in given jobs because superficially they possess characteristics of lower skill workers. Such might be the case with the young Chicano graduate. Although he possesses the necessary skills to do jobs

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requiring a college education, he may be relegated to low skilled jobs with less pay because he possesses values and attitudes attributed to working class Chicanos. Chicanos, supposedly possessing different values and norms from the Anglo majority, will continue to receive less money until they can demonstrate that they possess the proper attitudes and values. In essence, the evidence suggests that there is an acculturation process required for the Chicano. After several years of "on-the-job" acculturation, the Chicano may be able to demonstrate that he possesses the necessary Anglo values. Such an hypothesis seems consistent with the initial salary differential and the disappearance over time of such a differential.

Another explanation worth additional exploration involves the impact of salary expectations on actual salaries. It may be that since Chicanos tend to come from lower socio-economic levels than their Anglo counterparts, they may have lower income expectations than the Anglo graduates. Hence, it is more likely that they will find an acceptable job (in terms of salary) than their Anglo counterpart for a given amount of search. Stated differently, the Anglo will undertake a greater amount of search in order to find a satisfactory job.

It may not be until the Chicano is employed that he realizes that his salary is relatively low. Then, he may undertake the

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7The difference in socio-economic background was established in an earlier study at New Mexico State University.
necessary amount of search to remove the pay differential between himself and his Anglo peers. Such a process would not occur instantaneously, and it seems reasonable to argue that several years might be necessary to remove the full differential. Again, such an hypothesis seems to be consistent with the observed facts.

Thusfar, the analysis has focused on explaining the existence of salary differentials between the two groups. But a more important issue has been ignored. In light of this pay differential, should Chicanos undertake to earn a college degree? From the viewpoint of making a rational economic decision, the critical factor really is not the relationship between Anglo and Chicano earnings. Rather the relevant consideration involves the relationship between the earnings of college educated Chicanos with only a high school education. That is, without a college degree, what can a Chicano expect to earn? Bureau of Census data indicate that the average Chicano high school graduate earns $8,000 per year.\textsuperscript{8} Both 1970 Census data and the data of our study indicate that one to three years of post high school education generates very small gains in annual earnings. For example, for Chicanos between the ages of 25 and 64 with one to three years of post high school education, the average income is $8,800 per year, only 10% above the average for a high school graduate. According

\textsuperscript{8}For New Mexico only, the average is $5,400 per year. (Bureau of Census, \textit{Detailed Characteristics, New Mexico}, 1969, Table 197, p. 535).
to the Census data and our study. Chicanos with four or more years of college can expect to earn approximately 50% more than the average Chicano high school graduate.

In brief, less than a four year college education appears to provide the Chicano with only marginal economic benefits. By developing vocational skills, the Chicano may find that he is competing with a large number of other minority individuals for skilled and semi-skilled jobs. At the present time, minorities in general and Chicanos in particular are vastly over-represented in some of these skill areas. For example, 64.4% of Chicanos are employed in blue-collar positions compared to 47.1% for the United States population. Likewise, Chicanos are over-represented in the service sector of the economy while being substantially underrepresented in white collar positions.

In essence, policies implicitly or explicitly directed toward shifting Chicanos toward vocational training and away from college may be ill-advised. To the extent that dual labor markets exist, vocational training may simply push the Chicano back into a Chicano-dominated labor pool where discrimination is common.

On the other hand, a college degree does not assure a rapid ascent to high earnings. The possibilities of covert or overt discrimination may still exist despite the supposed existence of preferential hiring of Chicanos and other minorities. However,
the evidence suggests that the financial ill-effects of
discrimination toward college graduates disappear with job
experience.
Dear NMSU Alumnus:

Your help is needed -- just a few minutes of your time to complete and mail this questionnaire.

Your answers will provide valuable information regarding the role of NMSU in the career development of its ex-students. Such information will be used to assess the role of the University in the state and the region. The results of the study will be relayed to you through the Aggie Newsletter.

As you can see, there is no place for your name, so there is no way to identify an individual respondent. Therefore, you can be sure that your response will be completely anonymous.

Thank you in advance for your cooperation.

Sincerely yours,

Gerald W. Thomas
President

PLEASE COMPLETE THE QUESTIONNAIRE ON THE REVERSE SIDE
1. What years did you attend NMSU?

2. What degree(s) did you earn at NMSU?

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<th>Degree</th>
<th>Years</th>
<th>Major</th>
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</table>

3. (a) Did you attend any other college or university other than NMSU?  
   Yes [ ] No [ ]

   (b) If you answered yes in 3(a), complete 3(b)

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<thead>
<tr>
<th>College</th>
<th>Degree</th>
<th>Years</th>
<th>Major</th>
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4. Total Number of Years of College Education (please circle one)
   1  2  3  4  5  6  7  8  9  10 more than 10

5. Sex and Age: Sex: Male [ ] Female [ ] (Age: ___ years)

6. Racial or Ethnic Background (please check appropriate line)
   1. Chicano [ ] 4. Anglo [ ] 7. Other (please specify)
   2. Spanish-American [ ] 5. American Indian [ ]

7. Please complete the following:
   What was your first permanent employment after leaving NMSU?
   (a) Job Title
   (b) Type of organization or industry
   (c) Employer's location: City __________ State __________
   (d) Starting salary on an annual basis (excluding spouse's income)

   Annual Starting Income (First Permanent Position)
   $0 - 999 ______ 5,000 - 5,999 ______ 10,000 - 10,999 ______
   1,000 - 1,999______ 6,000 - 6,999______ 11,000 - 11,999______
   2,000 - 2,999______ 7,000 - 7,999______ If over 12,000 please
   3,000 - 3,999______ 8,000 - 8,999______ specify amount $ _________
   4,000 - 4,999______ 9,000 - 9,999______

   (e) Was this first position: Full time [ ] Part time [ ]

8. What is your current employment?
   (a) Job Title
   (b) Type of organization or industry
   (c) Employer's location: City __________ State __________
   (d) Present salary on an annual basis (excluding spouse's income)

   Annual Income (Present)
   $0 - 1,999 ______ 10,000 - 11,999 ______ 20,000 - 21,999 ______
   2,000 - 3,999______ 12,000 - 13,999______ 22,000 - 23,999______
   4,000 - 5,999______ 14,000 - 15,999______ If over 24,000 please
   6,000 - 7,999______ 16,000 - 17,999______ specify amount $ _________
   8,000 - 9,999______ 18,000 - 19,999______

   (e) Is your current position: Full time [ ] Part time [ ]

9. Did you have a job while you were attending college?  
   Yes [ ] No [ ] Don't remember [ ]

   If yes, what percent of your college expenses were covered by the income from your job?  
   0 - 25% [ ] 26 - 50% [ ] 51 - 75% [ ] Over 75% [ ]