# PERCEPTIONS OF THE FACTORS REGARDING SUCCESSFUL COMPLETION OF COURSE EXAMINATIONS IN THE SCHOOL OF MEDICINE AT THE UNIVERSIDAD CENTRO OCCIDENTAL LISANDRO ALVARADO OF VENEZUELA 

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## CHAPTER I

## INTRODUCTION

Latin American countries are emphasizing education as a means of developing tools to help people improve their lives. These improvements will hopefully lead to improvements in health, economics, social conditions, and agricultural conditions. By doing this, Latin American countries, called developing countries, can reach balanced development in all of the above mentioned areas and become developed countries.

The development of human resources through education is a condition for achieving the political, social, and cultural goals of a society. This idea was developed by Trejos (1971). It is necessary for a society to prepare specialized technicians and professionally educated persons to assist in the planning and distribution of the nation's wealth.

Venezuela, as a Latin American and developing country, considers education to be of vital importance in carrying out the nation's objectives. But the country is confronting a series of problems in trying to give education to all the people who need it.

Since 1958, there has been an explosion of students enrolling at all levels including elementary, secondary, and higher education. After the overthrow of the dictatorship in that year, a democratic approach to education has contributed to increased enrollments. In 1958, there was a total higher education enrollment of 11,003 , and of these, 10,657 were enrolled in the universities. The rest of the stu-
dents, 346 , went to the other higher education institution, a teacher's college. By that time, there were only four public universities, two private universities, and one teacher's college (see Table I).

From 1958 to 1978, the enrollment increased each year, and the students enrolled in polytechnic institutes, junior colleges, and teacher colleges which offered different career preparation at different levels. Yet the students were still keenly interested in enrolling at the universities (see Table II).

Diversification of higher education has occurred after 1958 due to the fact that democracy was the way of life for all the people. Another factor was that Article 78 of the Constitution and the Law of Education both stated that education is a right for all the people and that it must be free. By attending to this mandate, the state will form the human resources necessary to develop an autonomous nation. The democratic governments have tried to make the educational goals of the Constitution and the Law of Education a reality by increasing the number of educational institutions at all levels, elementary, secondary, and higher education. This last sector has grown vigorously (see Table III).

The Planning Office for the University Sector, a branch of the Ministry of Education, has implemented a systematic way to enroll students at the different existing institutions and to provide a student enrollment process for each of them. The approach is to distribute students among the different institutions according to both the career chosen and the available physical facilities. This office tries to set some limits on enrollments in the most common careers, i.e., medicine, law, engineering, dentistry, and teaching. These are

TABLE I

HIGHER EDUCATION INSTITUTIONS UP TO 1958

| Initials | Name | Founded |
| :--- | :--- | :---: |
| UCV | Universidad Central De Venezuela | $12-22-1721$ |
| ULA | Universidad De Los Andes | $09-21-1810$ |
| LUZ | Universidad Del Zulia | $05-29-1891$ |
| UC | Universidad De Carabobo | $11-15-189.2$ |
| UCAB | Universidad Catolica Andres Be11o | $10-19-1953$ |
| USM | Universidad Santa Maria | $10-13-1953$ |
| IUPC | Instituto Universitario Pedagogico | $09-30-1936$ |
|  | De Caracas |  |

TABLE II

ENROLLMENT TRENDS

| Years | Tota1 Enrollment | Universities Enrollment | \% | Other Higher Educ. Institutions |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1957-58 | 11,003 | 10,657 | 96.86 | 346 | 3.14\% |
| 1958-59 | 16,795 | 15,936 | 94.89 | 859 | 5.11\% |
| 1959-60 | 22,088 | 20,652 | 93.50 | 1,436 | 6.50\% |
| 1960-61 | 24,907 | 22,696 | 91.12 | 2,211 | 8.88\% |
| 1961-62 | 30,489 | 28,062 | 92.04 | 2,427 | 7.96\% |
| 1962-63 | 33,571 | 30,766 | 91.64 | 2,805 | 8.36\% |
| 1963-64 | 36,999 | 34,402 | 92.44 | 2,797 | 7.56\% |
| 1964-65 | 40,427 | 37,719 | 93.30 | 2,708 | 6.70\% |
| 1965-66 | 45,879 | 43,049 | 93.83 | 2,830 | 6.17\% |
| 1966-67 | 50,376 | 47,009 | 93.49 | 3,277 | 6.51\% |
| 1967-68 | 56,137 | 52,599 | 93.70 | 3,538 | 6.30\% |
| 1968-69 | 62,449 | 58,674 | 93.96 | 3,775 | 6.04\% |
| 1969-70 | 70,816 | 66,218 | 93.51 | 4,598 | 6.49\% |
| 1970-71 | 85,675 | 80,598 | 94.07 | 5,077 | 5.93\% |
| 1971-72 | 95,294 | 88,505 | 92.88 | 6,789 | 7.12\% |
| 1972-73 | 115,462 | 107,541 | 93.14 | 7,291. | 6.86\% |
| 1973-74 | 159,269 | 145,462 | 91.33 | 13,807 | 8.67\% |
| 1974-75 | 193,262 | 165,238 | 85.50 | 28,024 | 14.50\% |
| 1975-76 | 221,581 | 185,518 | 83.72 | 36,063 | 16.28\% |
| 1976-77 | 247,518 | 202,422 | 81.78 | 25,096 | 18.22\% |
| 1977-78 | 265,671 | 218,392 | 82.20 | 47,279 | 17.80\% |

TABLE III
NUMBER OF HIGHER EDUCATION INSTITUTIONS UP TO 1980

| Universities Public Private |  | Teacher Colleges Public Private |  |  | Polytechnic | Technological Public | Institutes Private | Junior Colleges Public Private |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 5 | 5 |  | 2 | 4 | 12 | 11 | 7 | 5 |
| Total: | 18 |  | 7 |  | 4 | 23 |  | 12 |  |

the traditional careers that are believed to give more prestige (Prieto, 1980).

The increasing enrollment in higher education is expected to produce a number of graduates who will go to the market place and benefit society. But this is not always true because according to Marta 5. Secea (1979) only a few students succeed in their academic programs. In fact, Venezuela appears to be experiencing educational wastage as increased resources are committed to education at the same time that academic performance is decreasing.

The Universidad Centro Occidental Lisandro Alvarado is one of the higher learning centers affected by this problem. This institution offers training for careers such as Business Administration, Veterinary Medicine, Medicine, Agronomy, Civil Engineering, Computer Science, Mathematics, Data Processing, and Agricultural Administration.

Enrollment at this institution has been increasing, the budget has been increasing, but the absolute number of graduates has been decreasing (see Table IV). It can be said that only a few students succeed without any problems at all. This implies that some factors are operating to cause the success or failure at the University, specifically at the School of Medicine (see Table V).

Statement of the Problem

There are many factors which influence an individual's performance at the university. It seems to be that factors such as: intellectual ability, exam difficulty, effort, luck, instructor biases, help from others, and mood influence the academic performance which is reflected in the success or failure of the individual.

TABLE IV
MEDICAL STUDENTS ENROLLED AT THE UNIVERSIDAD CENTRO OCCIDENTAL LISANDRO ALVARADO

| III | IV | V | VI | VII | VIII | IX | X | XI | XII |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 43 | 199 | 101 | 124 | 157 | 214 | 277 | 407 | 425 | 57 |

TABLE V

POPULATION OF MEDICAL STUDENTS BY SEMESTERS INCLUDING REPEATERS FOR THE FIRST, SECOND, AND THIRD TIME AND REGULAR STUDENTS DURING THE YEAR 1980-81.

| Year | Semester | Regular Students | Repeaters(I) | Repeaters(II) | Repeaters(III) | Pop. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980-81 | III | 216 | 98 | 62 | 52 | 428 |
|  | IV | 80 | 21 |  |  | 101 |
|  | V | 102 | 54 |  |  | 156 |
|  | VI | 73 | 18 |  |  | 91 |
|  | VII | 144 |  |  |  | 144 |
|  | VIII | 85 |  |  |  | 85 |
|  | IX | 87 |  |  |  | 87 |
|  | X | -- |  |  |  | --- |
|  | XI | 69 |  |  |  | 69 |
|  | XII | 07 |  |  |  | 07 |

This problem was higlighted in a document of the Planning Office for the University Sector which said:

The National Council of Universities (1979a) must conduct a careful study of the great number of repeaters that seek the solution at the educational level and at the student level because it will be necessary to reorient this kind of students and incorporate them into the mainstream of education (p. 8).

Although the Universidad Centro Occidental Lisandro Alvarado is allocating significant economic and human resources to the School of Medicine, it appears that a high number of medical students fail to graduate while a low number succeeds and graduates.

The University Council of the Universidad Central de Venezuela
(1979b) in the meeting held in January 11, 1978, said that:
... the low academic performance of the students is of suc a magnitude that only one out of five gets a degree in the stipulated period.
... research must be done in this area to reach solutions that allow make decisions at the national level to solve this problem (p. 10).

Due to the importance of this phenomenon, this study was conducted to address one major question:

Which factors--intellectual ability, exam difficulty, effort, luck, instructor biases, help from others, and mood--may influence the academic performance of medical students on exams?

Purpose of the Study

The extent to which the students and faculty are willing to cooperate, communicate, and improve their relationship depends upon how they perceive each other, since their attitudes affect their behavior and actions. Relationship is very important because it eases
some problems students can have.
There have been numerous studies concerning the problems students have at the elementary and secondary levels, but few studies have dealt with academic performance at the higher education institutions especia.lly universities in Venezuela.

The Rector of the Universidad Central de Venezuela (1979c) stated the problem but in relation to wastage in higher education:

It is without any doubt, that the universities and the other type of higher education institutions must do an effort to improve the efficiency and productivity in such a way that within the educational system and in accordance with the evolution of science and necessities of the country, there must be an equilibrium between the students who go to the system and those who get a degree (p. 14).

The Vice President for Academric Affairs of the Universidad Central de Venezuela (1979d) and the Commission for Support of the Academic Performance produced a document in which they say that:
... the average number of graduates up to 1969 was 1,677 per year for a population that is greater than 20,000 since 1964 . The academic performance at the Universidad Central is 25 percent with a variation from 15 to 38 percent according to the schcols (p. 14).

Regardless of the importance of this document, some features were absent in the study: there was no determination of the causes of the poor academic performance of students, the perceptions of the causes of failure by the faculty and students were not determined, and a comparison was not made between faculty and students. The present study was aimed at these objectives.

The purpose of this research was:

1. To find out the perceptions of the factors related to academic success of students in the School of Medicine at the Universidad Centro Occidental Lisandro Alvarado as they are perceived by students and faculty.
2. To contribute information relevant to the understanding of the variety of factors which students and faculty associate with academic success in medical school.

The main objectives of this study were:

1. To identify and rank according to importance student-faculty perceived factors related to academic success.
2. To compare students' perceived factors related to academic success to discover possible significant differences which may exist among perceptions held by them.
3. To compare students' perceived factors and faculty's perceived factors related to academic success to discover possible significant differences which may exist between perceptions held by students and teachers.

## Hypotheses

In view of the above problems, purpose, and objectives, four major hypotheses were tested.

1. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful versus unsuccessful medical students.
2. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices,
help from others, and luck as factors related to academic success as perceived by medical students who are successful versus those who are repeaters.
3. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.
4. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students versus faculty.

## Definition of Terms

The following terms are defined to add clarity and common understanding of their use in this study:

Academic Success--In this study, academic success was defined as the satisfactory outcome or result of being successful in more than half of the courses actually taken during any semester by getting grades of 10 points or above on the exams based on a scale from 1 to 20.

Academic Failure--In this study, academic failure refers to the unsatisfactory outcome or result of being unsuccessful in more than half of the courses actually taken during any semester by getting grades below 10 points on the exams based on a scale from 1 to 20.

Academically Successful Student--refers to a student who carries a normal academic load and receives a grade of 9 or below on exams in
all the courses taken at the end of any semester based on a scale from 1 to 20.

Academically Unsuccessful Student--refers to a student who carries a normal academic load and receives a grade of 9 or below on exams in more than half of the courses actually taken at the end of any semester based on a scale from 1 to 20.

Repeater--refers to a student who carries a normal academic load and receives a grade of 9 or below in more than half of the courses actually taken at the end of any semester based on a scale from 1 to 20 and who has to retake the exams in the courses he/she failed. If the student fails on the exams, he or she has to retake the courses.

GPA--refers to the acumulative grade point average over a definite period of time.

Evaluation System--refers to any evaluation, oral or written, graded according to a scale from 1 to 20 . The student who gets 10 or more is eligible to be promoted at the end of any semester; the student who gets 9 or below is not eligible to be promoted to the next semester. This system is compulsory, and every faculty member has to evaluate according to it.

Non-intellectual Factors--is concerned with personality and environmental variables not measured by previous academic records which might contribute to the academic success of medical students, i.e., anxiety, rural or urban origin, socio-economic status.

Scope of the Study

The scope of the study was limited to the Universidad Centro Occidental Lisandro Alvarado in Barquisimeto, Estado Lara, whose

School of Medicine has a high rate of repeaters and unsuccessful students. Although this University is representative of the Western Central Region of Venezuela, the study does not intend to reach conclusions about the region. Also, the study included only the School of Medicine from the various schools which the University has. Finally, the main thrust in the data analysis was limited to only seven factors--intellectual ability, exam difficulty, effort, luck, instructor biases, help from others, and mood--to be tested by students and faculty and not by administrators or authorities of the University.

Assumptions of the Study

1. It is assumed that the modification of the instrument had no significant effect on the validity and reliability of the whole instrument.
2. It is assumed that responses to the questionnaire items reflected the actual perceptions of the respondents to the various factors related to academic performance.
3. It is assumed that students--successful, unsuccessful, and repeaters--as defined in this study, play a major role in the academic performance and, thus, their perceptions have a stake in the decisions concerning academic performance.

Significance of the Study

There is a strong belief that academic performance is related to articulation problems, financing, efficiency and productivity at the university level. Based on this premise, identification of the factors by faculty and students, and more knowledge about the effects of
such factors on academic performance, are needed.
The data collected appear to have significance for several reasons. First, they may provide information which may be used to detect the factors that are related to academic success of medical students, and such information may be useful for improving low academic performance of the students at the Universidad Centro Occidental Lisandro Alvarado. Second, the information should help the educational administrators, faculty, and planners to examine the present perceptions of faculty and students and move in the direction of a more effective higher education in the near future. Third, in addition to the population under study, the findings should be of value to the rest of the higher education institutions in the state which may initiate a study about the problems pertinent to academic performance. Finally, the study has the potential of making a contribution to the literature on academic performance of medical students in Venezuela.

CHAPTER II

## REVIEW OF SELECTED LITERATURE

Concern with the prediction of academic performance has notably increased during recent years, and it has been intensively studied and reflected extensively in the literature. Numerous books and articles have focused primarily on intellectual and ability factors as predictors. Recently there have been important changes in emphasis and in the conceptualization of the problem due to the gradual recognition that some students perform better and some perform worse than predicted by ability tests. This fact led to the consideration of nonintellectual or personality characteristics and to the recognition of the fact that the interaction between aspects of the student's personality and his/her social environment is important. The review of literature in this study reports only that literature which was believed to be important and relevant. The literature was grouped into three categories: (1) studies relevant to success or failure and academic performance; and (2) studies relevant to personality factors; and (3) studies of academic performance in Venezuela.

## Success, Failure and Academic Performance

More than half a century ago, Bott--as reported by Harrison and Wallace (1975)--published a paper related to the prediction of academic performance of medical students. He used 275 medical students
from the classes of 1922 and 1923 at the University of Toronto and gave them aptitude tests. He found that there was neither correlation between first year and fifth year medical school grades nor correlation between the entrance examination aptitude tests and grades for the third, fourth, and fifth years. He concluded by saying that the criterion of achievement should be taken from later rather than earlier years of medical training because the indications are that the early standing is not itself reliable in a predictive sense. Through the years many studies have been done to predict academic performance of medical students. According to Ortega (1976),

In the organization of the higher learning, in constructing a university, the starting point must be the student and neither the body of knowledge nor the faculty member. The university has to be the institutional projection of the learner whose two dimensions are: What he is and what he needs to know to survive (p. 56).
that is the reason why the university as a site of higher learning has to deal primarily with students and all the factors related to them.

McNeely (1957) made a study based on the class of students entering as freshmen and registered for a degree at the beginning of the 1931-32 academic year in the different colleges and schools at each of the 25 universities which participated in the study. A tracing of the history and records of these students through their collegiate career was made for the purpose of discovering those who left the university over the regular 4-year period and those who remained until 1934-35 and were graduated. Students who entered the university, but who were not candidates for degrees, and those who came after the year 1931-32, were not taken into account.

The Office of Education furnished the form to be sent to the 25 universities spread throughout the U.S.A. which comprised various types of institutions. It contained items about sex, age at the time of enrollment, causes for leaving the university, credit hours taken, credit hours earned during each semester or quarter, academic grades, parttime work, participation in extracurricular activities, and membership in fraternities or sororities.

The data were obtained from the records of the students at the registrar's office, personnel officer, alumni organization or other agencies on the campus. If information about each of the items was not obtained, a questionnaire was sent directly to the students to obtain the missing information.

For the treatment of the data, 22 tables were furnished by the Office of Education to the different universities involved in the study. Each table was accompanied with the respective instructions and information on how to tabulate the statistical data.

It was found that mortality among men was greater than women. It indicated that in higher education in the U.S.A., a proportionately larger number of men than women fail to remain in college until graduation. In the university with the highest rate of graduation, almost 6 out of every 10 students obtained degrees during or at the end of the 4 year period.

Iffer (1958) indicated that 7.3 percent of the students failed to graduate on schedule out of a total of 12,667 entering freshmen in 1950. The data were based on the records and reports of students who entered as full-time freshmen in the fall of 1950. Data were furnished by the institution regarding standing in high school graduating
class, standing on college placement, and college grades.
The institutions which participated in the study were: (1) universities in which there was considerable stress on graduate instruction, which conferred degrees in a variety of liberal arts fields, and which had at least two professional schools that were not exclusively technological; (2) technological institutions, in which training was predominantly in technical and physical science disciplines; (3) liberal arts colleges in which the principal emphasis was placed on a program of general undergraduate education; and (4) teacher colleges devoted to teacher training and junior colleges which offered a degree after the two first years and which had programs not carrying degree credit.

From a total of 1,600 eligible institutions, a sample of 177 was drawn, of which 115 responded. The data showed 7.3 percent of the students failed to graduate on schedule out of a total of 12,667 entering freshmen in 1950. The data also showed 51.3 percent graduated during the summer of 1954, after 4 years of study. Approximately 11.2 percent were still attending the institutions of original registration. This group contained 500 seniors with major interest in engineering, 125 interested in medicine, and 400 interested in law. Many of these would not have received a degree by 1954, but they were in good academic standing.

Another important factor is the perception of students about success or failure. A number of studies have been conducted and they suggested that individuals tended to view their successes or failures as being related to their ability, effort, and luck.

BarTar and Darom (1979) extended the investigations made about
the causal perceptions of success and failure to a real test situation. They stated two hypotheses: "Success would be attributed more to internal causes than to external causes. Failure would be attributed more to external causes than to internal causes" (pp. 264-267). They conducted a study with a sample of 236 students, and their findings supported other studies which suggested that individuals tended to relate their successes or failures to their ability, effort, difficulty, and luck. Other findings were that ability, material, effort, test preparation, teacher, interest, and home conditions affected the academic performance of students.

Hanson and Snyder (1979) studied the factors that 144 children used to explain the outcomes of various familiar achievement situations. They found that ability was more often related to success, as were effort and interest. Mood, the task, and interactions between the tasks and the person's ability were more often used to explain failure.

Nierenberg and associates (1973) conducted a study with thirtytwo students at the University of California who were asked to imagine themselves as teachers who had given a test to a class. They were in turn to evaluate the students. The evaluation consisted of outcome on the exam, effort expended in studying for the exam, and level of ability, or any combination. They were told that they knew the pupil's ability, how hard he or she tried on this test, how well he or she usually tried, and how well he or she did on this test. The teachers administered rewards or punishments in each of the 20 simulated conditions (5 levels of outcome X 2 levels of effort X 2 levels of ability). It was found that success was rewarded more than failure, high effort was rewarded more than low effort, and, in general, low ability
was rewarded more than high ability. The highest rewards were given to students with low ability who tried hard and performed well, while the greatest punishments were given to students with high ability who did not try and performed poorly.

Davis, Mertens, Patterson, Lambson, and Brown (1976) conducted a study which attempted to predict academic success at the medical school in the University of Kentucky. Working with 568 medical students from 1961 to 1968, the study attempted to seek to determine the relationship of selected variables with the eventual success or failure of students in medical school. The findings suggested that Science Undergraduate Point Average was suggestive of the basic skills generally regarded as necessary for academic success in medical school.

Following the same trend of predicting success in medical school, Clapp and Reid (1978) studied 110 students at the University of Missouri, Columbia School of Medicine, during 1972 and 1973 and found selectivity of undergraduate institutions to be a useful predictor of performance. They found that GPA adjusted by institutional se1ectivity was considerable more successful than raw GPA in predicting academic success.

It seems that prediction of academic performance of medical students is of great concern for people involved in medical education. Selecting students for admission to medical school who have a high potential for success has been investigated and will be investigated by numerous researchers. The prediction of sutcess or failure is based on admission tests, interviews, and letters of recommendation from premedical faculty. Davis and his associates (1976) sought to determine ; the relationship of selected admissions variables with the eventual
success or failure of students in medical school. They used seven variables: 4 Medical College Admission Test (MCAT) subscores (verbal, quantitative, general information, and science), age at admission, undergraduate science grade point average, and the Otis Test of Mental Ability Scores. They reported that the variables of SGPA and MCAT science were suggestive of the basic skills generally regarded as necessary for academic success in medical schools. Age at admission appeared to be a valid predictor of academic success.

Harrison and Hall (1975) reported that during the first two years of medical school, attainment seemed to be an academic matter and could be predicted by a combination of certain variables: tested scholastic aptitudes and indices of premedical academic achievement. Murden and associates (1978) reported that many studies have demonstrated little or no correlation of various admissions parameters with academic success in medical school.

## Summary

It is apparent from the review of literature that many factors whether intellectual or non-intellectual appear to influence academic performance. Although these variables do not characterize medical students they help to understand the success or failure of them.

The studies revealed that no patterns exist to classify students as successful or unsuccessful because some discrepancies are still present due to the fact that the studies were not conclusive or definite.

## Studies Relevant to Personality Factors

Although this study did not seek to determine which personality factors could be used as predictors of success or failure of medical students, it appeared evident that some did affect the outcome of students. Personality factors, i.e., mood, are considered nonintellectual variables which intervene in the achievement of students. The literature reviewed revealed that mood, help from others (cheating), and instructor's biases were not found isolated as predictors of success or failure. They were used in the study because they seem to be important in the satisfactory or unsatisfactory outcome of the students.

Personality needs of students have been used to identify nonintellectual factors that contribute to college success. There was some evidence that factors other than intelligence affect student's performance in medical schools.

Merton, cited by Miller (1961), found that students who entered medical schools with previously acquired friends obtained higher grades in the first year anatomy courses than those who came without friends. That suggested that variables other than intelligence appear to be operating.

Vaughn (1949, p. 45) said that "scholastic success, however, does not depend exclusively on general ability or achievement, either in skills or knowledge." Personality factors, an individual's activity over and above his formal education, health and energy output, level of aspiration, identifying of purpose, and spiritual and moral values cannot be overlooked in predicting college success. A high proportion of
those students selected to begin the study of medicine should be able to complete the program satisfactorily, and their previous experiences, abilities and all the other characteristics which identify them as individuals must be taken into account by the curriculum, teachers, educational values, and the educational and professional opportunities. According to Vaught (1949),

The development of general ability or intelligence tests and specialized achievement examinations, whether they be in premedical science, art, literature is considered important to the medical college. With such instruments it can be measured with good precision the individual's ability and preparation, and from the results of the tests the motivation the individual has maintained can be guessed. If the measuring instruments are sufficiently diverse in character, it can also be estimated, within broad limits, the student's special interest. Health, physical status, energy output can be measured but attitudes, beliefs, social competence and emotional adjustment can not be measured as precisely as it is wished (p. 45).

Miller and associates (1961) also noted that there are factors other than intelligence that affect a student's performance in medical school. Motivation appeared to be very important, and the job of the effective teacher was to arrange instruction in such a way that motivational features would be present. He reported that George Kelly, psychological theoritician and clinician, found from his experience that the most. practical approach to so-called motivational problems of students is to reorient the faculty.

Another non-intellectual characteristic of considerable interest was personal adjustment, and the interview was the most widely used device to appraise personal adjustment. However a lack of criteria for the observations to be made limited the predictions. An agreement is necessary on certain personality characteristics, values or orien-
tations that were desirable in the students to assess these characteristics.

Plant and Minium (1967) conducted a study to determine if nonintellectual characteristics change over time for brighter than average students. Sociability, self-control, achievement via independence, intellectual efficiency, and responsibility were tested through several measurements, such as the Ethnocentrism Scale, the Dogmatism Scale, The Authoritarianism Scale, five scales from the California Psychological Inventory, and the Allport-Vernon-Lindzey Study of Values. They found that young adults with higher aptitudes exhibited more group association tendencies on sociability, self-control, achievement via independence, intellectual efficiency, responsibility and values changes over time and in the direction of the trend of college students in general. Another finding was that non-intellectual development was similar for male and female students.

Wessell and Flaherty (1964), using the CPI, found that after one year of college changes occurred in some personality traits-i.e., increase in capacity for status, social presence, self-acceptance, and achievement for independence.

Heilbrun (1963) used the Edward Personal Preference Schedule (EPPS) and reported that men who achieved in college were likely to score high on achievement and endurance and low on change. The male non-achiever was likely to score high on nurturance while women achievers were likely to score high on exhibition, autonomy, and aggression.

Long (1964) utilized the Guilford-Zimmerman Temperament Survey and the Kuder Preference Record as instruments to attempt to find nonacademic variables that would contribute to better academic prediction
of freshmen students at the Norfolk Branch of the College of William and Mary. In this study, Long reported sex differences on non-academic variables. For women, the following four variables contributed to predict academic success: Inactivity-General Activity, Artistic Interest, Persuasive Interest, and Hostility-Friendiness. For men, the predictive variables were Impulsiveness-Restraint, Subjectivity-Objectivity, Scientific Interest, and Hostility-Friendliness. It was found that interest patterns were more important for women and that personality factors were more important for men.

Blanton and Peck (1964) studied a group of freshmen women and found that a measure of motivation for academic achievement formed the best predictor of grade point average (GPA) at the end of one semester of college work.

According to Brown and associates (1954), several investigations were concerned with factors influencing student success and failure in college. The results of the studies emphasized that the student's attitude toward academic life might be as important as specific study habits, study aids, tutorial possibilities, and native intelligence. They reported a series of three studies concerning motivational differences between high and low scholarship students in college. Their

## findings were:

...the poor college student is characterized by activity delay, i.e., a lack of decisiveness of action, a tendency to procrastinate and perhaps an unwillingness to conform to academic requirements, routine and regulations.
...this activity delay is not limited to the classroom only but exhibits itself in regard to activities usually regarded as outside the classroom sphere such as voluntary participation in research studies in psychology and university-wide projects such as attitude surveys.
...the study pointed toward the assumption that the poor scholarship student does not necessarily score lower in psychological tests designed to measure intelligence, but that very often factors of interest and motivation are primary contributors toward low scholarship (p. 218).

Burnstein and associates (1978) reported that as freshmen medical students have high needs for achievement, endurance and order and low needs for play and sentience. In another study, Savage (1981) found that neuroticism and extraversion scores on the Mandoley Personality Inventory were significantly related to academic performance. In the same vein, Behrens and Vernon (1978) reported that personality and achievement were strongly related especially in Mathematics and English. Internal aggression, external aggression, projective aggression, negative self-esteem, and favorable attitude to school had consistently showed positive effects on academic achievement.

Weiner and potepan (1970) showed that successful male students were lower in test anxiety, higher in achievement orientation, more likely to attribute success to their own ability and effort, and less likely to attribute failure to a lack of ability than the failing male students. Another researcher, Entwistle (1972) warned about the research that has been conducted and said that:

First, it is dangerous to assume wide generality in statements about the relationships between personality and academic attainment. Age, ability, sex, geographical area, classroom organization, class size, teaching methods, and teacher personality may all affect these relationships to some extent (p. 151).

Summary

It is clear that in the different studies there existed some common indicators which authors have pointed out as factors that in-
fluence academic achievement. They can be summarized in this way: motivation is a unique aspect which cannot be overlooked at the time instruction has to be arranged; personal adjustment needs an agreement on the criteria to be used to appraise it; different tests to measure specific aspects of the personality seem to be very helpful to predict academic performance. According to the findings there is a relationship between personality characteristics and achievement. The studies showed the individuals isolated from the social context which surrounds them, and it might be that personality traits are useful in predicting performance when the social setting in which that achievement takes place is conceptualized and used as a significant variable.

## Academic Performance in Venezuela

Venezuelan higher education is characterized by a high level of enrollment, a rigid curriculum, a diversity of admission standards, a difficult course of studies, a constitutional right for a student to be enrolled for free, and to be accepted by a non-discriminatory process.

Education at all levels in Venezuela has dealt with the problem of weak academic performance--i.e., high rate of repeaters and drop-outs--by developing some policies which are intended to help the students to succeed. Fees and tuition practically do not exist, scholarships are available to a great number of students, loans are offered, meals can be bought at really low prices, books and other instructional materials are easily obtained because of the low prices, and transportation is free, medical and dental care are also free. These attempts to encourage the students to succeed seem not to be very effec-
tive and helpful because of the high rate of failure among the students.
Heydra (1977) reported a percentage of dropouts of 40 for elementary school, 40 for high school, and 70 for the universities. The Planning Office for the University Sector showed that the number of graduates from all the universities declined to 6,393 from 6,534 in 1973-1974 (1976). It is not an encouraging fact, and it does indicate underachievement. Furthermore, although universities are enrolling more students, many of them are not graduating from the universities. Romero G (1978) reported that:

In the Universidad de Los Andes, the phenomenon of underachievement reached enormous proportions. Approximately 40 percent of the students needed more than 8 semesters to complete the work of the first four semesters. Furthermore, it was found that about 25 percent of these students had not been able to complete a single course during their first four semesters at the university. And what is happening in that university can unquestionable be taken as representative of what is happening in all Venezuelan universities (p. 37).

Acosta (1967) reported that the academic performance of part-time students who were working was higher than those who were not working. Granel and associates (1968), in a study about the predictors of academic performance conducted at the Universidad Central de Venezuela, School of Medicine, reported that the high school grades and IQ were the best predictors of success. Although Granel found no correlation between socio-economic status and success, Sosa (1970) got a strong correlation between socio-economic status and success. Romero G (1978) found that at the Universidad de Los Andes, 85 to 95 percent of the students failed a term or final test, and the students believed that their teachers make them fail. Zambrano (1978) reported that repeaters were inclined to believe that low grades and difficult courses were the
dominant reasons for repeating. The Institute for Educational Research reported a relationship between grades obtained in high school and success, but it found there was little relationship with socio-economic status. It appears that the relationship between socio-economic status has not been clearly determined and that this area needs further research.

Consejo Universitario (1978) said that the Universidad Central de Venezuela made a study of academic performance and found that the variables which influenced it could be classified into four groups. First, some causes were not pertinent to the university, such as lack of preparation by the students in high school and elementary school. This meant that the students acquired a low level of basic skills and knowledges, developed a tendency toward memorization, had difficulties reasoning logically, acquired poor study habits, achieved poor reading skills, had limitations in verbal communications, and showed poor abilities in writing and paraphrasing. A second group was socioeconomic factors of the family which do not allow the students to buy books and supplies, to receive a balanced diet, and to concentrate on the studies because they had to work to support the family. A third group was university causes such as the rigidity of the curriculum and the content of the different courses, student-faculty ratio, and lack of counseling. Fourth were faculty causes such as lack of preparation by faculty members, methods of teaching, and the evaluation system. Last were student causes such as academic load, poor study habits, consciousness, and responsibility of the students.

It will be very helpful to mention the opinion of some writers and educators related to academic performance, Reyes (1979, p. 150)
said: "It is necessary to implement counseling offices at the elementary level, secondary and university in order to give the student the fundamental orientations to succeed in school."

Marta S. (1978) thought that the main causes of poor academic performance in the Venezuelan educational system was the adaptation of other curricula without studying its possibilities of producing better students. Also, the poor preparation of students at the elementary level and secondary level contributed to the failure of the learners at the higher level of education.

Uslar's concern (1980) was with the poor grade point average students obtained after finishing their high school education. After analyzing the grades of about 100,000 students who graduated from high school, he concluded by saying that only 5 students out of 100 could succeed at the universities. This means that from the total enrollment of about 300,000 students at the higher level, 225,000 would fail. It is a problem that is hurting Venezuelan heritage and the foundations of the nation. Following the same trend, Ochoa (1980) said that high school graduates were not being prepared well because they exhibited a notorious lack of preparation, skills, and knowledge that will allow them to succeed at the university.

Paris Montesinos (1979) also focused on the problem of lack of preparation at the elementary and secondary levels. He proposed a profound revision of the curriculum pertinent to these levels and better preparation of human resources to assist and counsel the students. He felt the student would be better prepared to go on to higher education and would find this kind of education less traumatic.

## Summary

It appears there have been few empirical studies of academic performance in Venezuela. This topic has neither been extensively nor intensively studied despite its importance and the characteristics of Venezuelan education which has a high rate of repeaters and dropouts. Some studies have been made, but they have been carried out empirically and without coordination and planning. Furthermore, the lack of research on academic achievement as well as the fact that the money available to investigate this area does not appear to meet the needs of the education in Venezuela.

However, educational administrators, faculty, students have realized the importance of academic performance in the development of better standards of education and are devoting time and efforts to determine the causes of poor academic achievement. Thus, different studies related to this area have pointed out predictors of academic performance. They were: (1) high school grades; (2) IQ; (3) socioeconomic status; (4) prejudices of faculty; (5) lack of preparation by students and faculty; (6) teaching methods; and (7) the evaluation system. The different studies did not make recommendations and suggestions for improving and lowering the poor academic performance.

DESIGN AND METHODOLOGY

## Introduction

Literature cited in the preceding chapters has established the need and basis for the investigation of identifying the factors which are related to success or non-success in school. This chapter describes the research methodology employed in the present study, including a description of the subjects, procedures, instrument, collection data, and statistical analysis employed.

Subjects and Procedures

The investigation was conducted during the spring semester 1982. The subjects for this study were drawn from the School of Medicine of the Universidad Centro Occidental Lisandro Alvarado located in Barquisimeto, Estado Lara, Venezuela. This university was chosen because: (1) the researcher is a faculty member in this institution, (2) the high rate of repeaters in the School of Medicine does not appear to diminish, (3) there is a great concern about this problem which causes wastage of money and human efforts, (4) the Universidad Centro Occidental Lisandro Alvarado has an established and well-known School of Medicine in the Western Central Region of Venezuela, and (5) feasibility in gathering the data.

The records indicate that there are 360 faculty members and 1052 medical students in the Universidad Centro Occidental Lisandro Alvarado. A list containing the whole population of medical professors and medical students was provided by the Registrar's office to the researcher. The students' files were checked, and they showed that there were 231 repeaters, 116 potentially unsuccessful, and 705 medical students without any academic problems. After these three groups were formed, they were arranged from 0001 to 1052, and using a table of random numbers, 76 repeaters, 46 potentially unsuccessful, and 139 students without academic problems were randomly selected. A total of 90 medical professors was used in the study, but only 73 responded to the instrument. It represented 81 percent of the sample (see Table VI).

The following criteria were met by faculty and medical students included as subjects for the sample population of this study.

1. All faculty members were actually teaching at least one course.
2. All students were actually enrolled and taking at least three courses.
3. All students and faculty were informed of the study to be done and the further benefits of it.
4. All students and faculty were willing to participate in the study and to respond to the instrument.
5. All students completed the instrument. Description of the Instrument

A two part instrument based on a questionnaire developed by Joseph Porac was used in this research (Appendix A). The letter re-

TABLE VI
NUMBER OF QUESTIONNAIRE RESPONDENTS BY FACULTY AND STUDENTS IN THE UNIVERSIDAD CENTRO OCCIDENTAL LISANDRO ALVARADO

|  | Population | Sample | $\%$ | Respondents | $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Faculty | 360 | 90 | 25 | 73 | 81 |
| Repeaters | 231 | 76 | 32.9 | 76 | 100 |
| Potentially <br> Unsuccessfu1 | 116 | 46 | 49.6 | 46 | 100 |
| Without <br> Problems | 705 | 139 | 19.7 | 139 | 100 |
| Total | 1,412 | 351 | 24.9 | 334 | 95.2 |

questing permission to use the instrument is in Appendix A.
Porac used a six-part questionnaire in his study about the perceived causes of good and poor performance on the exam. This study did not attempt to evaluate exam performance, did not seek explanations for exam performance, did not look for interrelationships between exam factors, and did not try to explain perception of exam factors. Therefore, these four parts of the Porac's instrument were dropped. The part used was modified by the researcher with some recommendations and suggestions from Dr. Thomas A. Karman, Head of the Department of Educational Administration and Higher Education at Oklahoma State University. The modifications were made upon Porac's instrument in order to adapt it to the unique conditions of Venezuelan education and the purpose of this research.

The first part of the instrument was dedicated to faculty and students' perceptions of exam-related activities. The respondents were asked to answer each question by circling the number on the rating scale from 1 to 9 that best reflected the understanding of the exam. Seven questions out of nine were chosen from Porac's instrument. The second part was devoted to feelings about the grades on exams and the possible final grades in the different courses. The respondents were asked to answer the questions by circling the number that best reflected his/her feeling about the grade and to write the course and estimate the final grade. Each of the items was followed by 9 numbers, from 1 to 9 . The numbers were stated as follows: 1 and 2 for very little impact, 5 for moderate impact, and 8 and 9 for very large impact. For the researcher's purposes 3 and 4 indicated little impact, 6 and 7 demonstrated large impact.

The questionnaire was developed originally in English, but it was translated into Spanish by the researcher being very careful to insure an accurate translation. The Spanish version was pretested with a group of 18 graduate students from Venezuela enrolled at Oklahoma State University at the time the questionnaire was being developed, January of 1982 . They reacted by making recommendations and suggestions which helped to clarify the content and to adapt it to the Venezuelan educational system.

## Collection of Data

In January, 1982, the researcher made a trip to Venezuela with a letter from the Department of Educational Administration and Higher Education of Oklahoma State University to the Rector of the Universidad Centro Occidental Lisandro Alvarado. The intention of the letter was to get the approval and cooperation of the university administrators and faculty of the School of Medicine in the development of a doctoral dissertation on perceptions about the factors related to academic success of medical students on exams as they are perceived by faculty and students in the Universidad Centro Occidental Lisandro Alvarado. On January 24, 1982, the researcher began contacting the faculty members selected as the sample one by one and explaining the objectives of the study and the purpose of the questionnaire. Some of them would be present at the time the students had to take the instrument.

The questionnaire was distributed to 90 faculty members in the first two weeks of February, 1982. In some cases few professors were not available, and the instruments were left for them to complete and
be returned to the researcher. Seventy-three questionnaires out of 90 were collected.

After completion of the questionnaire by faculty, the researcher began contacting the sections in which there were students selected for the study. Permission for meeting the students was granted by the instructor, and the instrument was handed in to the students previously selected. Those who were not selected had permission to go to the library with the instructor for 15 minutes and then return to class. The objectives and purposes of the study were explained to the students. Any question was clarified on an individual basis. This process lasted the first three weeks of February, 1982.

At the conclusion of the data collection, information from 73 faculty members and 260 medical students was gathered.

## Statistical Analysis

The statistical analysis which follows utilized the Statistical Package for the Social Sciences computer programs (SPSS). Analysis was conducted at the Oklahoma State University Computer Center. One-Way ANOVA was conducted to test whether the means of two or more groups were significantly different. Huck, Cornier, and Bounds (1974) said that:

A One-way analysis of variance (abbreviated ANOVA) is an inferential statistical procedure which has the same general purpose as the $t$ test: to compare groups in terms of the mean scores. The difference between the two procedures lies in the number of groups that can be compared. Whereas the $t$ test is designed for comparing two groups, a one-way ANOVA can be used to compare two or more groups. Both procedures yield identical results in a two-group comparison, but the one-way ANOVA is more versatile because it can also be used to compare three or more groups (p. 58).

The following formulas were used to determine the differences between and within the groups:

One-Way Between Subjects ANOVA

| Source | $\mathrm{d}_{\mathrm{F}}$ | SS=Sum of Squares | MS=Mean Square | F |
| :---: | :---: | :---: | :---: | :---: |
| Factor A | a-1 | $S S_{A}=\sum_{A=1}^{a} T_{A}^{2} / n_{A}-G^{2} / N$ | $\mathrm{MS}_{\mathrm{A}}=\mathrm{SS}_{\mathrm{A}} /(\mathrm{a}-1)$ | $\mathrm{MS}_{\mathrm{A}} / \mathrm{MS}_{\text {ERROR }}$ |
| Error | $\mathrm{N}-\mathrm{a}$ | $\mathrm{SS}_{\text {ERROR }}=\mathrm{SS}_{\mathrm{TOTAL}}-\mathrm{SS}_{\mathrm{A}}$ | $\mathrm{MS}_{\text {ERROR }}=\mathrm{SS}_{\text {ERROR }} /(\mathrm{N}-\mathrm{a})$ |  |
| Total | $\mathrm{N}-1$ | $S_{\text {TOTAL }}=\Sigma \mathrm{X}^{2}-\mathrm{G}^{2} / \mathrm{N}$ |  |  |

## One-Way Within Subjects ANOVA

| Source | $d_{F}$ | $S S=S u m$ of Squares | MS=Mean Square | $F$ |
| :--- | :--- | :--- | :--- | :--- |
| Factor $A$ | $a-1$ | ${S S_{A}=\sum_{A=1}^{a} T_{A}^{2} / n_{A}-G^{2} / N}^{M S} A=S S_{A} /(a-1)$ | $M_{A} / M S_{A S}$ |  |

Subj. (S) s-1 $\quad S_{S}=\sum_{S=1}^{S} T_{S}^{2} / n_{S}-G^{2} / N$
AxS $\quad(a-1) \mathrm{SS}_{\mathrm{AS}}=\mathrm{SS}_{\mathrm{TOTAL}}{ }^{-\mathrm{SS}_{\mathrm{A}}}{ }^{-\mathrm{SS}_{\mathrm{S}}} \mathrm{MS}_{\mathrm{AS}}=\mathrm{SS}_{\mathrm{AS}} /(\mathrm{a}-1)(\mathrm{s}-1)$
(s-1)
Total $N-1 \quad S_{\text {TOTAL }}=\Sigma X^{2}-G^{2} / N$

In these formulas the independent variable (factor) is labeled with a capital letter: $A, B, C$, and so on; $a, b, c$, are the number of levels for each independent variable, $S$ stands for subjects and $s$ stands for the number of subjects. The $G$ is the grand total sum of all the scores, $N$ indicates the total number of scores, and $T$ is the sum of scores for a particular condition; $n$ refers to the number of scores in a particular condition.

The hypotheses were tested using One-Way Between Subjects ANOVA and One-Way Within Subjects ANOVA. To rank according to importance student-faculty perceived causes of academic performance the following
criterion was used: the higher the mean, the greater the importance of the item to identify perceived cause of academic performance; the lower the mean, the lesser the importance of the item to identify perceived cause of academic performance. All of the data analyzed through ANOVA were measured using a significance level of .05.

Summary

Chapter III discussed the materials and methods, subjects, procedures, collection data and statistical analysis employed. The populations consisted of three groups of students: (1) repeaters, (2) students potentially unsuccessful, and (3) students without any problems; and one group of faculty members of the Universidad Centro Occidental Lisandro Alvarado. A questionnaire was employed to find out the perceptions of the causes of success and failure in the School of Medicine at the Universidad Centro Occidental Lisandro Alvarado as they are perceived by students and faculty.

One-Way ANOVA was used in determining the significance of the differences of responses of the three groups of students and the group of faculty members.

CHAPTER IV

## PRESENTATION AND ANALYSIS OF THE DATA

## Introduction

The presentation and analysis of the data for this research are reported as they relate to each of the hypotheses under study. The hypotheses suggested there would be a relationship between academic performance and intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as perceived by the different groups: medical students who were successful, unsuccessful, or repeaters, and faculty. Four hypotheses were stated. Seven ANOVAs were performed and reported for each hypothesis. The .05 level of significance was adopted to accept or reject the hypotheses. Since the hypotheses were non-directional, the probability values were two tailed.

## Hypothesis One

HoI: There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful versus unsuccessful medical students.

The $F$ value for intellectual ability for the two groups, successful versus unsuccessful students, was not significant at the 0.05 level. This indicated that there was no significant difference in the percep-
tion of intellectual ability as a factor related to academic success between successful and unsuccessful medical students (see Table VII).

The F value for mood for the two groups, successful versus unsuccessful students, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of mood as a factor related to academic success between successful and unsuccessful medical students (see Table VIII).

The F value for difficulty for the two groups, successful versus unsuccessful was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of difficulty as a factor related to academic success between successful and unsuccessful medical students (see Table IX).

The F value for effort for the two groups, successful versus unsuccessful students, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of effort as a factor related to academic success between successful and unsuccessful medical students (see Table X).

The F value for teacher prejudices for the two groups, successful versus unsuccessful students, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of teacher prejudices as a factor related to academic success between successful and unsuccessful medical students (see Table XI).

The F value for help for the two groups, successful versus unsuccessful students, was not significant at the 0.05 leve1. This indicated that there was no significant difference in the perception of help as a factor related to academic success between successful and unsuccessful medical students (see Table XII).

TABLE VII

ANALYSIS OF VARIANCE COMPARING PERCEPTION
OF INTELLECTUAL ABILITY AS A FACTOR RELATED TO ACADEMIC SUCCESS

AS PERCEIVED BY SUCCESS-
FUL VERSUS UNSUCCESS-
FUL MEDICAL STU-
DENTS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 5.1999 | 5.1999 | 1.539 |
| Within Groups | 183 | 618.3060 | 3.3787 |  |
| Total | 184 | 623.5056 |  |  |

TABLE VIII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF MOOD AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL MEDICAL STUDENTS

| Source | df | SS | MS | F |
| :--- | :---: | ---: | :---: | :---: |
| Between Groups | 1 | 7.4717 | 7.4717 | 1.138 |
| Within Groups | 183 | 1201.8989 | 6.5658 |  |
| Total | 184 | 1209.3706 |  |  |

TABLE IX

> ANALYSIS OF VARIANCE COMPARING PERCEPTION OF DIFFICULTY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL MEDICAL STUDENTS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.0186 | 0.0186 | 0.005 |
| Within Groups | 183 | 651.5729 | 3.5606 |  |
| Total | 184 | 651.5913 |  |  |

TABLE X

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF EFFORT AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL MEDICAL STUDENTS

| Source | df | SS | MS | F |
| :--- | :---: | :---: | :---: | :---: |
| Between Groups | 1 | 0.0418 | 0.0418 | 0.015 |
| Within Groups | 183 | 496.0053 | 2.7104 |  |
| Total | 184 | 496.0469 |  |  |

TABLE XI

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF TEACHER PREJUDICES AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PER-

CEIVED BY SUCCESSFUL VERSUS
UNSUCCESSFUL MEDICAL
STUDENTS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 3.6331 | 3.6331 | 0.549 |
| Within Groups | 183 | 1211.4678 | 6.6200 |  |
| Total | 184 | 1215.1108 |  |  |

TABLE XII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF HELP AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL

MEDICAL STUDENTS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 11.2814 | 11.2814 | 2.061 |
| Within Groups | 183 | 1001.6578 | 5.4735 |  |
| Total | 184 | 1012.9390 |  |  |

The F value for luck for the two groups, successful versus unsuccessful students, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of luck as a factor related to academic success between successful and unsuccessful medical students (see Table XIII).

The analysis of variance of the seven factors related to academic success leads to the conclusion that hypothesis one, i.e., there is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful versus unsuccessful medical students, cannot be rejected.

The means of each of the seven factors related to academic success were used to rank them according to importance as perceived by successful versus unsuccessful medical students. This was done in accordance to the objectives of the study (see Table XIV).

Hypothesis Two

HoII: There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are successful versus those who are repeaters.

The F value for intellectual ability for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of intellectual ability as a factor related to academic success between medical students who are successful and repeaters (see Table XV).

The $F$ value for mood for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of mood as a factor related to academic success between medical students who are successful and repeaters (see Table XVI).

The F value for difficulty for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of difficulty as a factor related to academic success between successful students and repeaters (see Table XVII).

The F value for effort for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of effort as a factor related to academic success between successful students and repeaters (see Table XVIII).

The $F$ value for teacher prejudices for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of teacher prejudices as a factor related to academic success between successful students and repeaters (see Table XIX).

The $F$ value for help for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of help as a factor related to academic succes between successful students and repeaters (see Table XX).

The $F$ value for luck for the two groups, successful students versus repeaters, was not significant at the 0.05 level. This indicated

TABLE XIII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF LUCK AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL

MEDICAL STUDENTS

| Source | df | SS | MS | F |
| :---: | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 1.5777 | 1.5777 | 0.263 |
| Within Groups | 183 | 1096.4331 | 5.9914 |  |
| Total | 184 | 1098.0107 |  |  |

TABLE XIV
FACTORS RELATED TO ACADEMIC SUCCESS
RANKED ACCORDING TO IMPORTANCE AS PERCEIVED BY SUCCESSFUL VERSUS UNSUCCESSFUL MEDICAL STUDENTS .

| Factors | Successful | Rank | Unsuccessful | Rank |
| :--- | :---: | :---: | :---: | :---: |
| Difficulty | 6.8058 | 1 | 6.7826 | 1.5 |
| Effort | 6.7482 | 2 | 6.7826 | 1.5 |
| Intellectual Ability | 6.4748 | 3 | 6.0870 | 3 |
| Mood | 5.8345 | 4 | 5.3696 | 4 |
| Luck | 4.4820 | 5 | 4.6957 | 5 |
| Teacher Prejudices | 3.7410 | 6 | 4.0652 | 6 |
| Help from Others | 3.1583 | .7 | 2.5870 | 7 |

TABLE XV
ANALYSIS OF VARIANCE COMPARING PERCEPTION
OF INTELLECTUAL ABILITY AS A FACTOR
RELATED TO ACADEMIC SUCCESS AS
PERCEIVED BY SUCCESSFUL ME-
DICAL STUDENTS VERSUS
REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 5.7891 | 5.7891 | 1.714 |
| Within Groups | 213 | 719.3369 | 3.3772 |  |
| Total | 214 | 725.1260 |  |  |

TABLE XVI
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF MOOD AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 5.0744 | 5.0744 | 0.805 |
| Within Groups | 213 | 1342.1660 | 6.3012 |  |
| Total | 214 | 1347.2402 |  |  |

TABLE XVII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF DIFFICULTY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 1.2739 | 1.2739 | 0.313 |
| Within Groups | 213 | 867.1516 | 4.0711 |  |
| Total | 214 | 868.4255 |  |  |

TABLE XVIII
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF EFFORT AS A FACTOR RELATED TO ACA-

DEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS.

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 1.2539 | 1.2539 | 0.490 |
| Within Groups | 213 | 544.5342 | 2.5565 |  |
| Total | 214 | 545.7881 |  |  |

TABLE XIX
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF TEACHER PREJUDICES AS A FACTOR RELated to academic success as perCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.4557 | 0.4557 | 0.072 |
| Within Groups | 213 | 1350.0693 | 6.3384 |  |
| Total | 214 | 1350.5249 |  |  |

TABLE XX
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF HELP AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 14.3197 | 14.3197 | 2.732 |
| Within Groups | 213 | 1116.4373 | 5.2415 |  |
| Total | 214 | 1130.7568 |  |  |

that there was no significant difference in the perception of luck as a factor related to academic success between successful students and repeaters (see Table XXI).

The analysis of variance of the seven factors related to academic success leads to the conclusion that hypothesis two, i.e., there is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful medical students versus those who are repeaters, cannot be rejected.

The means of each of the seven factors related to academic success were used to rank them according to importance as perceived by successful versus repeaters (see Table XXII). This was done in accordance to the objectives of the study.

## Hypothesis Three

HoIII: There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

The F value for intellectual ability for the two groups, unsuccessful students versus repeaters, was no significant at the 0.05 leve1. This indicated that there was no significant difference in the perception of intellectual ability as a factor related to academic success between unsuccessful students and repeaters (see Table XXIII).

The F value for mood for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicat-
ed that there was no significant difference in the perception of mood as a factor related to academic success as perceived by unsuccessful students and repeaters (see Table XXIV).

The $F$ value for difficulty for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of difficulty as a factor related to academic success between unsuccessful students versus repeaters (see Table XXV).

The $F$ value for effort for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of effort as a factor related to academic success as perceived by unsuccessful students and repeaters (see Table XXVI).

The $F$ value for teacher prejudices for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of teacher prejudices as a factor related to academic success between unsuccessful students and repeaters (see Table XXVII).

The $F$ value for help for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of help as a factor related to academic success as perceived by unsuccessful students and repeaters (see Table XXVIII).

The $F$ value for luck for the two groups, unsuccessful students versus repeaters, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of luck as a factor related to academic success as perceived by unsuccess-

TABLE XXI

## ANALYSIS OF VARIANCE COMPARING PERCEPTION OF LUCK AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS.

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.0591 | 0.0591 | 0.010 |
| Within Groups | 213 | 1305.4802 | 6.1290 |  |
| Total | 214 | 1305.5393 |  |  |

TABLE XXII

FACTORS RELATED TO ACADEMIC SUCCESS RANKED ACCORDING TO IMPORTANCE AS PERCEIVED BY SUCCESSFUL MEDICAL STUDENTS

VERSUS REPEATERS

| Factors | Successful | Rank | Repeaters | Rank |
| :--- | :--- | :--- | :--- | :--- |
| Difficulty | 6.8058 | 1 | 6.6447 | 2 |
| Effort | 6.7482 | 2 | 6.9079 | 1 |
| Intellectual Ability | 6.4748 | 3 | 6.1316 | 3 |
| Mood | 5.8345 | 4 | 5.5132 | 4 |
| Luck | 4.4820 | 5 | 4.4474 | 5 |
| Teacher Prejudices | 3.7410 | 6 | 3.7447 | 6 |
| Help | 3.1583 | 7 | 2.6184 | 7 |

TABLE XXIII

> ANALYSIS OF VARIANCE COMPARING PERCEPTION OF INTELLECTUAL ABILITY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.0570 | 0.0570 | 0.014 |
| Within Groups | 120 | 484.3916 | 4.0361 |  |
| Total | 121 | 484.3916 |  |  |

TABLE XXIV
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF MOOD AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS

VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.5911 | 0.5911 | 0.076 |
| Within Groups | 120 | 929.6973 | 7.7475 |  |
| Total | 121 | 930.2883 |  |  |

TABLE XXV

ANALYSIS OF VARIANCE COMPARING PERCEPTION
OF DIFFICULTY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.5444 | 0.5444 | 0.122 |
| Within Groups | 120 | 535.2303 | 4.4603 |  |
| Total | 121 | 535.7747 |  |  |

TABLE XXVI

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF EFFORT AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS

VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 0.4500 | 0.4500 | 0.171 |
| Within Groups | 120 | 316.1806 | 2.6348 |  |
| Total | 121 | 316.6304 |  |  |

TABLE XXVII
ANALYSIS OF VARIANCE COMPARING PERCEPTION
OF TEACHER PREJUDICES AS A FACTOR RE-
LATED TO ACADEMIC SUCCESS AS PER-
CEIVED BY UNSUCCESSFUL MEDI-
CAL STUDENTS VERSUS RE-
PEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 5.0666 | 5.0666 | 0.738 |
| Within Groups | 120 | 824.2075 | 6.8684 |  |
| Total | 121 | 824.2075 |  |  |

TABLE XXVIII
ANALYSIS OF VARIANCE COMPARING PERCEPTION
OF HELP AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS VER-

SUS REPEATERS

| Source | df | SS | MS | F |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Between Groups | 1 | 0.0284 | 0.0284 | 0.006 |
| Within Groups | 120 | 545.0833 | 4.5424 |  |
| Total | 121 | 545.1116 |  |  |

ful students and repeaters (see Table XXIX).
The analysis of variance of the seven factors related to academic success leads to the conclusion that hypothesis three, i.e., there is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters, cannot be rejected.

The means of each of the factors related to academic success were used to rank them according to importance as perceived by medical students who are unsuccessful versus those who are repeaters (see Table XXX).

## Hypothesis Four

HoIV: There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students versus faculty.

The three groups--successful, unsuccessful, and repeaters--were arranged in one group for the purpose of comparison as stated in the hypothesis. Seven ANOVAs were performed. The Bartlett-Box F test indicated that for three of the significant findings--intellectual ability, mood, luck--there was not homogeneity of variance. These three findings should be interpreted with caution.

The F value for intellectual ability for the two groups, medical students and faculty, was significant at the 0.05 level. This indica-ted that intellectual ability as a factor related to academic success

TABLE XXIX
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF LUCK AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 1.7664 | 1.7664 | 0.251 |
| Within Groups | 120 | 844.5232 | 7.0377 |  |
| Total | 121 | 846.2896 |  |  |

TABLE XXX
FACTORS RELATED TO ACADEMIC SUCCESS RANKED ACCORDING TO IMPORTANCE AS PERCEIVED BY UNSUCCESSFUL MEDICAL STUDENTS VERSUS REPEATERS

| Factors | Unsuccessful | Rank | Repeaters | Rank |
| :--- | :---: | :---: | :---: | :---: |
| Difficulty | 6.7826 | 1.5 | 6.6447 | 2 |
| Effort | 6.7826 | 1.5 | 6.9079 | 1 |
| Intellectual Ability | 6.0870 | 3 | 6.1316 | 3 |
| Mood | 5.3696 | 4 | 5.5132 | 4 |
| Luck | 4.6957 | 5 | 4.4474 | 5 |
| Teacher Prejudices | 4.0652 | 6 | 3.6447 | 6 |
| Help | 2.5870 | 7 | 2.6184 | 7 |

was perceived differently by medical students and faculty; therefore, a significant difference was found between them (see Table XXXI).

The $F$ value for mood for the two groups, medical students and faculty, was significant at the 0.05 level. This indicated that mood as a factor related to academic success was perceived differently by medical students and faculty; therefore, a significant difference was found between them (see Table XXXII).

The F value for difficulty for the two groups, medical students and faculty, was significant at the 0.05 leve1. This indicated that difficulty as a factor related to academic success was perceived differently by medical students and faculty; therefore, a significant difference was found between them (see Table XXXIII).

The $F$ value for effort for the two groups, medical students and faculty, was significant at the 0.05 level. This indicated that effort as a factor related to academic success was perceived differently by medical students and faculty; therefore, a significant difference was found between them (see Table XXXIV).

The F value for teacher prejudices for the two groups, medical students and faculty, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of teacher prejudices as a factor related to academic success between medical students and faculty (see Table XXXV).

The $F$ value for help for the two groups, medical students and faculty, was not significant at the 0.05 level. This indicated that there was no significant difference in the perception of help as a factor related to academic success between medical students and faculty (see Table XXXVI).

TABLE XXXI
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF INTELLECTUAL ABILITY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 47.5164 | 47.5164 | 14.940 |
| Within Groups | 332 | 1055.9495 | 3.1806 |  |
| Total | 333 | 1103.4658 |  |  |

TABLE XXXII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF MOOD AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 24.7734 | 24.7734 | 4.144 |
| Within Groups | 332 | 1984.6237 | 5.9778 |  |
| Total | 333 | 2009.3970 |  |  |

TABLE XXXIII
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF DIFFICULTY AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 204.1519 | 204.1519 | 48.870 |
| Within Groups | 332 | 1386.9114 | 4.1774 |  |
| Total | 333 | 1591.0632 |  |  |

TABLE XXXIV
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF EFFORT AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL

STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 28.4400 | 28.4400 | 10.870 |
| Within Groups | 332 | 875.8630 | 2.6381 |  |
| Total | 333 | 904.3030 |  |  |

TABLE XXXV

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF TEACHER PREJUDICES AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 9.1390 | 9.1390 | 1.601 |
| Within Groups | 332 | 1895.1936 | 5.7084 |  |
| Total | 333 | 1904.3325 |  |  |

TABLE XXXVI
ANALYSIS OF VARIANCE COMPARING PERCEPTION OF
HELP AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 15.6795 | 15.6795 | 3.203 |
| Within Groups | 332 | 1625.2183 | 4.8952 |  |
| Total | 333 | 1640.8977 |  |  |

The analysis of variance of the seven factors related to academic success leads to the conclusion that hypothesis four, i.e., there is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students and faculty, is rejected for intellectual ability, mood, difficulty, effort, and luck; however, it cannot be rejected for teachers' prejudices or help from others.

The means of each of the factors related to academic success were used to rank them according to importance as perceived by medical students and faculty (see Table XXXVIII). This was done in accordance to the objectives of the study.

## Summary

A summary of the statistical findings is as follows:

1. No statistically significant difference was found between successful versus unsuccessful medical students in their perceptions of intellectual ability, mood, difficulty, effort, teacher prejudices, help from others, and luck as factors related to academic success.
2. No statistically significant difference was found between medical students who are successful versus those who are repeaters in their perceptions of intellectual ability, mood, difficulty, effort, teacher prejudices, help from others, and luck as factors related to academic success.
3. No statistically significant difference was found between medical students who are unsuccessful versus those who are repeaters in their perceptions of intellectual ability, mood, difficulty, effort,

TABLE XXXVII

ANALYSIS OF VARIANCE COMPARING PERCEPTION OF LUCK AS A FACTOR RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Source | df | SS | MS | F |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 1 | 111.8060 | 111.8060 | 20.214 |
| Within Groups | 332 | 1836.3244 | 5.5311 |  |
| Total | 333 | 1948.1304 |  |  |

TABLE XXXVIII
FACTORS RELATED TO ACADEMIC SUCCESS RANKED ACCORDING TO IMPORTANCE AS PERCEIVED BY MEDICAL STUDENTS VERSUS FACULTY

| Factors | Medical Students | Rank | Faculty | Rank |
| :--- | :--- | :--- | :--- | :--- |
| Effort | 6.8008 | 1 | 7.5068 | 1 |
| Difficulty | 6.7548 | 2 | 4.8650 | 4 |
| Intellectual Ability | 6.3065 | 3 | 7.2192 | 2 |
| Mood | 5.6590 | 4 | 5.0000 | 3 |
| Luck | 4.5096 | 5 | 3.1096 | 7 |
| Teacher Prejudices | 3.7701 | 6 | 3.3699 | 6 |
| Help | 2.9004 | 7 | 3.1096 | 5 |

teacher prejudices, help from others, and luck as factors related to academic success.
4. A statistically significant difference was found between all classifications of medical students--successful, unsuccessful, repeat-ers--versus faculty in their perceptions of intellectual ability, mood, difficulty, effort, and luck as factors related to academic success, however, no statistically significant difference was found in their perceptions of teacher prejudices or help from others.
5. Table XXXIX summarizes the ranking of the seven factors related to academic success showing that successful medical students and unsuccessful medical students ranked the same factors in the same order according to importance. When comparing successful medical students and repeater medical students, difficulty was first and effort was second for successful, being effort first and difficulty second for repeaters, the rest of the factors were ranked from third to seven in that order for both groups. Comparing unsuccessful and repeater medical students difficulty was first and effort second for unsuccessful, being effort first and difficulty second for repeaters, the rest of the factors were ranked from third to seven in that order for both groups. Finally, medical students--successful, unsuccessful, and re-peater--as one group ranked (1) effort, (2) difficulty, (3) intellectual ability, (4) mood, (5) luck, (6) teacher prejudices, and (7) help; while faculty ranked (1) effort, (2) intellectual ability, (3) mood, (4) difficulty, (5) help, (6) teacher prejudices, and (7) luck.

TABLE XXXIX
RANKING OF FACTORS RELATED TO ACADEMIC SUCCESS AS PERCEIVED BY GROUPS

| Groups | Difficulty | Effort | Intellectual <br> Ability | Mood | Luck | Teacher <br> Prejudices |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Successful (I) <br> Means <br> Ranks | 6.8058 | 6.7482 | 6.4748 | 5.8345 | 4.4820 | 3.7410 | 3.1583 |

## CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the findings, conclusions which emerged from the study, and recommendations based on the findings and conclusions of the study.

## Summary

The main objectives of the study were:

1. To identify and rank according to importance faculty-student perceptions of intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success.
2. To compare student perceptions of intellectual ability, mood, difficulty, teachers' prejudices, help from others, and luck as factors related to academic success to discover possible significant differences which may exist among the student groups.
3. To compare student perceptions of intellectual ability, mood, difficulty, effort, teachers' prejudices, he1p from others, and luck as factors related to academic success with faculty perceptions of those factors to discover possible significant differences which may exist between students and faculty.

Samples for this study were randomly selected from the population of medical students and faculty of the School of Medicine of the Uni-
versidad Centro Occidental Lisandro Alvarado. They were drawn in a manner designed to insure representativeness from each population.

From a total population of 1,052 medical students--231 repeaters, 116 unsuccessful, and 705 successful--76, 46, and 139 students respectively were randomly drawn.

The information used to classify the medical students as successful, unsuccessful, and repeater in the School of Medicine was obtained from the Registrar's Office. Information on the perceptions of the factors related to academic success of medical students and faculty of the School of Mecicine in the Universidad Centro Occidental Lisandro Alvarado was obtained through a questionnaire developed by Porac and adapted to the unique characteristics of Venezuelan education by the researcher.

The faculty members selected as the sample for the study were contacted one by one and were explained the objectives of the research and the purpose of the questionnaire. Some of them would be present at the time the students had to take the instrument. Few faculty members were not available and the instruments were left for them to be completed and be returned to the researcher. Seventy-three questionnaires out of ninety were collected.

After completion of the questionnaire by the faculty members, the researcher began contacting the sections in which there were students selected for the study. Permission for meeting them was granted by the instructor, and the instrument was handed in to them to be answered. Those who were not selected had permission to go to the library with the instructor for 15 minutes and then return to class. Two-hundred and sixty questionnaires were collected.

Four major hypotheses were developed and tested. Each hypothesis involves the factors related to academic success: intellectual ability, exam difficulty, effort, luck, teacher prejudices, help from others, and mood. In sum, there were four major hypotheses and seven subhypotheses for each major hypothesis.

1. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful versus unsuccessful medical students.
la. There is no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by successful versus unsuccessful medical students.
lb. There is no statistically significant difference in the perception of mood as a factor related to academic success as perceived by successful versus unsuccessful medical students.
lc. There is no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by successful versus unsuccessful medical students.
ld. There is no statistically significant difference in the perception of effort as a factor related to academic success as perceived by successful versus unsuccessful medical students.
le. There is no statistically significant difference in the perception of teacher prejudices as a factor related to
academic success as perceived by successful versus unsuccessful medical students.

1f. There is no statistically significant difference in the perception of help as a factor related to academic success as perceived by successful versus unsuccessful medical students.
lg. There is no statistically significant difference in the perception of luck as a factor related to academic success as perceived by successful versus unsuccessful medical students.
2. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are successful versus those who are repeaters.

2a. There is no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.

2b. There is no statistically significant difference in the perception of mood as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.

2c. There is no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.

2d. There is no statistically significant difference in the perception of effort as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.

2e. There is no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.

2f. There is no statistically significant difference in the perception of help as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.
$2 g$. There is no statistically significant difference in the perception of luck as a factor related to academic success as perceived by medical students who are successful versus those who are repeaters.
3. There is no statistically significant difference between intellectual ability, difficulty, mood, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3a. There is no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3b. There is no statistically significant difference in the perception of mood as a factor related to academic suc-
ces as perceived by medical students who are unsuccessful versus those who are repeaters.

3c. There is no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3d. There is no statistically significant difference in the perception of effort as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3e. There is no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3f. There is no statistically significant difference in the perception of help as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.

3g. There is no statistically significant difference in the perception of luck as a factor related to academic success as perceived by medical students who are unsuccessful versus those who are repeaters.
4. There is no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students--successful, unsuccessfu1, repeaters-versus faculty.

4a. There is no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by medical students versus faculty.

4b. There is no statistically significant difference in the perception of mood as a factor related to academic success as perceived by medical students versus faculty.

4c. There is no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by medical students versus faculty.

4d. There is no statistically significant difference in the perception of effort as a factor related to academic success as perceived by medical students versus faculty.

4e. There is no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by medical students versus faculty.

4f. There is no statistically significant difference in the perception of help as a factor related to academic success as perceived by medical students versus faculty.

4 g . There is no statistically significant difference in the perception of luck as a factor related to academic success as perceived by medical students versus faculty.

The statistical techniques chosen for testing the research hypotheses were the one-way analysis of variance (ANOVA), the Scheffe multiple range test, and the use of a parametric statistics, the mean. The $F$ value provided the bases for explaining whether or not the diff-
erences between and among the various groups were significant at the 0.05 level of significance. Accordingly, the findings of the study concerning the four major hypotheses were:

1. There was no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=1.539, p>.05$.
2. There was no statistically significant difference in the perception of mood as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=1.138$, p>. 05 .
3. There was no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=$ 0.005 , p>. 05.
4. There was no statistically significant difference in the perception of effort as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=0.015$, p>. 05 .
5. There was no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=0.549, p>.05$.
6. There was no statistically significant difference in the perception of help as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=2.061$, p>. 05 .
7. There was no statistically significant difference in the perception of luck as a factor related to academic success as perceived by successful versus unsuccessful medical students, $F(1,183)=0.263$, p>. 05 .

According to these results the first major hypothesis, i.e., there was no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful versus unsuccessful medical students, cannot be rejected.
8. There was no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=1.714, \quad p^{>} .05$.
9. There was no statistically significant difference in the perception of mood as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=0.805$, p>. 05 .
10. There was no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=0.313$, p>. 05 .
11. There was no statistically significant difference in the perception of effort as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=0.490, \mathrm{p}>.05$.
12. There was no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=$
$0.072, \mathrm{p}>.05$.
13. There was no statistically significant difference in the perception of help as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=2.732, p>.05$.
14. There was no statistically significant difference in the perception of luck as a factor related to academic success as perceived by successful medical students versus repeaters, $F(1,213)=0.010$, $\mathrm{p}>.05$.

According to these results the second major hypothesis, i.e., there was no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by successful medical students versus repeaters, cannot be rejected.
15. There was no statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.014, p>.05$.
16. There was no statistically significant difference in the perception of mood as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.076$, p>. 05 .
17. There was no statistically significant difference in the perception of difficulty as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=$ $0.122, p^{>} .05$.
18. There was no statistically significant difference in the perception of effort as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.171$,
$\mathrm{p}<.05$.
19. There was no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.738, \mathrm{p}<.05$.
20. There was no statistically significant difference in the perception of help as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.006$, p<. 05.
21. There was no statistically significant difference in the perception of luck as a factor related to academic success as perceived by unsuccessful medical students versus repeaters, $F(1,120)=0.251$, p<. 05 .

According to these results the third major hypothesis, i.e., there was no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by unsuccessful medical students versus repeaters, cannot be rejected.
22. There was a statistically significant difference in the perception of intellectual ability as a factor related to academic success as perceived by medical students--successful, unsuccessful, re-peaters--versus faculty, $F(1,332)=14.940, \mathrm{p}<.05$.
23. There was a statistically significant difference in the perception of mood as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty, $F(1,332)=4.144, \mathrm{p}<.05$.
24. There was a statistically significant difference in the per-
ception of difficulty as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty, $F(1,332)=48.870, p<.05$.
25. There was a statistically significant difference in the perception of effort as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty, $F(1,332)=10.870, p<.05$.
26. There was no statistically significant difference in the perception of teacher prejudices as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters-versus faculty, $F(1,332)=1.601, p>.05$.
27. There was no statistically significant difference in the perception of help as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty, $F(1,332)=3.203, p>.05$.
28. There was a statistically significant difference in the perception of luck as a factor related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty, $F(1,332)=20.214, \mathrm{p}<.05$.

According to these results the fourth major hypothesis, i.e., there was no statistically significant difference between intellectual ability, mood, difficulty, effort, teachers' prejudices, help from others, and luck as factors related to academic success as perceived by medical students--successful, unsuccessful, repeaters--versus faculty is rejected for intellectual ability, mood, effort, difficulty, and luck; it was not rejected for help and teacher prejudices.

The scale used in the questionnaire was 1 to 9 , and a mean was
obtained for the purpose of this research. This mean was 5 . The mean of each factor was determined and ranked in order of importance according to the perceptions of the various groups. Each mean being 5 or above was considered important to discriminate the factors. Thus, successful and unsuccessful students ranked the same factors in the same order, with difficulty as the first with the highest mean of 6.8058 and 6.7826 , respectively; help had the lowest mean of 3.1583 and 2.5870; repeater students and medical students--successful, unsuccessful, repeaters--as a group ranked the same causes in the same order with effort in the first place with a mean of 6.9079 and 6.8008 and with help having the lowest mean of 2.6184 and 2.9004. Faculty members ranked the factors in a different way with effort in the first place with a mean of 7.5068 and luck in the last place with a mean of 3.1096 (see Table XXXIX).

## Conclusions

The analysis of variance (ANOVA) of the responses provided by the subjects in relation to their perceptions of the factors related to academic success of medical students showed that no statistically significant differences existed among successful, unsuccessful, and repeater medical students. Based on these findings, the first three major hypotheses and their seven sub-hypotheses were not rejected. When the responses of the faculty were analyzed, using the analysis of variance (ANOVA), a statistically significant difference was found between faculty and medical students concerning perceptions of intellectual ability, mood, effort, and luck as factors related to academic success.

Using descriptive statistics, the mean, on the responses provided by medical students, it was found that successful and unsuccessful students ranked the same factors in the same order, while repeaters and medical students as a group ranked the same factors in the same order of importance. When the responses of the faculty were analyzed, the first factor ranked by them, effort, was the same factor ranked by unsuccessful students, repeaters, and medical students--successful, unsuccessful, repeaters--as a group. All the groups--successful, unsuccessful, repeaters, and medical students as a group--ranked intellectual ability, mood, luck, teacher prejudices, and help in the same order of importance. Faculty ranked the factors differently except for teacher prejudices, which ranked sixth for all the groups.

These findings were supportive of studies made by Bar-Tar and Darom (1979), Henson and Snyder (1979), Zambrano (1978), and Weiner and Potepan (1970), who determined that difficulty, effort, intellectual ability, and mood were factors related to academic performance which influence success or failure of students. These findings were in contradiction with research conducted by Romero $G$ (1978), who concluded that 85 to 95 per cent of the students at the Universidad de Los Andes who failed a mid-term or final test believed that their teachers made them fail.

Based on the findings of the study, the following conclusions can be made:

1. Medical students--successful, unsuccessful, repeaters--considered effort, difficulty of the exams, intellectual ability, and mood as the prime factors related to academic success. This is a fact of great importance that cannot be ignored by the administrators, plan-
ners, and faculty.
Actually, at the Universidad Centro Occidental Lisandro Alvarado the Office of the Vice-Rector for Academic Affairs and the Planning Office are the responsibles for the development and implementation of new courses, evaluation system, and curriculum. They do not meet with the students to get their inputs, but they do meet with faculty. Thus, students' perceptions are ignored when they could be of great value to improve teaching effectiveness, and academic performance if their ideas were incorporated into the planning of academic matters at the University.

It is easier for the administrators, planners, and faculty to deal with students who are prepared to succeed rather than students who are not prepared to succeed. Therefore, intellectual ability must be a chief factor in getting into the School of Medicine, effort should be other characteristic that must emanate from students through the grades on exams, assignments, and expositions; mood to take the exams, to make oral expositions should help the students to ease the emotional stress.

To succeed in medical studies the students must be characterized by a high intellectual ability, a disposition to make great efforts, and a normal mood to take the exams, make oral expositions, and make the assignments. These characteristics could help the students to succeed and to overcome the difficulty of the exams that they say is a factor related to academic success.

On the other hand, faculty perceives that the most important factors related to academic success are effort, intellectual ability, and mood. Difficulty of the exams which is important for the students is
not important for faculty because they cannot be prejudiced about themselves.

According to the perceptions of students and faculty about the factors related to academic success policy makers should use them to improve the quantity, quality, and efficiency of medical students. By doing this, less medical students would be enrolled but more students would be graduated.
2. The variables that may influence academic success--such as difficulty of the exams, intellectual ability, mood, and effort-according to medical students--successful, unsuccessful, repeaters-and faculty should be used by the administrators, educational planners and faculty to change the evaluation system of medical students.

Under a new evaluation system the questions to be asked on the tests should be rated easy, less difficult, more difficult, and most difficult according to what the faculty thinks the student must know. Intellectual ability must be measured through intelligence tests; thus, students with the higher IQs will have the better chances to succeed. Mood must serve to help students develop a positive attitude toward the mid-term or final tests. Finally, effort might be measured through the attendance to class, punctuality to get the homeworks done, neatness of the assignments, increasing the points on exams, i.e., if the student gets 11 on a written or oral exam, next time he/she will get at least 13 and so forth.
3. Medical students--successful, unsuccessful, repeaters--agree on their perceptions about factors related to academic success regardless of their positive or negative performance. Students from elementary school on up to the university level appear to be influenced by
the educational system which does not teach them the value of success. If the students valued success the rate of repetition would be minimal at the secondary and university level. By the contrary, repetition continues to be a problem in the Venezuelan education. Zambrano (1978), in a study about repeaters, stated that from a total population of 2,282 entering students at the teachers colleges in Venezuela, 51.8 per cent repeated at least one time. Romero $G$ (1978) reported that 40 per cent of the student population in the Universidad de Los Andes needed more than eight semesters to complete the work of four semesters.

In the Universidad Centro Occidental Lisandro Alvarado the records show that medical students can repeat any semester up to three times, if they fail in the third attempt they are expelled from the university for one year and cannot be enrolled in any of the Schools at the University for that time. Because of this, the more opportunities the students have to repeat a semester the less valued academic success will be.
4. The instrument seems to have the ability to identify the factors related to academic success because successful and unsuccessful medical students agreed upon their perceptions about the factors, and ranked the same factors in the same order of importance. On the other hand, repeaters and medical students as a group perceived the same factors in the same order of importance.

To reinforce this point of view is the fact that the instrument did pick up differences in the perceptions of faculty members when compared with medical students about factors related to academic success. Faculty perceived and ranked differently these factors. Accord-
ing to this, the instrument might be useful in the future in studies about academic success at the high school, or higher education level.

## Recommendations

The following recommendations have arisen from this study:

1. University administrators and faculty need to realize that repetition has to be lowered and that unsuccessful and repeaters must be identified so they can be assisted. This must be one of the primary goals of the administrators and faculty. Toward this end, experienced professionals--psychologists, counselors--with appropriate qualifications should fill the available positions in the student services. At the high school level counseling programs should be instituted to help high school graduates effectively in the choice of their careers. At the university level students who failed more than half of the evalu-ations--written, oral--by getting 9 points or below should be given the opportunity to do remedial work.
2. Actually, any high school graduate can study medicine in the Universidad Centro Occidental Lisandro Alvarado if he/she wishes. There are no restrictions to be enrolled. Serious efforts should be exercised by administrators and faculty to select students who want to go to the School of Medicine.

Entrance examinations should be given to all the potential medical students to enroll those who have the intellectual ability and capacities to carry a full academic load. Thus, the risk of repeating or being unsuccessful would be minimal and the rate of success would be greater.
3. Faculty members should be evaluated by the department and stu-
dents and be given the opportunity to improve their quality and teaching in the School of Medicine. Those teachers who lack educational qualifications must be provided with some form of financial aid to improve and complete their education. Those who are capable of making advanced studies should be given a scholarship or leave with pay for the time of the studies in Venezuela or outside the country.
4. The administrators, faculty and students should encourage and look for a closer cooperation and dialogue to help students know what happens to them and why that happens. The more informed the students are about their academic progress the better chances they have to succeed because they can make more effort in studying if they need to, they can pay more attention to the attendance if they are not daily attending to classes, they can put special attention to certain topics if they are informed about that; therefore, they may value more academic success and be better students.
5. Administrators, faculty and students should be involved in workshops and seminars which attempt to develop positive attitudes toward students' performance outcomes. Those faculty members who have been protested because of their negative attitudes toward students must be given the opportunity to attend these seminars or workshops. Those faculty members whose students do not want to attend their classes and do not want to take the evaluations should be called by the department head and informed about the program, so they can attend. In-service programs should be provided.
6. The instrument should be more appropriate if specific questions about political position, socio-economic status, rural or urban origin, and what are the factors that may influence success or failure
might be addressed.
7. University administrators, planners and faculty together with the students should implement new policies about staffing, academic load, student-teacher ratio, support personnel because most of the professors in the School of Medicine are part-time doctors who actively practice their specialization and may not place high priority on the performance of their students. The average academic load for students is seven hours a day for five days a week and they do not have enough time to exchange ideas or communicate with administrators, faculty or other students. Also, the courses are compulsory and the students do not have the opportunity to make their plan of studies which allow them more time to be spent in sports and cultural activities. Another aspect is that the student-faculty ratio in the first semesters is too high, i.e., biochemistry classes are taught in the auditorium because the courses usually have 300 or 400 students and no classroom at the university has this capacity. Last, more support personnel is needed in the laboratory classes because they are taught by the instructors.

The recognition of this situation and the potential problems which could emerge would lead to changes such as: (1) more full-time professors with better salaries to discourage faculty members to work outside the university, (2) to implement a policy about credit hours that need to be taken each semester to stay at the university which does not actually exist, (3) to allow the students to make their plan of studies by selecting the courses, required or electives, needed each semester, (4) to lower the student-faculty ratio by building new classrooms and hiring new faculty, and (5) hiring new support personnel to help faculty in the laboratories, field trips, and administrative
duties.
8. The actual communication between medical students and faculty is evident that might not be very effective due to the fact that students do not.participate in the planning of curriculum matters, and most of the faculty members are part-time who do not have an office where they can communicate and exchange ideas with students. To reinforce this point of view is the fact that most of the strikes at the university are caused by lack of attention to students petitions about the improvement of laboratories, library, classrooms, student-faculty ratio, and also to the lack of consideration by some faculty members toward the students. At the university level most of the faculty thinks that the more students fail a course the better the instructor is in that course.

The communication must be improved through seminars, workshops, conferences which might develop a positive attitude from students toward faculty and from faculty toward students. Therefore, students petitions should be heard and the solutions to the problems would be sought.
9. Further research should be conducted in the selection of highly successful students, collecting data on grade point average in high school, socio-economic status, educational background of the family, rural or urban origin. These factors should be analyzed to see what are the most important in the successful completion of medical school. By doing this, a profile of successful medical students would be attained.

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APPENDIXES

APPENDIX A

LETTER REQUESTION PERMISSION TO USE AND MODIFY THE PORAC INSTRUMENT

```
St{iIwater, 09-28-81
```

Mr. Josepf $\overline{3}$. Porac
494 Commerce (West)
University of Illinois
Urbana, Illinois 61801

Dear Sir:
I am engaged in doctoral studies in higher education at Oklahoma State University, ht the resent time $I$ am pursuing my thesis study, which deals with Causal Eurceotions about Success and Satire of Medial Students at the Unirersidad Centavo Occider:ai Lُsandro Alvarado in Venezuela.

I would like approval from you to. allow me to use the instrument you is ed in your study about "Causal Loops and other Intercausal Perceptions in Attributions for Exam Performance". in the following manner:

1. Use it in connection with my dissertation on causal perceptions about success and failure.
2. Make modifications on the instrument to suit to Venezuelan conditions.
3. Append the original instrument to my dissertation for comparison with the modified Err.

I need the written approval at the earliest possibility.
Thank you so much.


Nix Ortiz,

 Curaicion,

APPENDIX B

QUESTIONNAIRE FOR MEDICAL STUDENTS AND FACULTY

There are many factors which influence an individual's performance on exams. This questionnaire contains seven (7) of these factors: intellectual ability, difficulty of exams, luck, instructor biases, help from others, effort, and mood. On the pages that follow, you will find questions concerning the factors previously cited. Please, read each question carefully and answer them honestly. There are no right or wrong answers, just your own personal opinion about the factors that you believe influenced your own exam performance.

This questionnaire is designed to give the instructor a better idea of the perceived causes of good or poor performance on the exam. Please, be honest and open when responding. Please, do not leave any question without answering. The success of this research will depend on the certaintity and honesty of your responses. This questionnaire is confidential.

## Perception of Exam Related Activities

The questions below pertain to the seven factors listed earlier. (see instruction page). Please answer each question by circling the number that best reflects your understanding of the exam.
A. Do you think your intellectual ability affect the outcome of the exam?

| 12 3 4 5 <br> It did not    <br> affect    |  | moderate | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

B. Do you think your mood while taking the exam affected the outcome of the exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

C. Do you think the difficulty of the questions affected the outcome of the exam?
1
2
3
4
5
6
7
8
9
It did not affect
moderate

$$
\begin{aligned}
& \text { It affected } \\
& \text { very much }
\end{aligned}
$$

D. How much effort do you think you devoted to study for the exam?
$1 \quad 2$
23
very little
$4 \quad 5 \quad 6$
moderate
7
8
9
very much
E. Do you think the exam reflects the instructor's own personal biases regarding the exam material?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

F. Do you think that unexpected help from other persons while taking the exam affected the outcome of the exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | very little moderate very much

G. Do you think that luck affected the outcome of the exam?
1
2
3
4
5
6
7
8
9
very little
moderate
very much

## Perceptions

A. How do you feel about the score you got on the exam?
$\begin{array}{lllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$
very dis- displeased neutral pleased very pleased pleased
B. Estimate as best as you can the grade you will get on the final.

Write the course number and the estimated grade.
Course
Grade
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

APPENDIX C

ORIGINAL INSTRUMENT USED BY DR. PORAC

Course ID \# $\qquad$

## EXAM EVALUATION QUESTIONNAIRE

There are many factors which influence an individual's performance on exams. This questionnaire concerns nine such factors: intellectual ability, exam difficulty, usual amounts of effort, unusual or a-typical amounts of effort, good luck, bad luck, instructor biases, help from others, and mood. On the pages that follow, you will find sections of questions directed to you concerning your performance on the midterm just returned to you. Please go through each section, answering all items honestly. Each section is self-contained, so your responses to one set should not influence your response to the others. Once you have turned a page, please do not go back and look at (or change) your previous responses. There are no right or wrong answers, just your own personal opinion about the factors that influenced your own exam performance.

The questionnaire is designed to give the instructor a better idea of the perceived causes of good and poor performance on the exam. Your questionnaire will be anonymous. There will be no way to trace your responses back to you. Also, it goes without saying that your responses to this questionnaire will not in any way affect the grade you get in this course. So please be honest and open when responding. Questionnaire completion is completely voluntary. If you feel that you do not want to complete the questionnaire, please feel free to refuse. Return the uncompleted questionnaire. If you choose to complete the questionnaire, please do not leave any items blank and answer honestly.

## Section: Evaluation of Exam Performance.

Please answer the following questions.

1. What was your numerical score on the midterm?
$\qquad$ points
2. In general, how well do you think you did on the exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| very <br> poorly |  |  | average |  | extremely |  |  |  |
| well |  |  |  |  |  |  |  |  |

Section: Explanations for Exam Performance.

On the spaces next to each of the following nine factors, indicate the extent to which you feel that each factor affected your exam grade (that is, affected how well you did on the exam). To make your ratings, use the following scale:
$\begin{array}{lllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$

Had no
effect
at all

Had a
moderate
effect

Had a
very large effect

1. $\qquad$ Your typical level of effort on exams; that is, the amount of effort you usually put into studying for and taking your course exams.
2. $\qquad$ Your intellectual ability.
3. $\qquad$ The difficulty of the exam.
4. $\qquad$ Your general mood while taking the exam.
5. $\qquad$ The instructor's own personal biases regarding the exam material.
6. $\qquad$ Unexpected help or hindrance from a friend, or acquaintenance while taking the exam.
7. $\qquad$ The amount of effort you put into studying for and taking this particular exam.
8. $\qquad$ Lucky breaks while taking the exam.
9. $\qquad$ Bad breaks while taking the exam.

Section: The Interrelationships Between Exam Factors.

In this section, you are asked to indicate how each of the nine factors interacted to affect one another. Each of the following pages contains a set of items designed to measure the extent to which you feel each of the factors was affected by each of the others. You are asked to make your ratings on a nine-point scale.
A. How was the difficulty of the exam affected by each of the following factors? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

| -4 | -3 | -2 | -1 | 0 | +1 | +2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |$+3$| +4 |
| :---: |
| decreased <br> exam difficulty <br> a great deal |

1. Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
4. The amount of effort you put into studying for and taking this particular exam.
5. $\qquad$ Your intellectual ability.
6. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
7. Any bad breaks you might have had while taking the exam.
8. $\qquad$ The instructor's own personal biases regarding the exam material.
B. How did each of the following factors influence the effects of any lucky break(s) you might have had while taking the exam? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

9. Your general mood while taking the exam.
10. Unexpected help or hindrance from a friend or acquaintance while taking the exam.
11. The amount of effort you put into studying for and taking this particular exam.
12. Your intellectual ability.
13. The amount of effort you usually put into studying for and taking course exams.
14. $\qquad$ Any bad breaks you might have had while taking the exam.
15. $\qquad$ The difficulty of the exam.
16. $\qquad$ The instructor's own personal biases regarding the exam material.
C. How was your general mood while taking the exam affected by each of the following factors? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

| -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Made my
mood much more negative

Had no effect on my mood

Made my
mood much more positive

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
3. The amount of effort you put into studying for and taking this particular exam.
4. $\qquad$ Your intellectual ability.
5. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
6. $\qquad$ Any bad breaks you might have had while taking the exam.
7. $\qquad$ The difficulty of the exam.
8. $\qquad$ The instructor's own personal biases regarding the exam material.
D. How was the amount of unexpected help or hindrance from a frined or acquaintance while you were taking the exam affected by each of the following factors? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

| -4 | -3 | -1 | 0 | +1 | +2 |
| :--- | :--- | :--- | :--- | :--- | :--- |

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ The amount of effort you put into studying for and taking this particular exam.
4. $\qquad$ Your intellectual ability.
5. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
6. $\qquad$ Any bad breaks you might have had while taking the exam.
7. $\qquad$ The difficulty of the exam.
8. $\qquad$ The instructor's own personal biases regarding the exam material.
E. How was the amount of effort you put into studying for and taking this particular exam affected by each of the following factors? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

| -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Decreased my effort a great deal

Had no effect on my effort

Increased my effort a great deal

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Unexpected help or hindrance from a frined or acquaintance while taking the exam.
4. $\qquad$ Your intellectual ability.
5. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
$\qquad$ Any bad breaks you might have had while taking the exam.
6. $\qquad$ The difficulty of the exam.
7. $\qquad$ The instructor's own personal biases regarding the exam material.
F. How was your intellectual ability affected by each of the following factors? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

| -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Decreased
my ability
a great deal

Had no
effect on
my ability

Increased my ability
a great deal

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. Unexpected help or hindrance from a friend or acquaintance while taking the exam.
4. The amount of effort you put into studying for and taking this particular exam.
5. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
6. $\qquad$ Any bad breaks you might have had while taking the exam.
7. $\qquad$ The difficulty of the exam.
8. The instructor's own personal biases regarding the exam material.
G. How was the amount of effort you usually put into studying for and taking course exams affected by each of the following factors? To make your ratings, place a number from one to nine in the space next to each factor. Use the following scale:

| -4 | -3 | -2 | -1 | 0 | +1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Had no | +2 | +3 | +4 |
| Decreased |  | effect on |  | Increased |  |
| my effort |  | my effort |  | my effort |  |
| a great deal |  |  |  |  | a great deal |

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
4. The amount of effort you put into studying for and taking this particular exam.
5. Your intellectual ability.
6. Any bad breaks you might have had while taking the exam.
7. The difficulty of the exam.
8. $\qquad$ The instructor's own personal biases regarding the exam material.
H. How did each of the following factors influence the effects of any bad break(s) you might have had while taking the exam? To make your ratings, place a number from one to nine in the space provided next to each factor. Use the following scale:

$\left.\begin{array}{lllllll}-4 & -3 & -2 & -1 & 0 & +1 & +2\end{array}\right]+3$| Had |
| :---: |

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
4. $\qquad$ The amount of effort you put into studying for and taking this particular exam.
5. $\qquad$ Your intellectual ability.
6. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
7. $\qquad$ The difficulty of the exam.
8. $\qquad$ The instructor's own personal biases regarding the exam material.

Course ID \#: $\qquad$
Section: Perception of Exam-Related Activities

The items below pertain to the nine factors listed earlier. Please answer each question by circling the one number on the rating scale immediately following the item that best reflects your understanding of the past midterm exam and your behavior while taking it.

1. How much intellectual ability do you think you have?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | | 8 |
| :---: |
| Very |
| little |

2. What was your general mood like while taking the exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Very |  |  |  | Neutra |  |  |  | xtremely |
| poor |  |  |  |  |  |  |  | good |
| (bad) |  |  |  |  |  |  | (exc | cellent) |

3. How difficult did you find the exam?

4. How much effort do you usually put into studying for and taking your course exams?

| 1 | 2 | 3 | 4 | 5 <br> Moderate <br> amount | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5. To what extent did the exam reflect the instructor's own personal biases regarding the exam material?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | | 8 |
| :---: |
| Very |
| Moderate |
| amount |$\quad$| Extremely |
| :---: |

6. How much unexpected help or hindrance did you get while taking the exam from a friend or acquaintance?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Very |  |  |  | Modera |  |  |  | xtremely |
| 1ittle |  |  |  | amoun |  |  | large | e amount |

7. How much effort did you put into studying for and taking this particular exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | ---: | :---: | :---: | :---: | ---: | ---: |$\quad$| 8 |
| ---: |
| Very |
| little |

8. How many "lucky breaks" did you have while taking the exam?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | ---: | :--- | :---: | :---: | ---: | ---: |$\quad$| 8 |
| ---: |
| Very |
| few |

9. How many "bad breaks" did you have while taking the exam?

| 1 | 2 | 3 | 4 | 5 <br> Moderate <br> numbery |  | 6 |
| :--- | :--- | :--- | :---: | ---: | ---: | ---: |

Section: Perception of Exam Factors.
A. In terms of how it influenced your score on the exam, each of the nine factors can be viewed as having involved something about the environment (anything outside of you), something about you personally, or something about both you and the environment. Using the following scale, please rate each factor.

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Is (was) |  |  | Both |  |  |  |  |
| completely |  |  | environm |  |  |  |  |
| environmental |  |  | and abou |  |  |  |  |

1. Any lucky breaks you might have had while taking the exam.
2. The difficulty of the exam.
3. $\qquad$ Your general mood while taking the exam.
4. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
5. The amount of effort you put into studying for and taking this particular exam.
6. $\qquad$ Your intellectual ability.
7. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
8. $\qquad$ Any bad breaks you might have had while taking the exam.
9. $\qquad$ The instructor's own personal biases regarding the exam material.
B. In terms of how it influenced your score on the exam, each of the nine factors can be viewed as having involved something over which you had no control (that is, something you were not able to change), over which you had moderate control, or over which you had complete control. Using the following scale, please rate each factor.

| $1 \quad 2$ | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | ---: |
| Had no <br> control <br> over it |  |  | Had <br> moderate <br> control <br> over it | Had |  |
|  |  |  |  | complete <br> control <br> over it |  |

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Your intellectual ability.
4. $\qquad$ The amount of effort you put into studying for and taking this particular exam.
5. $\qquad$ Any bad breaks you might have had while taking the exam.
6. $\qquad$ The instructor's own personal biases regarding the exam material.
7. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
8. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
9. $\qquad$ The difficulty of the exam.
C. In terms of how it influenced your score on the exam, each of the nine factors can be viewed as having involved something that was stable (did not change during the exam), something that was unstable (did change during the exam), or something that was neither very stable nor unstable. Using the rating scale below, please rate each factor.

| $1 \quad 2$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Was (is) |  |  | Neither |  |  | was | (is) |
| very |  |  | very stable |  |  |  | very |
| unstable |  |  | nor very |  |  |  | table |
|  |  |  | unstable |  |  |  |  |

1. $\qquad$ Any lucky breaks you might have had while taking the exam.
2. $\qquad$ Your general mood while taking the exam.
3. $\qquad$ Your intellectual ability.
4. $\qquad$ The amount of effort you put into studying for and taking this particular exam.
5. $\qquad$ Any bad breaks you might have had while taking the exam.
6. $\qquad$ The instructor's own personal biases regarding the exam material.
7. $\qquad$ Unexpected help or hindrance from a friend or acquaintance while taking the exam.
8. $\qquad$ The amount of effort you usually put into studying for and taking course exams.
9. $\qquad$ The difficulty of the exam.

Section: Feelings.

Please answer the following items.

1. How do you feel about your score on the exam? (circle one)

| -4 | -3 | -2 | -1 | 0 | +1 |
| :--- | :--- | :---: | :---: | ---: | ---: |
| Extremely |  | Neutral | +2 | +3 | Extremely |
| displeased |  |  | about | pleased |  |
| with it |  | it | about it |  |  |

2. The final exam will be very similar in structure to the midterm. Estimate as best you can how well you will be doing by placing the score you generally expect to get on the final.

I expect to get $\qquad$ points on the final exam.

## 2 <br> VITA

PLINIO GUAICAIPURO ORTIZ<br>Candidate for the Degree of<br>Doctor of Education

Thesis: PERCEPTIONS OF THE FACTORS REGARDING SUCCESSFUL COMPLETION OF COURSE EXAMINATIONS IN THE SCHOOL OF MEDICINE AT THE UNIVERSIDAD CENTRO OCCIDENTAL LISANDRO ALVARADO OF VENEZUELA

Major Field: Higher Education
Biographical:
Personal Data: Born in Duaca, Lara State, Republic of Venezuela January 15, 1943, the fourth son of Jose' Rafael Ortiz and Dorila de Ortiz, and married to Meselenia Manrique, with one son: Afrael G. Ortiz M, and two daughters: Farida E. Ortiz M , and Ainelesem Ortiz M.

Education: Attended elementary school at Jose^ Angel Alamo, Duaca, 1950-1956: attended secondary school at Liceo Lisandro Alvarado, Barquisimeto, 1957-1962, received the bachelor's degree, Professor of Secondary Education from the Experimental Pedagogical Institute de Barquisimeto, Estado Lara, Venezuela, 1973; received the degree of Master of Science in Education from Indiana State University, Terre Havice, Indiana, USA, 1977; completed the requirements for the Doctor of Education degree in May, 1983, Oklahoma State University, Stillwater, Oklahoma, U.S.A.

Professional Experience: Secondary school teacher from 1968 to 1975; faculty professor, 1977 to 1980, assistant head of faculty Development and Research, 1977 to 1980; Counselor for the Rector of the University, 1977 to 1980.

```
    THE IMPORTANCE OF THE STANDARD EVALUATIVE CRITERIA
        REGARDING ENTRY-YEAR TEACHERS AS PERCEIVED
        BY MEMBERS OF ENTRY-YEAR ASSISTANCE
            COMMITTEES AND ENTRY-VEAR
                        TEACHERS
    The Entry-Year Assistance Program has been implemented in
Oklahoma school districts employing beginning licensed teachers.
This questionnaire is designed to help identify certain perceptions
of the evaluative criteria used in the entry-year process. You
are familiar with those criteria as a result cf your involvement
in the Entry-Year Assistance Program in your school.
    Do not sign your name. Please check the appropriate square.
1. Your position on the Entry-Year Committee:
    QEntry-Year Teacher }\square\mathrm{ Administrative Representative
    \squareConsulting Teacher D.Higher Education Representative
2. Year(s) of teaching experience in public schools:
\(\square_{0} \Psi_{1-5} \quad\)-10 \(\quad\) Iover 15
3. Year(s) of teaching experience in institutions of higher education:
            0
                1-5
                    \-10
                    I1-15
```over 15
over 15
5. Current grade ievel(s) taught:


6. Level of eaucation:
\(\square\) Bachelor's Degree DMaster's Degree


The categories from the standard observation instrument used in evaluating the licensed entry-year teacher, in alphabetical order, are as follows:
\begin{tabular}{|c|c|}
\hline \[
2 A
\] & Classroom Management \\
\hline 3 B . & Human Relations \\
\hline 4 & Professionalism \\
\hline 10. & Teaching and Assessmen \\
\hline
\end{tabular}

Please rank order them from 1 to 4 in terms of your perception as to their importance in the evaluation process with 1 being MOST IMPORTANT and 4 LEAST IMPORTANT.
```

DIRECTIONS: After each cf the following statements from the
standard evaluative criteria, please circle the
letter that most correctly reflects your perception
(opinion) as to the validity of that item as a valid
descriptor of the Human Relations category of the
teaching pezformance.
The scale is coded as follows: SA=Strongly Agree,
A=Agree, D=Disagree, SD=Strongly Disagree

```

\section*{HUMAN RELATIONS}
1. Reacts with sensitivity to the needs and feelings of others.

2. Helps students build self-awareness and a positive self-concept.

3. Provides positive reinforcement to students.

4. Interacts and communicates effectively with parents and staff.

5. Treats students firmly and fairly while maintaining respect for their worth as individuals.
6. Develops and maintains rapport with students.
\begin{tabular}{llll} 
SA, & \(A\) & \(S D\) \\
\(-A B\), & \(A\) & \(D\) & \(S D\)
\end{tabular}
7. Helps students to understand and accept their similarities and differences.
\(S A\) D SD
8. Shows awareness of the growth and development patterns characteristic of the grour taught
9. Exhibits a sense of humor.
SA A D \(A\)
10. Attempts to include all ciass members in classroom activities

S5
A D SD
11. Accepts and/or uses ideas of students. SA DD

Please indicate the number(s) of any item(s) which should be eliminated from the Human Relations category of the instrument.
\(\qquad\)

Please indicate the number(s) of any item(s) which would be better placed in another one of the 4 evaluation categories.

Please indicate additional items which would improve the Human Relations category. \(\qquad\)


Please indicate additional items which would improve the reaching and Assessment category.
```

\#IPECTIONS: Aftor each of the Eollowing statements .rom the
standard evaluative criteria, please circle the
letter that most correctly reflects your perception
(opinion) as so the validity of that item as a vaijd
descriptor of the Professionalism category of the
teaching performance.
The scale is coded as follows: SA=Strongly Agree,
A=Agree, D=Disagree, SD=Strongiy Disagree

```
PROFESSIONALISM
1. Maintains a friendly, cooperative and helpful relationship with other employees.
\(\therefore A \quad \therefore\)
2. Exhibits leadership by sharing knowledge and techniques with other faculty.
\(S A \quad A \quad S D\)
3. Works effectively as a member of and educational team.
\(S A \quad A \quad D \quad S D\)
4. Demonstrates evidence of professional demeanor, scholarship, and behavior.
SA A D SD
5. Effectively expresses self in written and verbal communication using correct grammar and appropriate vocabulary. SA \(A\) SD
6. Uses current educational theories and practices.
SA AD SD

Please indicate the number (s) of any item (s) which should be eliminated from the professionalism sategory of the instrument.

Please indicate the number (s) of any items (s) which would be better placed in another one of the 4 evaluation categories.

Please indicate additional items' which would improve the
professionalism category.







Dear Mary:
I'm happy to do the enclosed questionnaire for you. I thought I'd better write and tell you about my new address. We have moved to Kansas City, living in an efficiency apartment here at the Seminary temporarily--until we get our house built.

Of course, I am no longer involved in the entry year assistance program but did a lot of the work while I taught at ECU, Ada before moving here in January. I had 4 entry year teachers.

My criticism of the program has nothing to do with the instrument, I think it is fine, though it is a little lengthy and takes some time.

I do however have some very strong feelings about HB 1706 and the time it takes from the people who are already working very hard. If you ever do any research in some of the other areas, I hope you will give me a chance to express myself. Or, if any of your friends are studying other areas of it, I hope you will give them my name and address. I wanted to express myself before I left, and just really didn't know to whom I should express it!

The one thing I want to say to you, in case you deal with it at all, is that there needs to de some kind of relief for those of us who are in higher education. I found it extremely difficult to find the times to visit my Ey teachers. I had to do a lot of schedule changing and I had to drive a tot of miles. Of course, they were wilting to pay me for overload, but it was still very difficult. Then, with the other areas of HB 1706 added on, it looked like an impossible task to me. I really know that it is intended to keep us sharp, and I know they have a point there, but for those of us who are already sharp and working hard and being effective (aren't you impressed with my modesty?!), to add on all those other responsibilities was causing me some real concern--almost depression. This matter needs to be studied, and if I can be of nelp, I want to. I was almost relieved to leave my job--which I loved-- because I just didn't see how I could do all that.

Let me know if I can help, and good luck on your project!

Bl11ye Van Schuyver, Chairman
Department of Education and Psychology
FROM: Kenneth Ellis Education and Psychology
Department of Educat of Education and Psychology
DATE: April 7, 1983
REF: Entry Year Evaluation Instrument

\section*{CAMERON UNIVERSITY}

After completion of evaluation instruments for entry year teachers during this school year and also during a pilot program with Lawton Public Schools this past year. I would like to report to you problems I have experienced. I am also recommending minor changes that I think would allow this instrument to be completed more easily and that will also increase the efficacy of the instrument.

Some of the items listed in the different categories ( I - Human Relations, II - Teaching and Assessment, III - Classroom Management, IV - Professionalism) are very similar or closely related. For example, Item C under III - Classroom Management (Treats Students Fairly) is included in Item E of I - Human Relations (Treats Students Firmly and Fairly while maintaining respect for their worth as individuals). Because some of chese similar and closely related items are in different categories there is a tendency for the evaluator to become redundant and reperitious while completing the different categories included in the instrument. Items that are related should be listed together and placed in the same category in the Evaluation Inscrument.

The enclosed Evaluation Instrument contains all of the different categories in the original instrument, however, I have regrouped these items so that related items could be answered collectively. The regrouped items are identified by using a number and the letter originally assigned to the item. For example, item H under (III - Classroom Management) has been placed under ( \(I\) - Human Relations) and the original place for this item is indicated by labelling the item 3 H . All of the items contained in the same bracket are items that I thought were similar or at least related in some way so that I could answer them collectively.

I have shared copies of the enclosed Evaluation Instrument (instrument with regrouped items) with other Cameron University Paculty Members who are working with entry year ceachers and have received feedback from these people. There is a consensus of opinion among these faculty members that related items should be grouped together and placed in a single category because of the above mentioned reasons.

Part IV - Professionalisa contains characteristics that every teacher should possess. However, it is my opinion that it is very difficult for the person in Blgher Education to gain the necessary information and insight needed to accurately answer items in this area during three observations. This part of the evaluation instrument should be completed only by the consulting teacher and the administrator. If these committee members are concerned that the entry year teacher is not functioning effectively in this area, then this could be discussed with the Higher Education Comantee Member before meeting with the entry year teacher.

\section*{APPENDIX G}

TEACHER CONSULTANT REGULATIONS instruetion
JACK STRAHORN sTATEFFDERAL

\section*{ \\ LESLIE FISHER, Superintendent \\ LLOYO GRAHAM, Deputy Superintendent \\ TOM CAMPBELL. Aszociate Deputy Superintendent \\ 2500 North Lincein Boulevard \\ ©kLifama Titg, ©klahoma 73105}

RECCMMENDED DUTIES OF TEACHER CONSULTANT
1. Acquaint beginning teacher with ouilding procedures; duties; materials used; texts used; location of materials, supplies, and texts; and special services available.
2. Introduce specialists and assist with all referrals.
3. Assist with and evaluate short term and iong term goals, objectives, and lesson plans.
4. Assist with and evaluate beginning teacher during parent conferences and pupil evaluation.
5. Provide classroom management techniques appropriate to school philosophy and level.
6. Provide access to teacher-made materials and ideas already tried.
7. Assist with pupil diagnosis, placement, and materials.
8. Wodel appropriate team teaching behavior, professionalisn, and enthusiasm.

HOUSE BILL 1706
rules and regulations for teacher consultant

> "'Teacher consultant' means any teacher holding a standard certificate who is employed in a school district to serve as a teacher and who has been appointed to provide guidance and assistance to an entry-year teacher employed by the school district. A teacher consultant shall be a ciassroom teacher and have a minimum of two (2) years of classroom teaching experience as a certified teacher. No certified teacher shall serve as a teacher consul tant more than two (2) consecutive years, although such certified teacher may serve as a teacher consultant for more than two (2) years." (Section 5, Item 9)
"A teacher consultant shall be selected by the principal from a list submitted by the bargaining unit where one exists. In the absence of a bargaining agent, the teachers shall elect the names to be submitted. No teacher may serve as a teacher consultant for more than one entry-year teacher at a time;" (Section 5, Item 9)

It is the intent of the rogulations that teacher consultants be selected who possess the requisite knowledge and skills for assisting the beginning teacher. Therefore, those persons responsible for submitting names for teacher consultants should use their best judgement in identifying teachers who possess leadershio qualities that can provide the best possible assistance for a beginning teacher.
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P.egulation 1

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    Beginning school year 1980-81, every beginning teacher (zero (0) years
    experience as a classroom teacher) employed shall serve under the
    guidance and assistance of a teacher consultant for a minimum of 180
    days. (See Oklahoma School Laws, Section 9, School Year - Length)
Regulation 2
    Upon employment of a beginning teacher, the superintendent or chief
    administrative officer snall notify the bargaining unit, where one exists,
    of the areas of certification and the teaching assignment of the
beginning teacher. The bargaining unit shall submit to the principal a minimum of three (3) names for prospective teacher consultants from the building in which the beginning teacher is assigned.

In the absence of a bargaining unit the aprincipal shall notify the classroom teachers from the building in which the beginning teacher is assigned, and these classroom teachers shall elect a minimum of three (3) names to submit to the principal for prospective teacher consultants:

\section*{Regulation 3}

A teacher consultant shall be a classroom teacher and have a minimum of two (2) years of classroom teaching experience as a certified teacher. The teacher consultant must hold at least a standard certificate. Whenever possible, the minimum three (3) names to be submitted shall have had experience in the teaching area of the beginning teacher.

\section*{Regulation 4}

No certified teacher shall serve as a teacher consultant more than two (2) consecutive years, although such certified teacher may serve as a teacher consultant for more than tivo (2) years.

\section*{Regulation 5}

Within at least five (5) teaching days after the beginning teacher enters the classroom, the teacher consuitant shall be selected.

\section*{Regulation 6}

It is the responsibility of the school district to ensure that a mechanism be provided whereby the teacher consultant will provide guidance and assistance to the beginning teacher a minimum of three (3) hours per week in classroom observation and consultation.

VITA

> Mary Louise Meritt Candidate for the Degree of Doctor of Education

Thesis: THE IMPORTANCE OF THE STANDARD EVALUATIVE CRITERIA REGARDING ENTRY-YEAR TEACHERS AS PERCEIVED BY MEMBERS OF ENTRY-YEAR ASSISTANCE COMMITTEES AND ENTRY-YEAR TEACHERS

Major Field: Educational Administration
Biographical:
Personal Data: Born in Hattiesburg, Mississippi, December 2, 1944, the daughter of Mr. and Mrs. Robert Chester Badgwe 11, Jr.

Education: Graduated from Midwest City High School, Midwest City, Oklahoma, in May, 1963; received Bachelor of Arts degree in Education from Central State University in 1966; received Master of Science degree in Education from Oklahoma State University in 1973; completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1983.

Professional Experience: English and Social Studies Teacher, Stigler, Oklahoma, 1966-69; English Instructor, Oklahoma State University Graduate Assistant, 1969-70; English Teacher, Stillwater, Ok1ahoma, 1970-71; Social Studies and English Teacher, Stillwater, Oklahoma, 1975-79; Counselor, Stillwater, Oklahoma, 1979 to present.```

