Early and late applicants to Mt. San Antonio College were compared in this study on the basis of grade point average and number of course units completed. Both full-time and part-time students who applied early were compared to students who applied late. All of the students studied were admitted for the fall 1972-73 semester. The dropout rate of early and late applying students was also compared. There was no significant difference revealed in the grade point average of new full-time and part-time students applying early and those applying late. (SW)
I. TITLE

"A Comparison of the Retention and Academic Success of New Students to Mt. San Antonio College"

II. STATEMENT OF THE PROBLEM

Prospective students began applying for admission to Mt. San Antonio College's fall 1972-73 semester February 15, 1972. Those persons applying between February 15, 1972 and August 14, 1972 were identified as early applicants. Those applying for the same semester between August 15, 1972 and August 25, 1972 were classified as late applicants. Attention was given to the total units completed and grade points earned as well as the numbers that withdrew during the fall 1972-73 semester.

The researcher compared the grade point averages and units completed for both groups. Students completing twelve units or more were identified as full-time; less than twelve units were classified as part-time. Those who withdrew from among the early and late applicant groups were also identified and compared.

III. HYPOTHESIS

There is no significant difference in the grade point average of first time (day) full-time students who make early applications to Mt. San Antonio College and those who apply late.

There is no significant difference in the grade point average of the first time (day) part-time students who make application to Mt. San Antonio college and those who apply late.

There is no significant difference in the dropout rate of first time (day) students who make early application to Mt. San Antonio...
A COMPARISON OF RETENTION AND ACADEMIC SUCCESS
OF EARLY AND LATE APPLICANTS TO MT. SAN ANTONIO COLLEGE

APPLIED EDUCATIONAL RESEARCH AND EVALUATION
MODULE

By
Kay Bagan
MT. SAN ANTONIO COLLEGE

JOHN DAVIDT, COUNSEL COORDINATOR
A PRACTICUM PRESENTED TO NOVA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY
December 20, 1975
College and those who apply late.

The researcher expected she would not be able to reject those null hypotheses.

IV. BACKGROUND AND SIGNIFICANCE OF THE STUDY

Mt. San Antonio College is a community college located in Walnut, Los Angeles County, California. The enrollment is approximately 17,000 including day and evening students.

The Mt. San Antonio College District has an estimated population of 500,000. There are twenty-three public and private high schools in the district, drawn from seventeen cities.

The admission requirements, for the past several semesters have included a completed application to the college; having one of the following test scores on file, the (SAT) School and College Ability Test, the (ACT) American College Test or the (SAT) Scholastic Aptitude Test; and verified copies of all transcripts, including all high school and college grades. Upon receipt of each of these items prospective students are notified of their acceptance to the college and a personal counseling appointment is arranged.

Prospective students may begin applying for fall admission in February of each year. The application period for the 1972-'73 fall semester began February 15, 1972 and was terminated August 25, 1972.

The researcher identified February 15, 1972 through August 14, 1972 as the early application period and August 15, 1972 through August 25, 1972 as the late application period. Those students in the early application period, are often viewed as the "motivated" who are most goal oriented and have a greater opportunity to
complete their matriculation earlier and be notified of earlier appointments to meet with counselors.

Those persons who apply in the late application period are often viewed as undecided about their futures and unsure about enrolling in college. They are, in limited situations, admitted on a probational status until test results have been received.

Decisions affecting the educational experiences of these two groups of first time enrollees in college are made with limited data. The purposes of this study were to identify what happens to these students once they have enrolled; to identify full-time and part-time patterns of enrollment; grade point averages; and observe the dropout patterns of each group. The findings of the study will be used to determine whether making an early decision about attending Mt. San Antonio College results in earning a higher grade point average and completing more units of credit.

The findings will be useful in the planning and constructing the course offerings, i.e. whether there is a need to provide the same array of courses for late enrollees as for early applicants. This fall (1973-74), the college extended the application period for an additional three weeks. This study will provide a basis for a comparative study with an even later group of applicants in the future.

The researcher expects to do follow-up research, by comparing findings of this study with the 1973-74 fall, first time college students, at the completion of the first semester. Persons, responsible for making decisions about admissions, registration and
and procedures. The re-evaluation of pre-conceived ideas about students, in either group will be encouraged.

The number of dropouts will be tabulated for early and late applicants and will be significant in the profiles of both groups. Mayer and Paulson (7), also from Mt. San Antonio College, defines dropouts as, "one who drops out or withdraws officially or unofficially before completing the program in which he was enrolled."

They express concern that students who enroll in the community college and later deliberately change their minds in order to undertake preferred alternative choices, should not be regarded as negative dropout statistics or as failures. Rouche (12) supported that premise in his findings when academic ability scores appeared to be of no value in predicting junior college dropouts. He found there are certain nonintellectual differences between students who persist and those who dropout.

The researcher did not find the exact kind of problem under-study in the literature. Some related research was found and is included in the following paragraphs.

Baird (1) found few significant differences between decided and undecided students. Hecklinger (6) concluded that undecided students were less satisfied with the college environment than the decided group. The decision factor referred to choice of a major and/or occupation.

Quay and Dole (11) suggest that student attrition and satisfaction with college are related. Montgomery Community College student responses on CUEC (College and University Environment Scales) as compared with responses of students at the University of Minnesota...
suggested that some unrealistic expectations may be a result of the
general adolescent culture and others may be due to character-
istics associated with a specific institution.

Research in the past 30 to 40 years has established that past
performance in high school is the most valid single predictor of
college grades. Morrisey (8) investigated six nonintellective vari-
ables to try and explain why higher ability students withdrew be-
fore receiving a degree or else fail to perform satisfactorily.
Academic ability was controlled while the nonintellective factors:
family independence, family social status, independence, liberalism,
peer independence and sex were allowed to vary. He identified 80
per cent of the high ability liberal students from families of low
socio-economic status persist while only 43 per cent of the high
ability, liberal students from families of high socio-economic
status persist. Individual efforts to persist may be fostered by
the desire to raise social status. He also speculates persons who
have the academic ability to do college work and takes a liberal
attitude are related to a desire to change and improve the lot of
man and believes that a college education will help them in the task.

Vaughan (13) found that students, in a four year college, dis-
missed for academic failure vs. those who voluntarily withdrew for
a variety of other reasons differ in cognitive measures and in per-
sonality characteristics. The implication is a need for different
approaches with members of these two groups in attacking the college
dropout problem.
V. DEFINITION OF TERMS

First-time student - the first time the student has enrolled in any college.

Full-time student - a student enrolled in and completing 12 or more units.


Dropout - a student failing to complete the fall 1972-73 semester at Mt. San Antonio College.

Grade point average - an average that is calculated on the basis of numerical values being equated with letter grades: A=4 points, B=3 points, C=2 points, D=1 point, W=0 points, F=0 points, WF=0 points. W grades are not calculated in the total units attempted; all units for all other grades are included.

Academic success - student earning a 2.00 grade point average.

VI. LIMITATIONS OF THE STUDY

The researcher recognized certain limitations in the study. One important limitation is that it will not be possible to generalize findings to other community colleges as only Mt. San Antonio
College first-time day students were included. The total day, first-time fall 1972-73 students totaled 3,432. A random sample of approximately 25% (847) of the population was identified by selecting every fourth student in an alphabetical list. The limitations of comparing these findings with students, identified in similar manner from another college would not provide a like population in educational background, socio-economic level and age range.

The researcher made the assumption there were no significant differences in early and late applicants for college academic success, units completed and staying in college. Unaccounted for factors were at work, i.e. financial burdens, personal problems, personality conflicts, academic preparation and/or lack of preparation, undependable transportation and parental conflicts.

The study lacks the selectivity of a matched sampling based on the above named factors. It is also limited to students completing only one semester of college work. A continued follow-up of this study would be valuable in identifying long term behavior and success patterns.

VII. BASIC ASSUMPTIONS

Certain assumptions were made in designing the study. The researcher assumed the two student groups, of early and late applicants, were reasonably homogeneous. This assumption was based primarily on the fact that a majority of the first time students, to Mt. San Antonio College, come directly from the district high schools since it is difficult to receive out-of-district permits to attend other community colleges.
The assumption was made that the sample was representative of both groups of applicants. It was also assumed the late enrollees had equal opportunity to select courses they wanted to take and thought they could succeed in, as did the early applicants.

VIII. PROCEDURES FOR COLLECTING DATA

Data were collected from the transcripts of a random sample of first time (day) fall 1972-73 students. The total number of students in this population was 3,432. The sample included approximately 847 of the total. The researcher began with six groups of findings:

1. First time (day) early applicant students that enrolled in and completed 12 or more semester units.
2. First time (day) late applicant students that enrolled in and completed fewer than 12 semester units.
3. First time (day) early applicant students that enrolled in and completed fewer than 12 semester units.
4. First time (day) late applicant students that enrolled in and completed fewer than 12 semester units.
5. First time (day) early applicant students that failed to complete the semester.
6. First time (day) late applicant students that failed to complete the semester.

Group results were tabulated in class intervals of one-half grade point as follows:

- 0.00 - 0.50
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00

The data were collected manually by the researcher over a period of
three weeks, involving a minimum of eighty hours. Each of the 847 student records were taken from a folder file, opened and the information transferred to the class interval distribution and dropout tally sheet.

IX. PROCEDURES FOR TREATING DATA

The data was tabulated according to grade point intervals. The mean and standard deviation was calculated for the following:

(1) Early Applicants, full-time (12 or more semester units)
(2) Late Applicants, full-time (12 or more semester units)
(3) Early Applicants, part-time (fewer than 12 semester units)
(4) Late Applicants, part-time (fewer than 12 semester units)

The z-test was calculated to test the null hypotheses. The z-test was also used on the dropout data to test the difference between two sample populations. The .05 level of significance was accepted. The z-two-tailed test was utilized because the investigator wanted to determine if the two means were significantly different. As the z-test assumes the two samples come from two populations with equal means but not necessarily equal variances, it was also used with the dropout data to test the differences between two sample populations.

X. DATA RESULTING FROM THE STUDY

The data appears in the following bar graphs and tables. The bar graphs pictorially illustrate four sets of data.
**EARLY APPLICATION - Full Time**

- $N = 317$
- $M = 2.54$
- $\sigma = .6$
\[ N = 277 \]
\[ M = 2.01 \]
\[ \sigma = 0.7 \]
LATE APPLICANT - Part Time

N = 54
M = 1.94
\sigma = .9
The full-time and part-time student grade point distribution appears in the following chart:

<table>
<thead>
<tr>
<th>GPA Interval</th>
<th>Early Applicant</th>
<th>Late Applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-0.50</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>0.51-1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.01-1.50</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>1.51-2.00</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>2.01-2.50</td>
<td>85</td>
<td>9</td>
</tr>
<tr>
<td>2.51-3.00</td>
<td>96</td>
<td>10</td>
</tr>
<tr>
<td>3.01-3.50</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td>3.51-4.00</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>( \frac{317}{317} )</td>
<td>( \frac{27}{27} )</td>
</tr>
</tbody>
</table>

The early applicant mean was 2.54 grade point average and the late applicant 2.45. The standard deviation was .6 for both sets of data.
The early applicant part-time mean was 2.01 grade point average and the late applicant part-time was 1.94 grade point average. The standard deviation for the early applicants was .7 and .9 for the late applicant group.
### Data Contrasted by Application Periods:

<table>
<thead>
<tr>
<th>Application Period</th>
<th>N</th>
<th>Mean GPA</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Applicant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February 15, 1972</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>317</td>
<td>2.54</td>
<td>.6</td>
</tr>
<tr>
<td>Part-time</td>
<td>277</td>
<td>2.01</td>
<td>.7</td>
</tr>
<tr>
<td>Dropout</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>724</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Late Applicant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 15 to August 25, 1972</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>27</td>
<td>2.45</td>
<td>.6</td>
</tr>
<tr>
<td>Part-time</td>
<td>54</td>
<td>1.94</td>
<td>.9</td>
</tr>
<tr>
<td>Dropout</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>847</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The z-test, applied to the full-time early and late applicant data yielded a .737 level of significance; therefore, the researcher failed to reject the null hypothesis, "There is no significant difference in the grade point average of first time (day) full-time students who make early application to Mt. San Antonio College and those who apply late."

The z-test, applied to the part-time early and late applicant data yielded a .538 level of significance; therefore, the researcher failed to reject the null hypothesis, "There is no significant difference in the grade point average of first time (day) part-time students who make early applications to Mt. San Antonio College and those who apply late.

The third null hypothesis, "There is no significant difference in the dropout rate of first time (day) students who make early applications to Mt. San Antonio College and those who apply late." was rejected. There were 724 early applicants, 130 of whom dropped out before the end of the semester. Forty-two of the 123 late applicants withdrew.

XI. SIGNIFICANCE AND CONCLUSIONS

The assumption was made that early and late applicants to Mt. San Antonio College were generally alike in their educational preparation and abilities to succeed. The grade point averages of early and late, full-time and part-time students in the spring of 1973 supported the assumption that ability to succeed was the same for both groups.

One conclusion is that students who applied late and remained were academically successful; however, there was a greater likelihood for the for the late applicants to withdraw. One basic assumption was that late enrollees had equal opportunity to select the courses they wanted and could be expected to succeed in, as did the early applicants. A careful review of classes available after August 15, 1972, revealed that several classes
were closed. This was particularly true of morning hours, usually considered primetime for students who are employed. In those cases, where 'first choice' classes were closed students enrolled in whatever was available at the hours they could attend. With some career majors, i.e. Commercial Flight, this meant the student was not enrolled in a course he/she saw as goal directed. In reviewing the data in the individual folders, it was apparent that many of the late applicant dropouts had enrolled in only one or two courses. In order to make conclusive statements about those students who dropout a matched sample would need to be established with the opportunity to make the same course selections as early applicants.

As was noted under the background section, persons responsible for making decisions about admissions, counseling and registration will utilize the findings in answering questions about extending the registration period in the spring semester.

XII. FUTURE STUDIES

The investigator recommends that a follow-up study of this semester's students be conducted under the same set of criteria plus following up the students in this sample to better determine success and behavior patterns, answering such questions as, "Do the dropouts return to college?" If so, when? "Do they become the early applicants the second time around?" "Does academic success, in the first semester, mean that students are more apt to succeed the second semester?"

In answering these questions or those posed in the study the reader should be aware that findings are related to students at Mt. San Antonio College. Application of the findings to another situation is not advised.
BIBLIOGRAPHY


