

THE RELATION OF SELECTED VARIABLES TO THE  
ACADEMIC ACHIEVEMENT OF UNDERGRADUATE  
VENEZUELAN STUDENTS AT OKLAHOMA  
STATE UNIVERSITY

By

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1971

Submitted to the Faculty of the Graduate College  
of the Oklahoma State University  
in partial fulfillment of the requirements  
for the Degree of  
MASTER OF SCIENCE  
December, 1983

Thesis  
1983  
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## ACKNOWLEDGMENTS

The author wishes to express her appreciation to her major adviser, Dr. Thomas Karman, for his assistance throughout this study and for his critical reading of the manuscript. Appreciation is likewise extended to other committee members: Dr. Kenneth St. Clair and Dr. Robert Kamm.

A special note of thanks goes to my friend, Dr. Carlos Prado, for his invaluable guidance and interest. Dr. Prado's expertise in research and statistics was especially helpful and greatly appreciated.

An expression of gratitude goes to my friend, Carole Wolfe, for her assistance in the preparation of the final report of this study. Thanks are also given to Dr. William Adrian for his guidance during the initial stage of this research.

Acknowledgments go to the undergraduate Venezuelan students enrolled for the spring term of 1983, for consenting to take part in this study. Also a note of thanks to the Latin-American students who were willing to participate in the pilot study.

Very special gratitude is expressed to my husband, Gonzalo, for his understanding and support, and to my children: Maria Adela, Robin, and Maria Gabriela. That gratitude is also extended to my parents, brothers, and sisters, for their encouragement during my graduate studies.

## TABLE OF CONTENTS

Chapter	Page
I. THE RESEARCH PROBLEM. . . . .	1
Introduction . . . . .	1
Statement of the Problem . . . . .	2
Objective. . . . .	5
Definitions. . . . .	5
II. REVIEW OF THE LITERATURE. . . . .	6
Introduction . . . . .	6
Literature Related to Foreign Student Problems . . . . .	6
Summary of the Review of Current Literature. . . . .	10
III. METHODS AND PROCEDURE . . . . .	12
Introduction . . . . .	12
Subjects . . . . .	12
Instruments. . . . .	13
Procedure. . . . .	14
Statistical Treatment. . . . .	16
Assumptions. . . . .	17
Limitations. . . . .	17
Summary. . . . .	18
IV. ANALYSIS OF THE DATA. . . . .	19
Introduction . . . . .	19
Section I. . . . .	19
Marital Status. . . . .	21
Sex . . . . .	21
Age . . . . .	22
Field of Study. . . . .	22
Class in College. . . . .	24
Command of the English Language . . . . .	25
Educational Background. . . . .	25
Monthly Income. . . . .	27
Self-Perceived Adequacy of Oral English, Self- Perceived Economic Situation, and Self- Perceived Adequacy of Written English . . . . .	27
Summary of Section I. . . . .	28

Chapter	Page
Section II . . . . .	28
Subgroup I. . . . .	30
Subgroup II . . . . .	30
Subgroup III. . . . .	31
Subgroup IV . . . . .	31
Evaluation of Results. . . . .	33
Subgroup I. . . . .	33
Subgroup II . . . . .	34
Subgroup III. . . . .	34
Subgroup IV . . . . .	36
Summary of Section II. . . . .	37
Section III. . . . .	37
Summary of Section III . . . . .	39
V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS . . .	41
Summary. . . . .	41
Findings . . . . .	44
Conclusions. . . . .	47
Recommendations. . . . .	49
BIBLIOGRAPHY . . . . .	52
APPENDIXES . . . . .	54
APPENDIX A - CORRESPONDENCE . . . . .	55
APPENDIX B - INSTRUMENT . . . . .	60
APPENDIX C - DATA GRAPHS OF SUBGROUPS . . . . .	65

## LIST OF TABLES

Table	Page
I. Increase in Number of Venezuelan Students at Oklahoma State University . . . . .	3
II. Items That Were Responded to by All the Subjects . . . .	20
III. Items With a Percentage of Response Less than 100% . . .	21
IV. Distribution According to Area of Specialization of Undergraduate Venezuelan Students Enrolled for the 1983 Spring Semester at Oklahoma State University. . .	23
V. Class in College of Undergraduate Venezuelan Students Enrolled for the 1983 Spring Semester at Oklahoma State University . . . . .	24
VI. Distribution of TOEFL Scores . . . . .	26
VII. Demographic Data for Undergraduate Venezuelan Students Enrolled for the 1983 Spring Semester at Oklahoma State University . . . . .	29
VIII. Distribution of Subgroups by Field of Study. . . . .	32
IX. Significant Correlation Coefficients of Subgroup I . . .	34
X. Significant Correlation Coefficients of Subgroup II. . .	35
XI. Significant Correlation Coefficients of Subgroup III . .	35
XII. Significant Correlation Coefficients of Subgroup IV. . .	36
XIII. Values of R for Each of the Subgroups . . . . .	40

## CHAPTER I

### THE RESEARCH PROBLEM

#### Introduction

The single most important justification for this study is that Venezuela has invested considerable amounts of money to send students to the United States to pursue graduate studies or academic goals on the undergraduate level. Venezuela, as a developing nation, has created several plans of scholarships for qualified students in order to prepare them to meet the increasing need for professionals in a wide range of fields.

Current research indicates that a newly-arrived student on any university or college campus is likely to be affected by several factors that may relate to his or her academic achievement. Several previous studies have concluded that those factors affecting college students tend to be more severe when the student comes from a foreign country. Some of the findings reveal that foreign students feel more academic pressure than domestic students in American higher education institutions, although foreign student enrollment is proportionately high (Sadegui, 1980), and that seven problems were found to be most severe: academic advisement, finances, orientation, social-personal relations, English language, placement services, and living and dining services (Akpan-Iquot, 1980). Other studies have categorized foreign



student problems into academic problems, language problems, health problems, and housing problems (Shandiz, 1981).

Venezuelan students are likely to face a variety of personal problems with which they must learn to cope. They probably have trouble communicating because of their limited command of the English language. Other factors such as financial insecurity and the difficulty of establishing friendly and supportive relationships are likely to affect the academic achievement of Venezuelan students. However, little attention has been given to these and other problems. No study has been conducted to reveal the overall situation of Venezuelan students in the United States and to help meet their needs.

Oklahoma State University is a very strategic point for starting this type of research study. The state of Oklahoma has been the recipient of a great contingent of Venezuelan students (Table I). Conducting this study at Oklahoma State University could encourage the Venezuelan government and other scholarship-granting institutions to promote and support research in this area in order to understand better the factors that affect academic achievement of Venezuelan students and in order to meet those students' needs.

#### Statement of the Problem

Academic achievement is a complex variable that can be affected by many factors. Several studies have been conducted in the United States in an attempt to clarify the nature of that variable. However, the academic achievement of undergraduate Venezuelan students in the United States has not yet been investigated.

TABLE I  
INCREASE IN NUMBER OF VENEZUELAN STUDENTS  
AT OKLAHOMA STATE UNIVERSITY

School Year	Number
1973-74	25
1974-75	32
1975-76	40
1976-77	48
1977-78	77
1978-79	148
1979-80	165
1980-81	157
1981-82	145
1982-83	134

Source: Oklahoma State University, International Student Advisement Office, Personal Interview (July, 1983).

Since many Venezuelan students are pursuing undergraduate work at Oklahoma State University, it was thought that the investigation of the academic achievement of those students would be a project worthy of research. Many scholarship-granting institutions from Venezuela could benefit from obtaining useful information from such an investigation. In addition, the Venezuelan government could utilize its

results in controlling the factors that affect the academic achievement of Venezuelan students. Finally, the undergraduate Venezuelan students themselves could benefit from an investigation of their achievement: the research of that problem could help those students to be aware of some of the factors that support or disrupt their achievement.

Since several variables have been found to be related to the academic achievement of American college students, this study has been designed to discover the extent to which those variables are related to the academic achievement of undergraduate Venezuelan students.

This study has been undertaken in order to investigate the following research problem:

What is the relationship between the academic achievement of undergraduate Venezuelan students enrolled for the spring semester of 1983 at Oklahoma State University and the following selected variables:

1. Marital Status
2. Sex
3. Age
4. Field of Study
5. Class in College
6. Command of the English Language
7. Educational Background
8. Monthly Income
9. Self-Perceived Adequacy of Oral English
10. Self-Perceived Economic Situation
11. Self-Perceived Adequacy of Written English.

## Objective

The objective of this study is to determine whether a relationship exists between the academic achievement of undergraduate Venezuelan students enrolled for the spring semester of 1983 at Oklahoma State University and each one of the previously mentioned variables.

## Definitions

In order to avoid ambiguities, the following terms are defined to suit the special nature of this study:

Venezuelan students are those students born in Venezuela who came to the United States for the sole purpose of pursuing their education and whose names and addresses appear in the institution's list of Venezuelan students.

Command of the English language will be defined by the Test of English as a Foreign Language (TOEFL) score.

Educational background will be defined by the Grade Point Average (GPA) obtained by the students in high school.

Self-perceived adequacy of oral English language refers to the degree of the student's satisfaction in relation to personal command of oral English.

Self-perceived adequacy of written English language involves the degree of the student's satisfaction in relation to personal command of written English.

Self-perceived economic situation is related to the degree of the student's satisfaction in relation to personal income.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

A research study should always be based, in part, on a comparison with what has already been done in other studies. The purpose of this chapter is to provide a logical framework and an overall picture concerning current knowledge of student problems that affect academic achievement and adjustment to higher education in the United States.

Although this study focuses on the relationship between selected variables and the academic achievement of undergraduate Venezuelan students, the literature reviewed does not address this topic specifically. No study related to undergraduate Venezuelan students in the United States was found. Most studies focus on foreign students in general, and a few of them include undergraduate students from foreign countries. Therefore, this chapter will cover the different types of studies on foreign students, graduate and undergraduate, in different parts of the United States. One study that focuses on American college students will be mentioned because some of the variables analyzed in that study are common with the variables selected for this study.

#### Literature Related to Foreign Student Problems

Akpan-Iquot's (1980) study investigated the kinds of problems

facing international students attending Oklahoman colleges and universities. It was found that foreign students' problems in selected Oklahoman universities were similar to those described elsewhere in the literature. Seven problem areas were found to be most severe: academic advisement, finances, orientation, social-personal, English language, placement services, and living and dining. The analysis of the data indicated that there was a strong relationship between the student's country of origin and the kind of problems he experienced. In regard to Venezuelan students, the English language was found to be the most difficult problem.

The findings of the study conducted by Shandiz (1981) revealed that a group of characteristics common to foreign students really does exist, that they behave in many respects like all other foreign students, and that they face many common problems. Such variables as English facility, absence of family, socioeconomic background, and perceived social and cultural distance have been found to have a significant relationship to the adjustment of foreign students.

Sadegui (1980) conducted a study that proposed to determine self-perceived factors that most affected the academic success or failure of foreign students who enrolled during the spring semester of 1980 at selected institutions of higher education in Tennessee. This study revealed the following: (1) foreign students feel more academic pressure than domestic students in American higher education institutions, (2) the factors perceived by respondents to affect their academic success were English language preparation, familiarity with American culture and customs, financial security, faculty teaching methods, and grading patterns and examination procedures.

Surdam (1980) completed a study at the University of Wyoming in order to determine the relationship between certain independent variables and the adaptation of international students. The findings revealed that students who perceived their English as adequate appeared to be significantly better adapted than those who perceived their English ability as inadequate and that students from educated families in which parents had seven or more years of formal education were significantly better adapted than those from less educated families.

Tan-Ngarmtrong (1979), after studying the relationship between selected variables (undergraduate GPA, English language proficiency, language cultural regions, sex, and others) and academic achievement of foreign graduate students at Mississippi State University, arrived at the following conclusions:

1. No significant relationship was observed between the foreign graduate student's English proficiency scores and his academic achievement.
2. No significant differences were found in academic achievement of male and female foreign graduate students.
3. No significant differences were found in the academic achievement of foreign graduate students from different language cultural regions.

Cieslak (1955), in his study designed to describe and analyze the current administrative and guidance practices in the United States with respect to foreign students, revealed some interesting findings. Housing, health, and finances were some of the on-campus problems mentioned in his study, while social-personal difficulties were some

of the off-campus problem areas found. Regarding the students' residence in dormitories, several problems were reported. Differences of culture, prejudice or discrimination, and too many foreign students in dormitories (making it difficult to learn English) were especially noted by the author. Cieslak noted that frequently these experiences directly affected the kind and quality of school work a foreign student produces.

DuBois (1964) has provided a thorough analysis of the status, potential, problems, and programs affecting the foreign students in American colleges and universities. She noted that language is a factor of primary importance in the foreign student's adjustment because the ability to communicate decides the success or failure of interpersonal relations, as well as probability of academic achievement. DuBois suggested that, although opinions diverge sharply on whether younger (undergraduate) or older (graduate) students derive more benefits from a sojourn in the United States, the age of a foreign student is generally assumed to be an important factor in his adjustment in either case.

A study conducted by Astin (1971) attempted to determine what traits, background factors, and past performances provide the most accurate indication of future performance of American college students. The relative weight that could be assigned to the student's age, high school record, academic ability, and other personal factors in predicting performance in college was the first concern of the research. Astin reported in his study that much data supported the fact that girls get higher grades in secondary school than boys. In relation to the freshman GPA of 19,524 men and 17,057 women, it was



found that women tended to get better grades than men. Of all the information available about the high school student, the record of academic performance seemed to be the best single indicator of how well he or she would do in college. There was a consistent relationship between grades in high school and grades in college, but that relationship was far from perfect. Finally, personal characteristics have been shown to contribute to the prediction of freshman GPAs of American students; however, the contribution of any single one of them is quite small compared to the differences attributable to high school grades and aptitude test scores.

#### Summary of the Review of Current Literature

From the preceding review of literature now available, it was concluded that no study relating the academic achievement of undergraduate Venezuelan students to various variables has been conducted. However, several studies have analyzed the problems affecting foreign students in American colleges and universities.

While most studies report that English language, financial problems, social-personal problems, and sometimes academic problems have given the foreign students the greatest concern, no agreement among the authors was found in their opinions about the relationship between the student's country of origin and the kind of problems experienced. That apparent discrepancy seems to be justified; since the economic, cultural, political, and social environment of the countries from which the foreign students come does not remain constant, it is likely that the problems they experience do not follow a definite pattern.

However, the literature has revealed that, regardless of the country of origin, foreign students feel more academic pressure than domestic students in institutions of American higher education.

## CHAPTER III

### METHODS AND PROCEDURE

#### Introduction

This study investigated the relationship between selected variables and the academic achievement of Venezuelan students. In this chapter, the subjects under study are described, as well as the instrument utilized for collecting data. Subsequently, the research procedure used in responding to the research problem identified in Chapter I and the statistical treatment used for analyzing data are presented. Finally, the assumptions made for the purpose of this study and the limitation established by the researcher have also been included in this chapter.

#### Subjects

The population for the present study consisted of all undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. Due to their limited number, all undergraduate Venezuelan students enrolled for the spring, 1983, semester have been utilized in this study. One limitation of the present study, in terms of population, was that only undergraduate students were utilized because the dependent variable was academic achievement. Since the requirements for graduate students are more selective than

the requirements for undergraduate students, and since the criteria for evaluating graduate students and undergraduate students are different, it is likely that mostly A's and B's will be found in the academic achievement of graduate students. Therefore, graduate students were eliminated from this study.

### Instruments

No appropriate instrument was found to fit the nature of this study. Therefore, a special questionnaire was devised by the researcher. The instrument was developed, taking into account each of the variables under investigation in the study, as well as the recommendations given in the review of related literature. Gay (1981) listed several characteristics of a good questionnaire and suggested that the following points should be observed in constructing such instruments:

1. The questionnaire should be as attractive, as brief, and as easy to respond to as possible.
2. No item should be included that does not directly relate to the objectives of the study.
3. Structured or closed-form items should be used whenever possible.
4. Each question should deal with a single concept.
5. Clear, unambiguous terms should be used.
6. Leading questions, which suggest that one response may be more appropriate than another, should be avoided.
7. The instrument should be administered to a pilot group.

When the instrument was formulated, it was given to selected faculty members of the Department of Educational Administration and Higher Education and of the Department of Applied Behavioral Studies, and to some fellow graduate students, for review and evaluation. Interviews with the above-mentioned individuals were conducted, and necessary changes, deletions, and additions were made for clarity.

The instrument was divided into three parts. Section I consisted of a Likert scale soliciting information pertaining to each participant's perception of his or her oral and written English and his or her economic situation. In analyzing the first part of the instrument, numerical values were assigned to the different response categories in order to permit statistical treatment of the data. The total score for each student on each variable was then obtained. Those students' scores for each variable were ranked in order, a step which must be included before using the Spearman Correlation Method. Sections II and III solicited demographic data and academic information.

The face validity of the instrument was determined by the researcher and her advisers. In order to determine reliability, the instrument was administered to 20 Latin-American students, other than Venezuelans. The coefficients of stability obtained through test-retest procedures were .87 for the section dealing with self-perceived adequacy of oral English, .92 for the section dealing with self-perceived economic situation, and .95 for the section dealing with self-perceived adequacy of written English.

#### Procedure

The procedures utilized in this study were as follows:

1. A list of all undergraduate Venezuelan students enrolled for the 1983 spring semester and a list of all undergraduate Latin-American students enrolled for the same term were obtained from the International Students Advisement Office.

2. Twenty of those undergraduate Latin-American students (other than Venezuelans) were randomly selected for the pilot study in which the instrument was administered twice to the same group. Afterwards, all these subjects were interviewed and encouraged to make comments and suggestions concerning directions and specific items. The data and information obtained were utilized to refine the questionnaire and to determine the coefficients of test-retest reliability.

3. Since the chief purpose of the study was to find out which variables were more closely related to the academic achievement of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University, one questionnaire, together with a cover letter explaining the purpose and significance of the study, was personally given to each of those students during the fourth week of April.

4. After several days, the questionnaires were personally collected.

5. Repeated efforts for collecting the questionnaires were made. By the end of May, 70 out of 99 questionnaires had been returned. Two questionnaires could not be delivered because the addresses found in the International Students Advisement Office were not current. In addition, two students could not be contacted because they had left the country. Three of the students included in the list of undergraduate students were graduate students.

6. Within a month after collection of the data, all questionnaires were coded, and all the data were key punched onto computer data processing cards. These data were then analyzed by utilizing programs from the Statistical Package for the Social Sciences (SPSS) and from the Statistical Analysis System (SAS).

#### Statistical Treatment

The following description of the analysis of data is included to provide an overview of the statistical treatment utilized for this study. The analysis was done in two stages: in the first, the group of respondents was regarded as a single unit; in the second, the group of respondents was divided into four subgroups. (The decision to place a student in one subgroup rather than another was based on the field of study preferred by the student.) The first stage of data analysis included: (1) the overall percentage of returns, (2) the percentage of response for each item, and (3) the relationship between investigated variables. The third point was arrived at by determining a value for the Pearson Coefficient or Correlation as it applies to continuous variables. For other variables--whether discrete or categorical--either the Point Biserial Coefficient or Correlation or Spearman's was used. The nature of the problem to be solved determined which of these two coefficients was the most suitable.

In the second stage of analysis, the sample group was divided into four subgroups, gathering together similar areas of specialization in each. For each group, matrices of correlation were constructed by using the Pearson Coefficient of Correlation, the Spearman Coefficient of Correlation, and the Kendall TAU Coefficient of

Correlation. Finally, in order to describe the relation that exists between academic performance and the variables that are the best predictors, the most applicable equation of regression was determined by using the stepwise regression method. To test the independence between academic achievement and field of study, Chi Square was obtained.

### Assumptions

For the purpose of this study, the following assumptions were made:

1. It was assumed that respondents answered the questionnaires as honestly and carefully as possible.
2. It was assumed that the students answered the questionnaires without any outside help.
3. It was assumed that the ability to communicate provides the means for adequate interaction, adjustment, and academic satisfaction and, furthermore, that academic satisfaction is important for academic achievement.

### Limitations

The limitations established by the investigator are the following:

1. This study was limited to undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. Graduate students were not included in this study.
2. This study has the limitation of all studies using self-reported data.



3. No data could be verified because the sources of information needed for verification were closed to all except university and other officials.

### Summary

A questionnaire was given to all undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. The instrument was developed by the researcher on the basis of a literature review and the purpose of the study. The questionnaire consisted of three sections. The first section was a Likert scale; the second and third sections were questions soliciting demographic and academic information. A pilot study was conducted with 20 Latin-American students, other than Venezuelans. Of 103 students enrolled, 99 received the questionnaires; 70 completed and returned them. The responses to the questionnaires were then coded, tabulated, key-punched, verified, and analyzed by the researcher. The purpose of the questionnaire was to collect data in order to determine the relationship of selected variables to the academic achievement of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. The data were then analyzed through the methods and techniques discussed in this chapter. Those methods were Pearson Product-Moment Correlation, Spearman, Chi Square, Kendall, Point Biserial Correlation Methods, and the Stepwise Regression Method.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Introduction

The purpose of this chapter is to analyze the data gathered for this study. When considering how to present the data as clearly as possible, it was noted that they fell naturally into three separate sections. The first section of this chapter will include the overall percentage of returns and the percentage of response for each item. This section will also cover a descriptive analysis which includes a description of the results obtained through the application of correlational techniques to the data from all students comprising the sample. The second section of this chapter will be devoted to the analysis of the data obtained after the sample's individual members were divided into four subgroups on the basis of the degree of similarity among their fields of study. The third section will cover the analysis of the data obtained through the application of several regression models for the purpose of describing the relationship between the predictor variables and the response variable, which is academic achievement.

#### Section I

One questionnaire was given personally to each of the 99 subjects

comprising the population of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. Of those 99 questionnaires, 70 (71%) were returned.

Tables II and III show that 22 of 27 questions were answered by all the respondents. Five of those 27 questions were omitted by at least one respondent.

TABLE II  
ITEMS THAT WERE RESPONDED TO BY  
ALL THE SUBJECTS

Item 1	Item 10	Item 18
Item 2	Item 11	Item 21
Item 3	Item 12	Item 22
Item 4	Item 13	Item 23
Item 5	Item 14	Item 24
Item 6	Item 15	Item 27
Item 7	Item 16	Total: 22
Item 8	Item 17	?: 81.5

TABLE III  
ITEMS WITH A PERCENTAGE OF RESPONSE  
LESS THAN 100%

Number of Response	% of Response
9	98.6
19	95.7
20	97.1
25	90.0
26	88.6

### Marital Status

Of the 70 Venezuelan students who responded to the questionnaire, the larger proportion, 52.9 percent, were unmarried, and 47 percent were married. Of the married students, 60.6 percent had children. The statistical analysis indicated that no significant correlation was found between the academic achievement and the marital status of this population.

### Sex

Forty-eight (68.6%) of the 70 respondents were male, while 22 (31.4%) were females. Through the application of Point Biserial Correlation procedures, it was found that no significant correlation for this population existed between academic achievement and sex.

### Age

Undergraduate Venezuelan students at Oklahoma State University represented a fairly wide age range: from 17 to 37. The mode, which is the age with the highest frequency, was 24; the average age for this group was 24.75 years. The Pearson Product-Moment Correlation indicated no significant relationship between the academic achievement of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University and their age.

### Field of Study

Table IV, compiled from research data, shows that 11.5 percent of the students selected Agronomy as a major field of study; 5.7 percent were studying Animal Science and Horticulture; 20 percent were studying Business and related disciplines; 5.7 percent were studying Computer Science; 28.6 percent were studying Engineering; 7.1 percent were studying Psychology, Education, Fine Arts, and Speech Pathology; and 18.6 percent were studying Technology. One student (1.4%) was still undecided and one student (1.4%) did not answer the item soliciting information about the field of study. The analysis with Chi Square procedures revealed that no significant relationship was found between the academic achievement of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University and their field of study.

TABLE IV  
 DISTRIBUTION ACCORDING TO AREA OF SPECIALIZATION  
 OF UNDERGRADUATE VENEZUELAN STUDENTS ENROLLED  
 FOR THE 1983 SPRING SEMESTER AT  
 OKLAHOMA STATE UNIVERSITY

Field of Study	Number	Percentage
Agronomy	8	11.5
Animal Science and Horticulture	4	5.7
Business, Accounting, Advertising, and Management	14	20.0
Computer Science	4	5.7
Engineering	20	28.6
Psychology, Education, Fine Arts, and Speech Pathology	5	7.1
Technology	13	18.6
Undecided	1	1.4
No Response	1	1.4
Total	70	100.0

### Class in College

The research data collected from the 70 respondents revealed that the largest proportion of undergraduate Venezuelan students was doing work at the junior and senior levels. Twenty-three juniors and 26 seniors comprised 70 percent of all the respondents. Ten students (14.3%) were freshmen and 11 (15.7%) were sophomores (Table V). This distribution is to be expected because, as the data in Table I show, the number of Venezuelan students has been decreasing since 1979.

TABLE V  
CLASS IN COLLEGE OF UNDERGRADUATE VENEZUELAN  
STUDENTS ENROLLED FOR THE 1983 SPRING  
SEMESTER AT OKLAHOMA STATE  
UNIVERSITY

Class	Number	Percentage
Freshman	10	14.3
Sophomore	11	15.7
Junior	23	32.9
Senior	26	37.1

In regard to the analysis of the data, it was found that, although the lowest GPA was earned by a freshman and the highest by a

senior, a very low correlation coefficient (.36) was found between current GPA and class in college.

#### Command of the English Language

A command of the English language was defined for this study as the score obtained by the student on the TOEFL test. Sixty-two (88.6%) of the respondents took the TOEFL test at least once. Eight (11.4%) of the students had not taken the TOEFL test due to several reasons. Some were not required to do so because they had studied in high schools in the United States. This particular group was required to take either the ACT or the SAT tests. Others had already done undergraduate work at several colleges, and others had taken another test for measuring proficiency in English, such as the Michigan test.

Those respondents who took the TOEFL test represented a range from 460 points to 620 points. Forty-one (58.6%) of the students obtained a score between 500 and 550, and 12 (17.2%) obtained a TOEFL score of between 551 and 600 points. Only one (1.4%) student obtained a score higher than 600, while eight (11.4%) had a score lower than 500 points (Table VI). After correlating TOEFL scores and current GPAs of the respondents through the Pearson Product-Moment Correlation method, no significant relation was found between those variables.

#### Educational Background

Educational background has been defined for this study as the GPA from high school. The previous GPA of the respondents represented a range from 12 points to 18 points. The grading scale currently in effect in Venezuela ranges from 1 to 20 points. The lowest acceptable



grade is 10 points. Sixty-three (90%) expressed their previous GPAs in terms of the scale prevalent in Venezuela. Seven (10%) of the respondents had gone through secondary school in the United States and thus expressed their previous GPAs in terms of the grading scale found in this country. Therefore, it was necessary to adjust and convert them into grades compatible with the Venezuelan scale.

TABLE VI  
DISTRIBUTION OF TOEFL SCORES

Score	Number	Percentage
More than 600 points	1	1.4
Between 551 and 600 points	12	17.2
Between 500 and 550 points	41	58.6
Less than 500 points	8	11.4

Note: Eight (11.4%) of the students did not take the TOEFL test.

The Pearson Product-Moment Correlation was utilized to discover whether or not there was a relationship between the academic achievement of the subjects under study and their previous GPA. No significant relationship was found between these two variables.

### Monthly Income

The data indicated that the monthly income of the respondents varied from \$340.00 to \$1,500.00. The mode was \$500.00, and the monthly income average was \$624.74. The analysis of the data revealed no relationship between monthly income and academic achievement.

### Self-Perceived Adequacy of Oral English, Self-Perceived Economic Situation, and Self-Perceived Adequacy of Written English

These three self-perceived variables were measured through a Likert scale having five categories, from "Strongly Agree" to "Strongly Disagree." To permit statistical treatment of the data, numerical values were assigned to the response categories in the following pattern: Response Categories - Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1).

Throughout the questionnaire, there were some questions of negative connotation. These questions were included with the purpose of breaking the monotony of the questionnaire and keeping the respondents attentive. For these negative connotation questions, the ratings of the numerical values were reversed.

A score for these self-perceived variables was obtained for each respondent by combining the scores of the different items comprising the Likert scale. Then, Spearman Correlation procedures were utilized to discover whether or not there was a relationship between academic achievement and each one of the self-perceived variables. No significant relationship was found between them.

### Summary of Section I

When the statistical procedures discussed in Chapter III were applied to the whole group of undergraduate students from Venezuela, no significant relationship was found between the academic achievement of these students and any of the variables under study.

### Section II

Looking for a relationship between the selected variables and the academic achievement of the students under study, the whole group was split into four homogeneous subgroups on the basis of the degree of similarity among their fields of study. The composition of these subgroups was: Subgroup I - students from Agronomy, Animal Science, and Horticulture; Subgroup II - students from Technology-related disciplines; Subgroup III - students from Engineering and Computer Science; and Subgroup IV - students from Business, Fine Arts, Education, Speech Pathology, and Psychology.

This section will cover the following: (1) a description of each of the subgroups into which the subjects were divided, and (2) an evaluation of the results obtained through the application of correlational procedures to each of the aforementioned subgroups. Six variables were considered important for the purpose of describing the sample. Those variables were: (1) field of study, (2) marital status, (3) sex, (4) age, (5) TOEFL score, and (6) current GPA.

Table VII, based on the research data, summarizes the demographic data of the individuals under study. It includes: (1) the four subgroups into which the group of respondents was divided, (2) the

TABLE VII  
 DEMOGRAPHIC DATA FOR UNDERGRADUATE VENEZUELAN STUDENTS  
 ENROLLED FOR THE 1983 SPRING SEMESTER AT  
 OKLAHOMA STATE UNIVERSITY

	<u>Subgroup I</u>		<u>Subgroup II</u>		<u>Subgroup III</u>		<u>Subgroup IV</u>	
	Agronomy Animal Science Horticulture		Technology		Engineering Computer Science		Education Psychology Business Speech Pathology Fine Arts	
	No.	Average Age	No.	Average Age	No.	Average Age	No.	Average Age
<u>Sex</u>								
Male	8	26.8	12	27.4	17	24.0	9	22.0
Female	4	23.0	1	24.0	7	22.0	10	25.0
<u>Marital Status</u>								
Married	7	27.4	8	29.6	7	27.7	10	25.0
Unmarried	5	22.8	5	23.0	17	21.7	9	22.0

number of students in each of the subgroups, (3) the number of married and unmarried individuals in each subgroup, (4) the number of males and females in each subgroup, and (5) the average ages for married and unmarried males and females in each subgroup.

### Subgroup I

#### Students From Agronomy, Animal Science, and Horticulture.

Since Animal Science is a Department of the College of Agriculture, students from Agriculture and Animal Science were included in the same subgroup. One student from Horticulture was also included in this subgroup because of the similarity of the curricula of Horticulture and Agronomy.

This subgroup was the smallest of all in number. It was composed of 12 students: eight from Agronomy and four from Animal Science and Horticulture. Of those 12 students, seven were married and five were unmarried. No significant difference was found between the academic achievement of married and unmarried students of this subgroup. Although the monthly income mean was higher for unmarried students, no difference was found in TOEFL score means of the subgroup.

Eight students in the first subgroup were males and four were females. Monthly income was higher for males, but the difference of TOEFL score means and current GPAs of males and females were found to be insignificant.

### Subgroup II

#### Students From Technology-Related Disciplines. This subgroup was

composed of 13 students: eight married and five unmarried; 12 males and 1 female. The comparison of current GPAs and TOEFL score means showed that there was no significant difference between married and unmarried or between males and females for those variables. Monthly income means was found to be higher for married students, while the only female of the subgroup received a monthly income higher than the monthly income mean for males.

### Subgroup III

Students From Engineering and Computer Science. The largest proportion of undergraduate Venezuelan students enrolled for the 1983 spring semester selected Engineering and Computer Science as their majors. Twenty-four individuals comprised this subgroup: 20 from Engineering and 4 from Computer Science. Of those 24, 7 were married and 17 were unmarried; 17 were males and 7 were females. While monthly income means were found to be higher for married and for females of this subgroup, no significant difference was found between married and unmarried, and between males and females in regard to current GPAs and TOEFL score means.

### Subgroup IV

Students From Business, Fine Arts, Education, Speech Pathology, and Psychology. Students from Business, Fine Arts, Education, Psychology, and Speech Pathology were included in the same group, as all these disciplines have in common a greater necessity for students to make effective use of the language than would students who are enrolled in more quantitatively-oriented programs.

Subgroup IV was composed of 19 students, 14 (73.7%) from Business and 5 (26.3%) from the other fields. Some of these students from Business were majoring in Business Education. Of those 19, 10 were married and 9 were unmarried; 9 were males and 10 were females. Monthly income mean was found to be higher for married students of subgroup IV, while current GPA and TOEFL score mean of married and unmarried persons were not found to be significantly different. In regard to differences between monthly income of males and females, the former received a lower monthly income. No significant difference was found in the current GPA and in the TOEFL score means of the males and females of Subgroup IV (Table VIII).

TABLE VIII  
DISTRIBUTION OF SUBGROUPS BY FIELD  
OF STUDY

Subgroup I	Subgroup II	Subgroup III	Subgroup IV
Agronomy Animal Science Horticulture	Power Technology Petroleum Technology Mechanical Technology Fire Protection Tech. Engineering Tech. Construction Tech.	Engineering Computer Science	Business Education Fine Arts Speech Path. Psychology

## Evaluation of Results

Once all subgroups in which the respondents were divided have been described, this chapter will cover the evaluation of the results obtained through the application of correlational procedures to each one of the aforementioned subgroups.

To discover if a relationship existed between the current GPA and the variables being investigated, Spearman's Correlation Coefficient was used. This method was the choice for dealing with respondents who had been divided into four subgroups. These subgroups, which were more nearly homogeneous, were considerably smaller in number.

In order to interpret the results of the correlational procedures utilized and to express the degree of agreement between each pair of variables, the following four categories of values of  $\rho$  (rho) were considered: High ( $.90 \leq \rho \leq 1.00$ ), Moderate ( $.75 \leq \rho < .90$ ), Low ( $.50 \leq \rho < .75$ ), and Very Low ( $\rho < .50$ ).

### Subgroup I

The correlation coefficients shown in Table IX are those which were found to be significantly different from zero for this subgroup. Two negative correlations were observed in this subgroup. The self-perceived adequacy of oral English and the self-perceived adequacy of written English were found to be negatively correlated with the age of the individual. In relation to this, it could be concluded that, apparently, as the individual becomes more mature, his capacity for self-criticism increases as he becomes more aware of his own limitations.



TABLE IX  
SIGNIFICANT CORRELATION COEFFICIENTS  
OF SUBGROUP I

Category	Correlation Coefficient	Variables	P. Value
Moderate	.73	GPA and TOEFL score	.007
Low	.70	Self-perceived adequacy of oral and written English	.01
Low	-.65	Self-perceived oral English and age	.02
Low	-.56	Self-perceived written English and age	.05

### Subgroup II

Correlation coefficients found to be significantly different from zero for Subgroup II are displayed in Table X. The correlation seen between income and age is apparently justified since it is a fact that the Technology students (Subgroup II) are, for the most part, employed by industrial firms which send them to the United States in order to perfect their knowledge in certain areas.

### Subgroup III

None of the selected variables was found to be significantly correlated to the academic achievement of students of Subgroup III.

Table XI displays the correlation coefficients found to be significantly different from zero for this subgroup.

TABLE X  
SIGNIFICANT CORRELATION COEFFICIENTS  
OF SUBGROUP II

Category	Correlation Coefficient	Variables	P. Value
Low	.73	Income and age	.005
Low	-.61	TOEFL score and age	.03
Low	.56	GPA and self-perceived adequacy of written English	.05

TABLE XI  
SIGNIFICANT CORRELATION COEFFICIENTS  
OF SUBGROUP III

Category	Correlation Coefficient	Variables	P. Value
Low	.56	Self-perceived adequacy of oral and written English	.004
Very Low	.47	Self-perceived oral English and TOEFL score	.02

Subgroup IV

Table XII displays the correlation coefficients found to be significantly different from zero for the students comprising Subgroup IV. Since this subgroup is composed of students from Business, Education, Psychology, Fine Arts, and Speech Pathology, it seems logical that they need to make better and more frequent use of the English language. Apparently, this could explain the relationship found between current GPA and TOEFL scores for Subgroup IV.

TABLE XII  
SIGNIFICANT CORRELATION COEFFICIENTS  
OF SUBGROUP IV

Category	Correlation Coefficient	Variables	P. Value
Moderate	.79	Self-perceived adequacy of oral and written English	.0001
Low	.56	GPA and TOEFL score	.01
Low	-.53	TOEFL and age	.02
Very Low	.46	TOEFL and self-perceived adequacy of oral English	.04

## Summary of Section II

Self-perceived adequacy of oral and written English was found to be correlated in three of the four subgroups into which the respondents were divided. It seems logical that these two variables, which are related to self-perception of adequacy in the English language, are found to be in agreement. In the same way, the TOEFL score and the self-perceived adequacy of oral English and the TOEFL score and the GPA were found to be significantly correlated in two of the four subgroups. The TOEFL score and age turned out to be negatively correlated in two of the four subgroups.

## Section III

This section will cover the analysis of the data obtained by applying several regression models for the purpose of describing the relationship between the predictor variables and the response variable. The predictor variables utilized in the different models analyzed for the various subgroups were as follows:  $V_1$  = self-perceived adequacy of oral English;  $V_2$  = self-perceived economic situation;  $V_3$  = self-perceived adequacy of written English;  $V_7$  = age;  $V_8$  = income;  $V_{11}$  = previous GPA;  $V_{12}$  = command of the English language;  $V_{13}$  = marital status; and  $V_{14}$  = sex.

The best regression equation was determined using the maximum determination coefficient ( $R^2$ ). This equation was obtained in order to describe the relationship that exists between academic achievement and the variables that are best at predicting it. This descriptive use of a regression equation has been summarized by Chatterjee and

Price (1979, p. 197), who stated: "A regression equation may be used to describe a given process or as a model for a complex interacting system. The purpose of the equation may be purely descriptive, to clarify the nature of this complex interaction."

In order to determine the best predictor variables, the stepwise regression method was utilized for each of the subgroups. In Subgroup I it was found that self-perceived adequacy of written English, age, TOEFL score, self-perceived economic situation, marital status, and previous GPA explained 97.53% of the total variation of the response variable. However, from these six mentioned variables, only the TOEFL score, the self-perceived adequacy of written English, and the age were found to be significant. Due to the fact that the number of observations is considerably low for this subgroup, it is not possible to use the regression equation as a predictor equation; however, as mentioned earlier, it is possible to use it for descriptive purposes.

In regard to Subgroup II, it was found that the variables which explained 57.73% of the variations were the TOEFL score, the previous GPA, and sex. The sex variable can be accounted for by the composition of this subgroup, which was 92.30% male. It is also true for Subgroup II that the regression equation cannot be used as a prediction equation. However, the analysis of that equation shows that the TOEFL score and the previous GPA are significant in the prediction of current GPA for this subgroup.

For Subgroup III it was found that the variables explaining 62.94% of the total variation of the response variable were: self-perceived adequacy of oral English, self-perceived economic situation, self-perceived adequacy of written English, marital status, sex,

previous GPA, and the TOEFL score. Of these seven variables, only five were found to be significant. Those significant variables were: TOEFL score, previous GPA, sex, and self-perceived adequacy of oral and written English.

Regarding Subgroup IV, which was composed of students from Business, Education, Fine Arts, Speech Pathology, and Psychology, it was found that five variables explained 54.69% of the total variation of the response variable. Those five variables were: self-perceived adequacy of oral English, self-perceived adequacy of economic situation, monthly income, previous GPA, and TOEFL score.

### Summary of Section III

According to the results obtained through the application of several regression models, it can be concluded that the TOEFL score is a predictor variable common to all the four subgroups in which the respondents were divided. It was also found that the previous GPA participated as a predictor in three of the four subgroups. As described in Table XIII, different values of  $R^2$  have been observed for each group.

Since the determination coefficient is the square of the multiple correlation coefficient, it can be assumed that the correlation coefficients found between the predictor variables and the response variables for each case are high and moderate for these subgroups.

TABLE XIII  
VALUES OF  $R^2$  FOR EACH OF THE SUBGROUPS

Subgroup	$R^2$ (Determination Coefficient)
I	.98
II	.58
III	.63
IV	.55

## CHAPTER V

### SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

This chapter has been designed to summarize the study with respect to its framework, design, findings, conclusions, and recommendations, as well as to report its results. This investigation was attempted in order to discover whether or not there was a relationship between selected variables and the academic achievement of undergraduate Venezuelan students enrolled for the 1983 spring semester at Oklahoma State University. The objectives of this study were: (1) to provide information about the personal characteristics of the undergraduate Venezuelan population, (2) to investigate the relationship of the variables of sex, age, marital status, income, field of study, TOEFL score, class in college, previous GPA, self-perceived economic situation, and self-perceived adequacy of oral and written English to the academic achievement of those students, and (3) to investigate the relationship among the aforementioned variables as observed in the four subgroups into which the original population was split.

Various motives played a decisive role in determining which problem would be studied. On one hand, foreign students are expected, as far as possible, to conduct investigations which make use of data related to their countries of origin. Such projects draw upon the



experiences and opportunities these students have had and thus benefit their countries. On the other hand, it would be worthwhile to carry out a study involving undergraduate Venezuelan students, since a review of the literature revealed such a work has yet to be undertaken. In light of this finding, it was decided that a study concerning undergraduate Venezuelan students would serve as the starting point for the investigation on a subject which is of interest to Venezuela, a country which has been sending large contingents of students to the United States to pursue a university education during the last 10 years. The selection of academic achievement as a dependent variable was made for the following reasons: (1) academic achievement is a cause for concern for many educators, among whom the author of this study is included, and (2) an investigation of the variables related to the academic achievement of undergraduates studying abroad could contribute useful information, not only to the country of Venezuela, but also to the institutions which award scholarships to qualified Venezuelan students wishing to study outside their country.

As has already been mentioned in this chapter, there is no study directly related to the problem set forth here; nevertheless, a review of the literature made it possible to establish the theoretical framework necessary for this investigation. The research carried out by Astin (1971), in which he examined the relationship existing between certain selected variables and the academic achievement of American college and university students, served as the basis for the selection of some of the variables referred to in this study. In fact, in the present study, as in Astin's, an attempt has been made to relate the student's age, sex, and previous qualifications to academic

achievement. In addition, a review of literature brought other factors to light which could eventually affect the academic achievement of foreign students in the United States. As a matter of fact, in his study, Akpan-Iquot (1980) reported that the communication problem was the greatest concern for Venezuelan students in selected Oklahoman universities. This finding gave the author the insight to include the TOEFL score as an important variable in this research. Similarly, a project done by Surdam (1980) at the University of Wyoming revealed that those students who perceived their English as adequate performed better than those who did not. Thus, her work brought about the idea that self-perceived adequacy of oral and written English were useful variables to investigate. In this way, the educational theory underpinning this study was laid.

Since this is primarily a descriptive study, some of the statistics appropriate for this type of study were evaluated, such as the means, the standard deviations, and the ranges. In order to make the characteristics of the individuals homogeneous, the group under observation was divided into four subgroups by taking into consideration the similarity of the areas of specialization chosen by the students. (Table VIII specifies the composition of the subgroups into which the respondents were divided.) Then, the correlation that exists among the different variables was studied through the construction of correlation matrices. The statistical hypotheses which state that the correlation coefficient is equal to zero were tested, and the P-values were found for each case.

The theoretical basis for the use of regression models in this study is found in Chatterjee and Price (1977). They determined that:

A regression equation may be used to describe a given process or as a model for a complex interacting system. The purpose of the equation may be purely descriptive, to clarify the nature of this complex interaction. For this use there are two conflicting requirements: (1) to explain as much of the variation as possible, which points in the direction for inclusion of large number of variables; and (2) to adhere to the principle of parsimony, which suggests trying for ease of understanding to describe the process with as few variables as possible. In situations where description is the prime goal, we try to choose the smallest number of independent variables that explains the most substantial part of the variation in the dependent variable (p. 196).

One of the basic assumptions of the regression theory is that the response variable should have the same variance for the different values of the predictor variables. This assumption, called "homocedasticity," was what this researcher had in mind when she divided the group under study into four subgroups. Creating more homogeneous subgroups, this division made it possible to increase considerably determination coefficients. Then, by utilizing regression methods, it was possible to describe the relationship between the academic achievement and the variables affecting it the most.

### Findings

The research findings can be summarized as follows:

When the total group was considered, no significant relationship was found between the academic achievement of the subjects under study and the following selected variables: (1) marital status, (2) sex, (3) age, (4) field of study, (5) class in college, (6) command of the English language, (7) educational background, (8) monthly income, (9) self-perceived adequacy of oral English, (10) self-perceived economic situation, and (11) self-perceived adequacy of written English.

Several correlation coefficients were found to be significantly different from zero when correlational procedures were applied to each one of the four subgroups in which the subjects were divided. It is worthwhile to notice that current GPA and TOEFL scores were found to be correlated in two of the subgroups: Subgroups I and IV. This finding showed how important it was to have a good command of the English language in order to perform well in programs such as Agronomy, Business, and Education; the command of the English language did not seem to be as relevant a variable for satisfactory performance in Engineering and Technology, which are undoubtedly more quantitatively oriented.

The only subgroup of the four that did not show any significant correlation coefficient involving current GPA was Subgroup III, which was composed of students from Engineering and Computer Science. This fact was reflected in the low value of  $R^2$  obtained by using the ordinary linear regression model for those variables. In order to discover the association between the current GPA and the selected variables for this subgroup, it was necessary to build a different predicting model with those variables. In this case, a substantial increase in the value of  $R^2$  was obtained.

As might be expected, there was a significant correlation between the self-perceived adequacy of written English and of oral English for the majority of the subgroups. Subgroup II, made up of students of Technology, was the only one which failed to reveal this relationship.

Theoretically, it was possible to postulate a correlation between the TOEFL score and the two self-perceptions of English adequacy, because it is likely that if a person performs well in the TOEFL test,

his or her self-confidence will increase. Nevertheless, this study showed that a significant correlation between these variables exists in only two subgroups.

The correlation between age and the two self-perceived variables measuring the adequacy of the English language, and the correlation between age and TOEFL score, were found to be negative. The first negative correlation suggests that maturity increased self-criticism about the command of the language. Regarding the negative correlation between the TOEFL score and age, it suggests that younger people can easily develop the necessary skills for good achievement in a second language. Research has been conducted in order to clarify whether or not adults and children are capable of the same level of achievement in a foreign language. Seliger's (1978) study reported that evidence supports the fact that the learner's age is a relevant factor in acquiring "native-like" pronunciation and intonation of a foreign language. Other factors could be considered relevant in explaining the negative correlation between TOEFL score and age. On one hand, younger people are less inhibited than older people; therefore, they are less afraid of demonstrating inabilities and are more confident in using the second language in a natural way. On the other hand, younger students, especially if they are unmarried, have more opportunities to establish friendly relationships which could lead to a frequent practice of the second language.

In Subgroup III, which was composed of students from Technology-related disciplines, a significant correlation was found between income and age. This fact can be explained because 53.8 percent of these students, whose ages varied from 25 to 36, are employees from

oil companies and other industrial companies from Venezuela. Since these students were sent to the United States for professional improvement, they usually receive their total salary, or a high percentage of that salary, from their companies.

### Conclusions

When correlational procedures were applied to data from all respondents, no correlation coefficient was found to be significantly different from zero, which suggested that the sample was heterogeneous. This heterogeneity was confirmed when significant correlation coefficients were obtained after dividing the group of respondents into four subgroups, according to the similarity of students' fields of study. In this case, it was found that only 2 of the 11 variables studied were significantly related to academic achievement. They were: the TOEFL score and the self-perceived adequacy of written English. Since these two variables are related to the use of the English language, it may be concluded that for all the subjects under study, except for those of Subgroup III (students from Engineering and Computer Science), the English language was a relevant variable affecting their achievement.

It is worthwhile to notice that the student's age was not found to be directly related to his or her achievement. However, some findings suggest a relationship worthy of investigation among the command of the English language, the academic achievement, and the age of undergraduate Venezuelan students. Those findings are: (1) a negative correlation was found between the TOEFL score and self-perceived adequacy of written English to age, and (2) a positive

correlation between the same two variables (the TOEFL score and self-perceived adequacy of written English to academic achievement).

In regard to the negative correlation between the TOEFL score and age found in Subgroups II and IV (which subgroups comprised 45.7 percent of the total group), it can be concluded that the skills needed to acquire a good command of the English language were more readily developed by younger than by older respondents.

An additional selective analysis of the data that permitted the separation of those questionnaires from students found to hold a current GPA higher than 3.5 revealed the following common characteristics of those students: (1) an age between 21 and 24, (2) a good command of the English language as measured by a performance of 525 or above in the TOEFL test, and (3) a previous GPA that represented a range from 14 to 18.5 (a GPA of 14 points is considered a good one in Venezuela, although the maximum of the scale is 20 points). Since the evaluation system in Venezuela is content-referenced, it is virtually impossible for any student to hold a GPA of 20--it would mean that he or she had mastered all the courses studied. Therefore, a student holding a GPA of 14 points is considered a good student. Referring back to the relationship between age, command of English, and achievement, it could be concluded that the results of this research support such a relationship. Although the age of students from the total group under study represented a range between 17 and 37, high achievers' ages only varied between 21 and 24.

An analysis of the regression equations for all the subgroups makes it indisputably clear that the TOEFL score is an important factor which is significantly related to the academic achievement of

all the students under study. In agreement with Astin's (1971) findings regarding American college students, the GPA was also found to be a relevant factor related to academic achievement of Venezuelan subjects studied.

Theoretically, it was possible to expect agreement between the TOEFL score and self-perceived adequacy of oral and written English. However, there is no evidence to support such a conclusion in this research--the self-perceptions of the English language were not found to be correlated with the actual performance in the TOEFL test.

Of the 11 variables selected, marital status, sex, and income were found to be irrelevant in explaining academic achievement for those students. Therefore, other factors should be considered for further investigations.

### Recommendations

Since this study has dealt with a specific group of students at one university, it is recommended that other groups of undergraduate Venezuelan students be tested. At the same time, it appears that factors other than those investigated in this study played a relevant role in the academic achievement of the subjects under study.

Although this study is primarily a descriptive study, and although this researcher has not attempted inferences or predictions regarding Venezuelan students from other universities and from other times, the following two recommendations seem logical: first, Venezuelan students planning to pursue undergraduate work in the United States should be aware of the necessity of obtaining a good command of the English language prior to entering American universities; the



second recommendation is directly addressed to the scholarship-granting institutions from Venezuela--the findings of this study indicate that more attention should be given, by those institutions, to the students' command of the English language and to the students' previous GPAs. Moreover, this researcher would recommend that students take the TOEFL test in Venezuela and obtain the required score before coming to the United States to pursue undergraduate studies. This policy would serve a threefold purpose: (1) to save time, effort, and money, which is applicable not only to the scholarship-granting institutions, but also to the students themselves, (2) to invest only in those students who have previously demonstrated their basic abilities in the English language such as those required in the TOEFL test, and (3) to motivate higher achievement in English in those candidates wishing to pursue studies in the United States, since English would be a basic tool for them.

An additional issue would emerge: who should pay for the study of English in Venezuela? Although more evidence should be considered, the results of this study suggest the possibility that every student pay for his or her own English preparation. Since command of the English language has been found to be related to the academic achievement of the subjects under study, and since previous research (Seligman, 1978) revealed that many factors, such as the age of the learner, place some people at a disadvantage with respect to others when a second language is going to be learned, it does not seem fair that any country should invest in students without having a high probability that their achievement will be high. Therefore, further research in this area should be encouraged in order to clarify the nature of the

relationship between age, command of the English language, and age of Venezuelan students pursuing undergraduate studies in the United States.

It appears evident that more research on Venezuelan undergraduate students in the United States is needed. There may be many factors other than the ones investigated in this study which affect their achievement. Motivation, personal interests, organizational ability, and mental capacity seem to be factors common to high achievers of the Venezuelan students investigated. Therefore, further studies considering a broader scope that includes students from different colleges and universities should be undertaken not only to confirm the relevance of English language adequacy, but also to test other variables such as those mentioned.

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## APPENDIXES

APPENDIX A

CORRESPONDENCE

April, 1983

Dear Mr.

I am conducting a study entitled "The Relation of Selected Variables to the Academic Achievement of Undergraduate Venezuelan Students at Oklahoma State University" as a partial requirement for my Master's degree in Higher Education Administration at Oklahoma State University.

The purpose of this study is to identify factors influencing the academic achievement of undergraduate Venezuelan students and to promote research in this area among the different scholarship-granting institutions in Venezuela and other Latin American countries. I feel that this project could help to foresee the factors that affect academic achievement of undergraduate students and could help to meet the needs of these students.

As a Latin American student, you were selected to take part in a pilot study that is as important as the study itself. I am requesting your cooperation in completing and returning the questionnaire attached to this letter. Please, answer the questionnaire and return it as soon as possible.

Your answers to all items will be kept in strict confidence and will be used for this research only. Please do not sign your name on the questionnaire. If you have any difficulty filling out the questions or need assistance, please do not hesitate to call me. My home phone is 372-2540.

Thank you for your assistance in this research.

Sincerely,

Maria Adela Castellano  
Graduate Student  
Educational Administration  
and Higher Education Dept.  
Oklahoma State University

April, 1983

Apreciado

Estoy realizando un estudio cuyo titulo es "La relacion existente entre ciertas variables seleccionadas y el rendimiento academico de los estudiantes de pregrado de la Universidad Estatal de Oklahoma" a fin de cumplir con uno de los requerimientos para obtener mi Maestria en Educacion Superior y Administracion Educacional.

El objeto de mi estudio es identificar factores que influncian el rendimiento academico de los estudiantes de pregrado y estimular la investigacion de esta area por parte de las diversas instituciones que otorgan becas en Venezuela y otros paises latinoamericanos. Considero que este estudio es significativo porque podria ayudar a prever los factores que afectan el rendimiento academico de los estudiantes de pregrado y podria ayudar a resolver los problemas de estos estudiantes.

Como latinoamericano, usted ha sido seleccionado para participar en el estudio piloto, el cual es tan importante como el propio estudio. Por lo tanto, por medio de esta carta, solicito su cooperacion la cual consiste en contestar cuidadosamente el cuestionario que le adjunto. De mas esta decirle que su cooperacion es muy importante para el exito de este estudio, por este motivo, le agradezco conteste el cuestionario lo mas pronto posible, por cuanto necesitaria tenerlos todos respondidos para dentro de una semana.

Sus respuestas seran tratadas de manera estrictamente confidencial y seran utilizadas para este estudio solamente. Por favor, no firme su cuestionario. Si tiene alguna dificultad con alguna de las preguntas o si necesita alguna asistencia, por favor pongase en contacto conmigo. Mi numero de telefono es 372-2540.

Gracias anticipadas por su colaboracion.

muy atentamente

Maria Adela Castellano  
Estudiante de Post grado



April, 1983

Dear Mr.

I am conducting a study entitled "The Relation of Selected Variables to the Academic Achievement of Undergraduate Venezuelan Students at Oklahoma State University," as a partial requirement for my Master's degree in Higher Education Administration at Oklahoma State University.

The purpose of this study is to identify factors influencing the academic achievement of undergraduate Venezuelan students and to promote research in this area among the different scholarship-granting institutions in Venezuela and other Latin American countries. I feel that this project is significant to Venezuelan students because it could help to foresee the factors that affect their academic achievement and could help to meet the needs of these students.

As a Venezuelan student, you were selected to take part in this study. Therefore, I must emphasize that your cooperation in completing the questionnaire attached to this letter and your cooperation in returning it is very important to the success of this study.

Your answers to all items will be kept in strict confidence and will be used for this research only. Please do not sign your name on the questionnaire. If you have difficulty filling out the questions or need assistance, please do not hesitate to contact me. My home phone number is 372-2540.

Sincerely,

Maria Adela Castellano  
Graduate Student  
Educational Administration  
and Higher Education Dept.  
Oklahoma State University

April, 1983

Apreciado

Estoy realizando un estudio cuyo titulo es "La relacion existente entre ciertas variables seleccionadas y el rendimiento academico de los estudiantes venezolanos de pregrado de la Universidad Estatal de Oklahoma" a fin cumplir con uno de los requisitos para obtener mi Maestria en Educacion Superior y Administracion Educacional.

El objeto de mi estudio es identificar factores que influncian el rendimiento academico de los estudiantes venezolanos de pregrado y estimular la investigacion de esta area por parte de las diversas instituciones que otorgan becas en Venezuela y otros paises latino-americanos. Considero que este estudio es significativo porque podria ayudar a prever los factores que afectan el rendimiento academico de los estudiantes de pregrado y podria ayudar a resolver los problemas de estos estudiantes.

Como venezolano, usted ha sido seleccionado para participar en este estudio. Por lo tanto, por medio de esta carta solicito su cooperacion la cual consiste en contestar cuidadosamente el cuestionario que le adjunto. De mas esta decirle que su cooperacion es muy importante para el exito de este estudio, por este motivo, le agradezco conteste el cuestionario lo mas pronto posible, por cuanto necesitaria tenerlo respondido para dentro de una semana.

Sus respuestas seran tratadas de manera estrictamente confidencial y seran utilizadas para este estudio solamente. Por favor, conteste todas las preguntas de la manera mas honesta posible, de lo contrario, los resultados que se obtengan en este estudio no tendran ninguna utilidad por cuanto careceran de validez. No firme su cuestionario. La investigadora solamente esta interesada en los datos que pueda recopilar para categorizar al estudiante venezolano en general. Si tiene alguna dificultad con alguna de las preguntas o si necesita alguna asistencia, por favor pongase en contacto conmigo. Mi numero de telefono es 372-2540.

Gracias anticipadas por su colaboracion.

muy atentamente

Maria Adela Castellano  
Estudiante de Post grado

## APPENDIX B

## INSTRUMENT

## Part I

Please respond to the following statements using the code below. Please circle the response that most nearly expresses your feelings on each individual statement.

SA=Strongly Agree; A=Agree; U=Undecided; D=Disagree;

SD=Strongly Disagree.

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| 1. My command of oral English is adequate in all circumstances                    | SA | A | U | D | SD |
| 2. I have the money I need for buying my textbooks.                               | SA | A | U | D | SD |
| ✓3. Giving oral reports in class troubles me.                                     | SA | A | U | D | SD |
| ✓4. Lack of understanding lectures in English is a problem I have.                | SA | A | U | D | SD |
| 5. My written English is adequate for my needs.                                   | SA | A | U | D | SD |
| ✓6. Lack of money to meet expenses is a common problem I have.                    | SA | A | U | D | SD |
| ✓7. Lack of command of oral English limits my academic activities.                | SA | A | U | D | SD |
| ✓8. My command of written English allows me to write term papers without trouble. | SA | A | U | D | SD |
| ✓9. An essay exam (long self-developed answers) troubles me.                      | SA | A | U | D | SD |
| ✓10. The money I receive allows me to meet my economic needs.                     | SA | A | U | D | SD |
| ✓11. My ability to write English is limited.                                      | SA | A | U | D | SD |
| ✓12. Not receiving my money on time is a problem I have.                          | SA | A | U | D | SD |
| ✓13. Reading textbooks written in English troubles me.                            | SA | A | U | D | SD |
| ✓14. My oral English is adequate for my needs.                                    | SA | A | U | D | SD |

## Part II

Personal Information

15. Marital status

\_\_\_\_\_ Married

\_\_\_\_\_ Not married

16. Number of children: \_\_\_\_\_

17. Sex: \_\_\_\_\_ M \_\_\_\_\_ F

18. Age: \_\_\_\_\_

19. My personal income is \$ \_\_\_\_\_ monthly  
yearly

Part III  
Academic Information

20. Field of Study \_\_\_\_\_
21. Class in College  
\_\_\_\_\_ freshman (1 ) \_\_\_\_\_ junior (3 )  
\_\_\_\_\_ sophomore (2 ) \_\_\_\_\_ senior (4 )
22. Number of years in this university: \_\_\_\_\_
23. Number of years in the United States: \_\_\_\_\_
24. My high school degree was obtained in (Science,  
Humanities, etc.) \_\_\_\_\_.
25. My Grade Point Average from high school was: \_\_\_\_\_
26. My highest TOEFL score was: \_\_\_\_\_
27. My current Grade Point Average is: \_\_\_\_\_

## PARTE I

Por favor, responda las siguientes preguntas utilizando el código que seguidamente se especifica. Por favor, encierre en un círculo la alternativa que mejor exprese sus sentimientos en cada una de las preguntas que se le plantean. TA= Total acuerdo; A= Acuerdo; I= Indeciso; D= Desacuerdo; TD= Total desacuerdo.

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| 1. Mi dominio del inglés oral es adecuado en todas las circunstancias que se me presentan.                      | TA | A | I | D | TD |
| 2. Yo cuento con el dinero que necesito para la compra de mis libros.   | TA | A | I | D | TD |
| 3. Hacer presentaciones orales en clase es difícil para mi.   | TA | A | I | D | TD |
| 4. El no entender lo que el profesor dice en clase es un problema que tengo.                                    | TA | A | I | D | TD |
| 5. Mi inglés escrito es adecuado a mis necesidades.   | TA | A | I | D | TD |
| 6. Falta de dinero para cubrir mis gastos es una constante preocupación para mi.                                | TA | A | I | D | TD |
| 7. La falta de dominio del inglés oral limita mi participación en actividades académicas.                       | TA | A | I | D | TD |
| 8. Mi dominio del inglés escrito me permite escribir mis reportes y trabajos sin ninguna dificultad.            | TA | A | I | D | TD |
| 9. Los exámenes de desarrollo o ensayo (que constan de preguntas cuyas respuestas son largas) se me dificultan. | TA | A | I | D | TD |
| 10. El dinero que recibo me permite cubrir mis necesidades económicas.  | TA | A | I | D | TD |
| 11. Mi habilidad para escribir en inglés es muy limitada.   | TA | A | I | D | TD |
| 12. El no recibir dinero a tiempo es un problema que me afecta.   | TA | A | I | D | TD |
| 13. Leer libros en inglés se me dificulta.  | TA | A | I | D | TD |
| 14. Mi inglés oral es adecuado a mis necesidades.   | TA | A | I | D | TD |

## PARTE II

## Información personal

15. Estado civil  
       \_\_\_\_\_ Casado  
       \_\_\_\_\_ No casado
16. Número de hijos: \_\_\_\_\_
17. Sexo  
       \_\_\_\_\_ M        \_\_\_\_\_ F

18. Mi edad: \_\_\_\_\_
19. Mi ingreso personal es de \$ \_\_\_\_\_ mensuales.  
anuales.

PARTE III  
Información académica

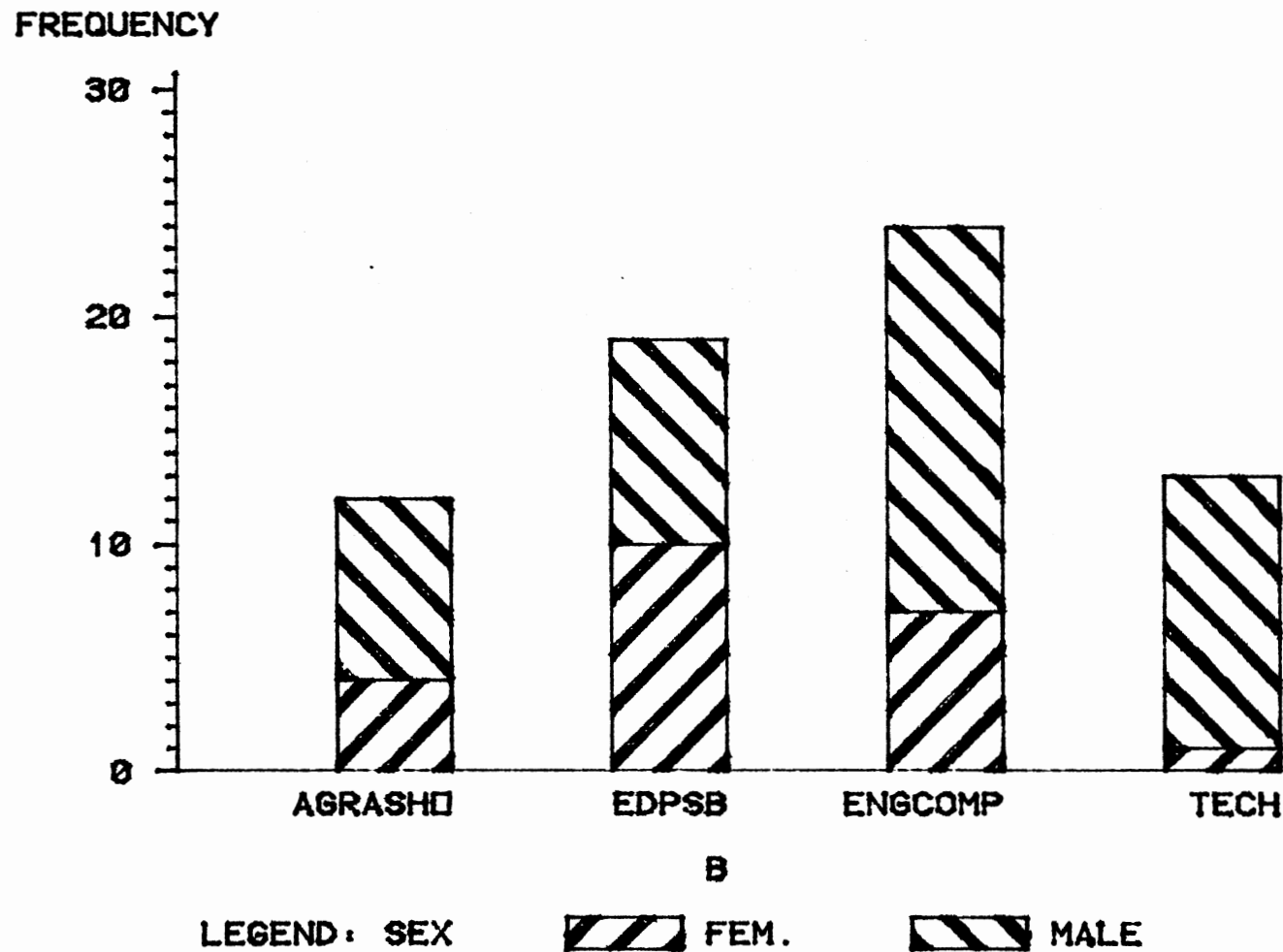
20. Carrera que estoy estudiando: \_\_\_\_\_
21. Año que estoy estudiando:  
\_\_\_\_\_ freshman (1º) \_\_\_\_\_ junior (3º)  
\_\_\_\_\_ sophomore (2º) \_\_\_\_\_ senior (4º)
22. Número de años que he estudiado en esta universidad:  
\_\_\_\_\_.
23. Número de años que tengo en los Estados Unidos: \_\_\_\_\_
24. Mi bachillerato lo obtuve en (Ciencias, Humanidades, etc.): \_\_\_\_\_.
25. Mi promedio de calificaciones en secundaria fue:  
\_\_\_\_\_.
26. Mi calificación de TOEFL más alta fue: \_\_\_\_\_.
27. Mi promedio de notas actual es: \_\_\_\_\_.  
(en número)

## APPENDIX C

### DATA GRAPHS OF SUBGROUPS

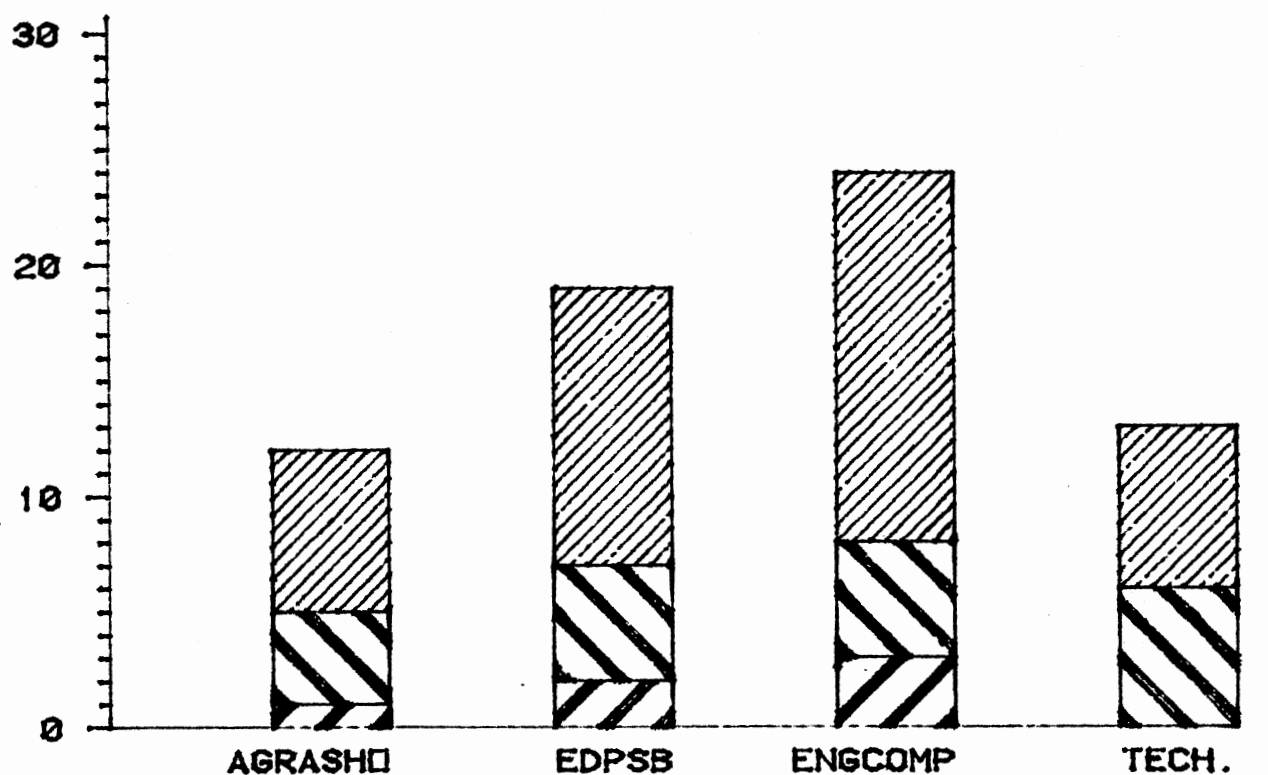


# DISTRIBUTION OF SEX IN SUBGROUPS



# DISTRIBUTION OF AGES IN SUBGROUPS

FREQUENCY



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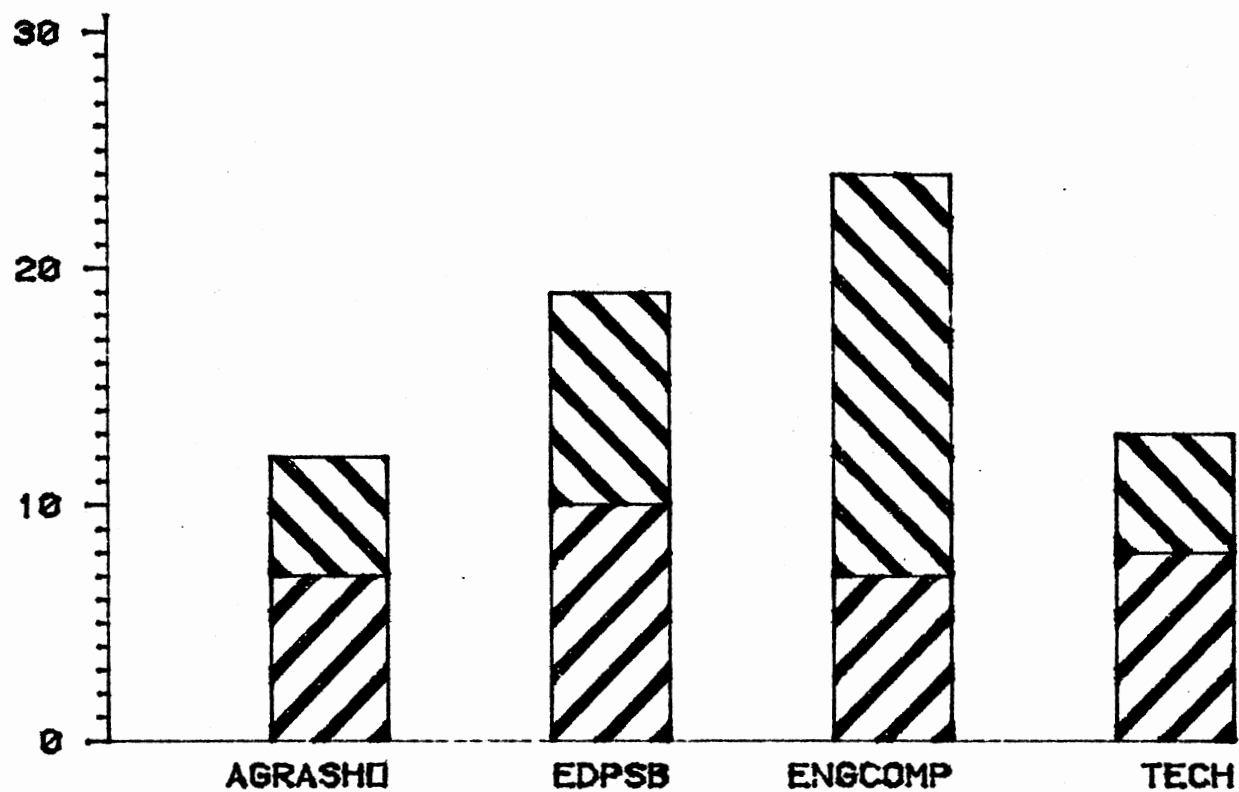
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 20-25

# DISTRIBUTION OF MARITAL STATUS IN SUBGROUPS

FREQUENCY



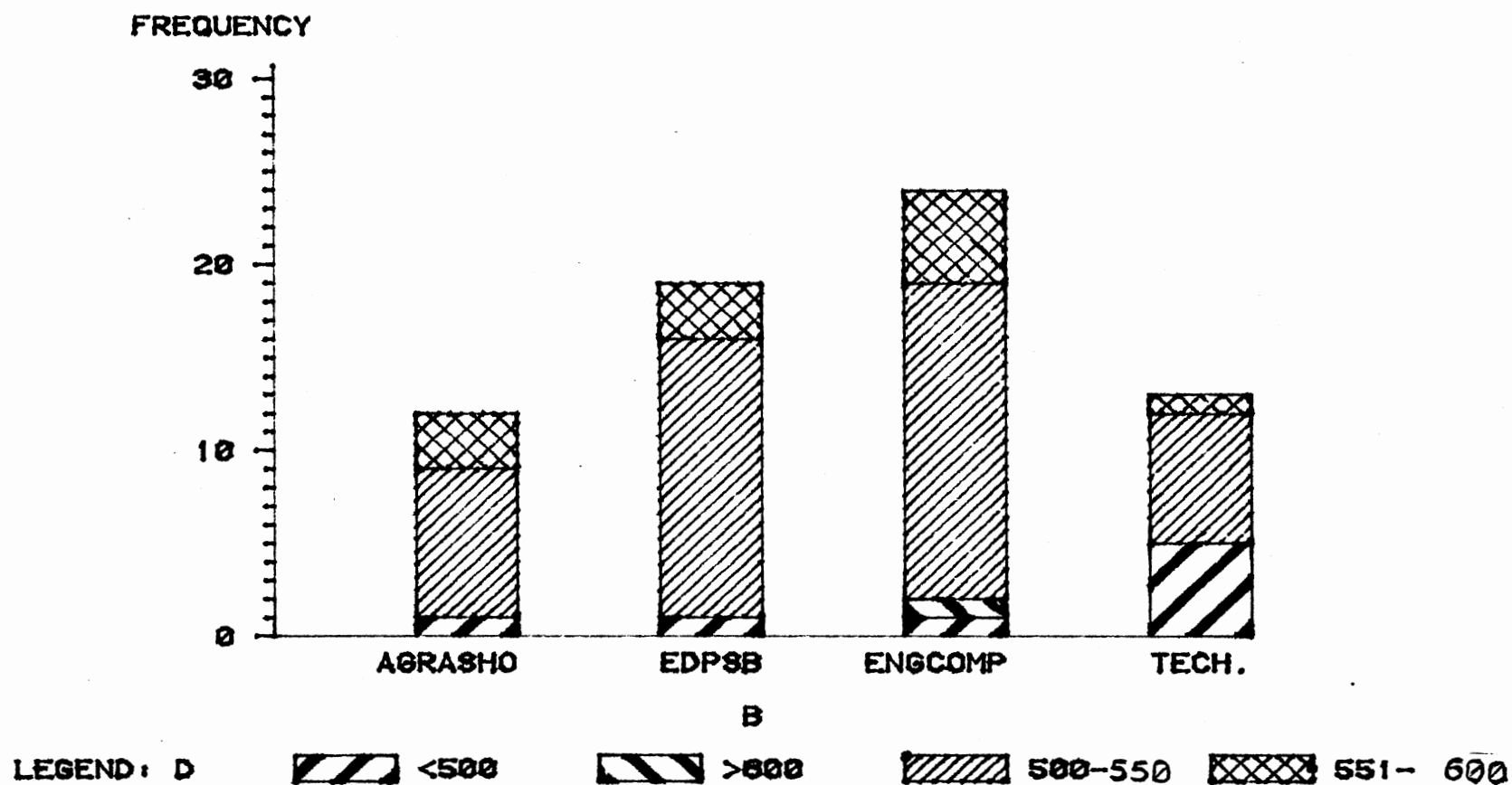
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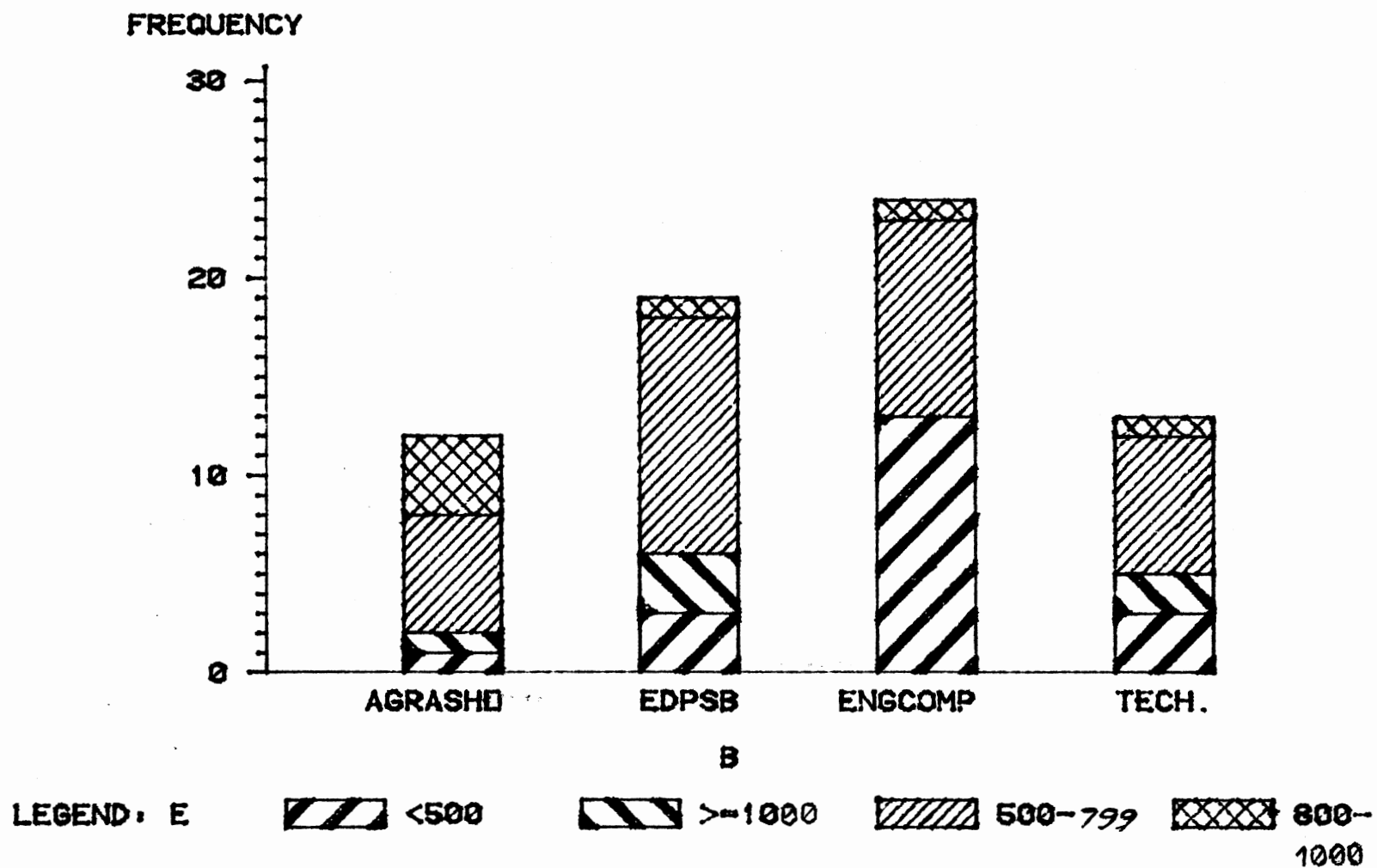
MARRIED

UNMARR.

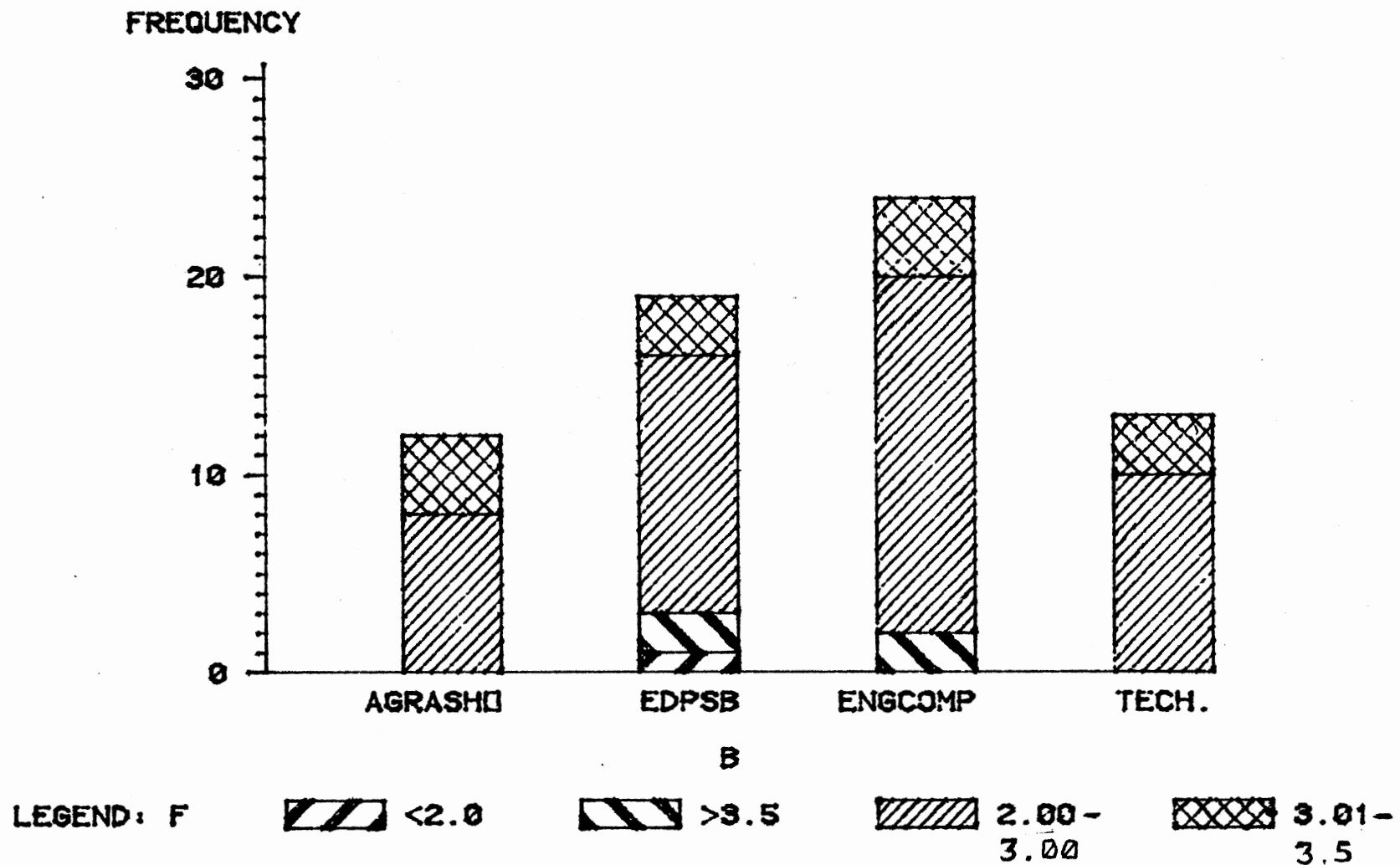
# DISTRIBUTION OF TOEFL SCORES IN SUBGROUPS



# DISTRIBUTION OF INCOME IN SUBGROUPS



# DISTRIBUTION OF G P A IN SUBGROUPS



VITA |

Maria Adela Torrellas De Castellano

Candidate for the Degree of

Master of Science

Thesis: THE RELATION OF SELECTED VARIABLES TO THE ACADEMIC  
ACHIEVEMENT OF UNDERGRADUATE VENEZUELAN STUDENTS AT  
OKLAHOMA STATE UNIVERSITY

Major Field: Education Administration

Biographical:

Personal Data: Born in Caracas, Venezuela, October 5, 1944, the  
daughter of Mr. and Mrs. Jose Torrellas.

Education: Attended public schools in Caracas, Venezuela; graduated from Liceo de Aplicacion, Caracas, Venezuela, in July, 1961; received the Secondary Education Professor degree from the Instituto Pedagogico de Caracas, Caracas, Venezuela, in July, 1971; completed requirements for the Master of Science degree at Oklahoma State University in December, 1983.

Professional Experience: Teacher of English, Liceo Diego de Losada, Caracas, Venezuela, 1969-70; Teacher of English and Head of the Evaluation Department, Liceo Francisco de Miranda, Los Teques, Estado Mirando, Venezuela, 1970-74; Teacher of English and Head of the Evaluation Department, Liceo Fermin Toro, Caracas, Venezuela, 1974-81.

Professional Organizations: Colegio de Profesores de Venezuela, Federacion Venezolana de Maestros.