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ACADEMIC ACHIEVEMENT AND RETENTION OF A SELECT GROUP OF VETERANS

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ACADEMIC ACHIEVEMENT AND RETENTION
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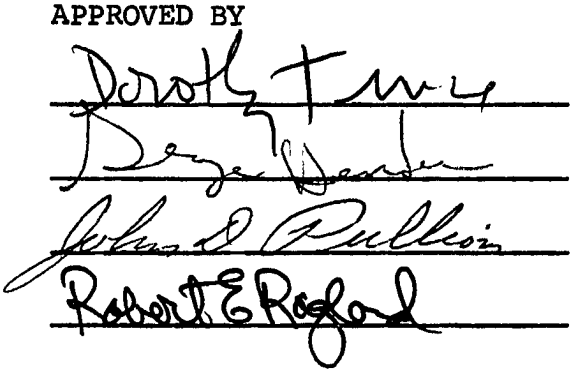
APPROVED BY



DISSERTATION COMMITTEE

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ACADEMIC ACHIEVEMENT AND RETENTION OF A SELECT GROUP OF VETERANS

CHAPTER I

INTRODUCTION

With the end of the war in Vietnam, an increasing number of veterans are having to reenter society without enough formal education to equip them for a successful adjustment to civilian life and a hopeful future. Much of this adjustment can best be accomplished by assisting the veteran to develop the educational skills and communication competencies required for competition in college and/or the job market.

Crucial to the success of a veterans' program is the institution's wholehearted commitment to the veteran as a student. Although, in some cases, the view prevails that a post-secondary institution should not be dealing with remedial education or that veterans' needs are no different from those of other college stu-

dents, the national trend is to support educational efforts for veterans. They require special services because they are not typical highschool graduates, but are an adult audience that has been out of school in some cases as long as fifteen years.

Background and Need for Study

September 1, 1973, the University of Oklahoma launched the Veterans' Cost of Instruction Program. This program consists of a full time Office of Veterans' Affairs. Full time Office of Veterans" Affairs is defined as a unit created and maintained within an institution of higher education to provide adequate outreach, recruitment, special education, counseling, and other services for veterans.

The veterans' program at the University of Oklahoma consists of a well coordinated and extensive referral service involving agencies providing assistance in areas such as housing, employment, health, recreation, vocational and technical training, and financial assistance. The veterans' program also maintains a guidance program for individual veteran students that will ensure the highest possible rate of retention in their

educational programs. The veterans' program provides special educational programs of a remedial, motivational, and tutorial nature. The program has a questionnaire for assessing veterans' needs, problems, and interests. With respect to recruitment, the veterans' program has a recruiter it uses to bring in the maximum number of veterans into purposeful systematic programs of higher education suited to their educational and career aspirations, including such techniques as publications, use of mass media, and personal contacts.

Veterans' Affairs Staff

1. Coordinator of Veteran Services - The Coordinator of Veteran Services is to coordinate and manage budget, scheduling, veteran services, counseling services and programs, and special projects.

2. Student Development Counselor and Coordinator of Married Student Programs - The main function of the Student Development Counselor and Coordinator of Married Student Programs is to operate # 9, commonly known as the crisis center. This center provides an all night emergency counseling service and its staff

consists of volunteers. The student development counselor directs the staff of the crisis center. Some areas or services provided by the Student Development Counselor are:

A. Provide individual counseling on a drop-in basis,

B. Operate groups in interpersonal communication skills,

C. Provide guidance for individual decision making for personal, academic, and social problem areas,

D. Develop group programs in the field of leadership skills, human development, residence advisor orientation, minority relations, and human sexuality.

3. Field Representative and Counselor - The Field Representative and Counselor is to maintain a close and personal contact with the various junior or community colleges in the state of Oklahoma. Each community college is visited during the fall and spring terms. Many veteran students are talked with during the semi-annual visits. Forms or applications and additional information, such as a veteran handbook especially printed for the veteran who plans to enter Oklahoma University, are disseminated. Information concerning housing, employment, health, financial

assistance, and vocational or technical training is also provided.

4. Admission Counselor - The Admission Counselor of the University of Oklahoma is located in the office confines of Admissions and Records. Here, the Admissions Counselor starts the certification procedure for financial payment to the veteran, veteran dependent, or widow. The Admission Counselor determines the eligibility of the veteran through constant contact with the veterans' affairs regional office located in Muskogee, Oklahoma.

Specific Services

1. Housing - Housing for veterans can be located through the Office of Housing located in the Center for Student Development. The Center for Student Development is one of the many units directly responsible to the vice president of the university community.

2. Recreation - Recreation for veterans can be had through the Office of Communications, Fraternities, and Programs, which is also located in the Center for Student Development. Recreational activities include

swimming, basketball, and tours.

3. Employment - Employment for veterans is usually handled through the Veterans' Affairs Office where a constant contact with the State Employment Office affords the veteran job information, referral, or veteran unemployment compensation. Also, the veteran is instantly referred to the university employment service. A work/study program provided by Veterans' Affairs nationally is in effect at this Office of Veterans' Affairs whereby a veteran can earn $2.50 per hour for 100 hours of work.

4. Financial Assistance - Financial Assistance through short term loans can be arranged at the Office of Veterans' Affairs. Financial Assistance can also be obtained from the Office of Financial Assistance by means of a referral from the Veterans' Affairs office.

5. Health - With the Veterans' Administration Hospital in nearby Oklahoma City, veterans' health needs can readily be met.

6. Vocational and Technical Training - After enrollment the veteran has freedom of choice in determining what line of education he or she wishes to pursue.

7. Special Instructional, Tutorial, and Guidance Services - Any of the aforementioned services can be supplied to the veteran students upon their requests.

Retention

There are two distinct aspects of the problem of selecting students: (a) selective admission and (b) selective retention.

Selective admission is concerned with the qualifications of a student at the time he applies for matriculation. In certain divisions of the university, such as the freshman class and the medical schools, the number of applicants for admission exceeds the number which existing administrators indicate should be admitted. The officers of admission must determine from the credentials presented by each applicant whether or not he meets the admission requirement if admission is granted without regard to the experience on the part of the student in this institution.

The second and perhaps more important aspect of the problem of selection has to do with the retention of students after they have matriculated in the university and have carried academic work for a period

of time. The problem is to identify as nearly as possible both the students who are likely to fail and those who are likely to prove conspicuously successful. The treatment of the groups thus differentiated is a matter of administrative policy.

In the recent past approximately one-third of the dropouts from the institutions of original registration transferred to other institutions, some being on record as having made several transfers, and approximately three-fourths of the transfers eventually graduated. The highest percentage of transfers were made from church-related institutions, 43.7 per cent, of whom 72.2 per cent graduated. The comments made by the student usually explained the circumstances.[1]

Policy on the Admission of First-time Entering Students

Residents of Oklahoma

Universities

Any resident of Oklahoma who (a) is a graduate of an accredited high school, (b) has participated in the American College Testing Program, and (c) meets at least one of the following

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[1] R. E. Iffert, "Retention and Withdrawal of College Students," U.S. Dept. of H.E.W. Bulletin No. 1, (Washington: U. S. Printing Office, 1957), p. 10.

requirements, is eligible for admission to either of the state universities:

1. Maintained an average grade of "C" or above in the four years of his high school study.

2. Ranked scholastically among the upper three-fourths of the members of his high school graduating class.

3. Attained a composite standard score on the American College Testing Program which would place him among the upper three-fourths of high school seniors, based on twelfth grade national norms.

An individual not eligible for admission as stated above may, if he is a high school graduate and has participated in the American College Testing Program, be admitted "on probation" for study in the second semester of the academic year following high school graduation or in any term thereafter.

The standard for admission as stated will be considered minimal. Any institution may set a higher standard for its own use, if approved by the Oklahoma State Regents for Higher Education, subsequent to the adoption of this policy.[2]

Policy on Retention of Students Pursuing Study in Undergraduate Programs

The following standards relating to retention of students pursuing study in undergraduate programs will apply at all institutions in the Oklahoma

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[2] Oklahoma State Regents for Higher Education, "Admission and Retention Policies for the Oklahoma State System of Higher Education," (Oklahoma City: State Capitol, January, 1967), p. 5.

State System of Higher Education. For continued enrollment at any institution in the state system, a student must have earned a cumulative grade point average as indicated below:

At the end of two semesters
(24-36 semester hours attempted).....1.40

At the end of four semesters
(37-72 semester hours attempted).....1.60

At the end of six semesters
(73-108 semester hours attempted) ...1.80

Further study after 108 semester hours.2.00

A student who achieves a grade-point average of 2.00 or above in the last semester in which he was enrolled will be considered to be making satisfactory progress regardless of his cumulative grade point average.

Any student not maintaining satisfactory progress will be placed on probation for one semester, at the end of which time he must have met the minimum standard required in order to continue as a student.

A senior who has failed to meet the cumulative grade-point average of 2.00 may enroll in an additional 15 semester hours in further attempts to achieve the requirements for graduation.

The standards for retention as stated above will be considered minimal. Any institution may set higher standards for its own use, if approved by the Oklahoma State regents for Higher Education, subsequent fo the adoption of this policy.

This policy shall be effective for all students enrolled at institutions in the Oklahoma State System of Higher Education beginning with the fall semester, 1967.[3]

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[3] Ibid., p. 12.

Statement of the Problem

One purpose of this study is to investigate a group of freshman veterans to determine whether they achieve above predicted grade point averages (GPA) when given special instructional, tutorial, and guidance services at the University of Oklahoma during the fall of 1973.

Another purpose is to compare achievement and retention of these veterans and Threshold students, and other freshmen with ACT scores of 16 or below.

Differences in achievement among Black, Chicano, and Native American veterans who are participatign in the spcial service program will be compared.

The Hypotheses

The following null hypotheses were formulated from the statement of the problem:

H_{01} --There will be no statistically significant difference in the number of veteran students who achieve above their predicted GPA and those who achieve below their predicted GPA.

H_{02} --There will be no statistically significant difference in the number of female veteran students who achieve above their predicted GPA and male veteran students who achieve above their predicted GPA.

H_{03} --There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Native American veteran students who achieve above their predicted GPA.

H_{04} --There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

H_{05} --There will be no statistically significant difference in the number of Native American veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

H_{06} --There will be no statistically significant difference in the percentage of entering in the fall veteran students who achieve above their predicted GPA and the percentage of entering in the fall Threshold students who achieve above their predicted GPA.

H_{07} --There will be no statistically significant difference in the percentage of veteran students who achieve below 1.4 GPA and the percentage of students in the freshman class with ACT composite scores of 16 or below, who achieve below 1.4 GPA for fall semester.

H_{08} --There will be no statistically significant difference in the percentage of dropouts of veteran students and the percentage of dropouts in the entire freshman class at the end of the fall semester.

H_{09} --There will be no statistically significant difference in the percentage of veteran females who drop out at the end of the fall semester, and the percentage of freshman females, not in the veterans' program, whose ACT composite is 16 or below, who drop out at the end of the fall semester.

H_{010} --There will be no statistically significant difference in the percentage of veteran males who drop out at the end of the fall semester, and the percentage of freshman males, not in veterans' program, whose ACT composite is 16 or below, who drop out at the end of the fall semester.

Definition of Terms

The following definitions of terms were used for this study:

Threshold Student - Indigent and minimally prepared.

Veteran - Actual military service.

Veteran Dependent - Wife or child of veteran.

Veteran Widow - Wife of deceased veteran.

Predicted GPA - That grade average arrived at by use of existing data obtained from past academic records and a formula using ACT Research DATA.

Achieved GPA - The average of the actual grades earned by the student during the fall semester of 1973.

High School Average - The average earned by the student in high school (HSA).

Regression Constant - Predicted measures from 1968 ACT study.

Project Threshold

The summer of 1968 saw the beginning of Threshold at the University of Oklahoma. Threshold was designed primarily for the student who had academic potential, but was unable to attend college for other reasons, with finances being the most common problem.

The student entered the Threshold project with extra financial support, for example work/study. The work/study provides 15 hours of work per week at $2.02 per hour, which provided the student with additional income without placing a study burden on him or her. The national defense student loan is made available to the project students, provided the student meets a certain academic criteria.

The Threshold project provides individual guidance through project counselors and individual federally funded tutorial services, as well as group tutorial services. Students able to meet certain academic criteria such as 3.00 or 4.00 averages can request and sometimes

be granted tuition deferred advantages.

Project Threshold is in its sixth year of operation. The program's success is owed to the splendid direction of Dr. Elizabeth A. Holmes.

Organization of the Study

This study consists of five chapters. The first chapter presents the introduction or need for the study, retention of veterans in the program, and the policy of admissions for first time entering students, policy on admission, the policy on retention, the statement of the problem, the hypotheses, and the organization of the study.

Chapter II is devoted to a review of research and literature related to the study.

Chapter III deals with the design of the study.

Chapter IV deals with the treatment, presentation, and analysis of the data.

Chapter V presents the summary, findings, conclusions, and recommendations.

Procedural Pattern

The ex-post facto design will be used to test

the hypotheses and this will allow use of existing data extrapolated from the students' high school transcripts, their ACT composite scores, and university records.

In 1968 American College Test Research scientist, Donald Hoyt, published a report entitled Forecasting Academic Success in Specific Colleges.[4] The report describes in detail how Hoyt developed a formula for predicting academic achievement in college based on previous studies by A. W. Austin who had published college profiles for over 1,000 accredited four-year colleges in 1965. From Austin's "profile scores" Hoyt was able to estimate means needed to make generalized predictions for all colleges. Statistical procedures described in the report produced ACT composite means and regression constants for a total of 985 colleges. This formula for predicting academic success in college was chosen as a means for determining a predicted GPA for students involved in this study.

The data necessary for comparison with other

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[4] Donald P. Hoyt, "Forecasting Academic Success in Specific Colleges," American College Testing Research Report, (Iowa City: American College Testing Program, 1968), p. 38.

students will be obtained from individual student records.

Statistics used to treat the data were the Chi Square[5] and the Fisher's Exact Method.[6] Significance was set at the .05 level, 1 tail.

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[5] George A. Ferguson, Statistical Analysis in Psychology and Education, (New York: McGraw-Hill, 1966), pp. 195-200.

[6] Ibid., p. 167.

CHAPTER II

REVIEW OF RELATED RESEARCH AND LITERATURE

One purpose of this study is to determine the academic achievement of a select group of veterans after a fall semester of study.

This chapter presents a review of related literature and research relevant to the study. The first section presents studies and literature related to college admission policies. The second section cites literature that deals with academic achievement. The third section deals with the incidence of college dropout.

College Admission Policies

The Constitution and Statutues of Oklahoma provide that the Oklahoma State Regents for Higher Education are to prescribe standards for admission to and retention in the colleges and universities in the Oklahoma State System of Higher Education. In meeting this responsibility it is the view of the state regents that every high school graduate in Oklahoma who has the desire and ability

and who is willing to put forth the necessary effort, shall have an opportunity to improve himself through further education at some institution in the state system. At the same time, opportunity must be provided for the institutions in the state system tomake their maximum contribution to the state in implementing their functions and achieving their purposes.

Ever-increasing demands are being made by the youth of Oklahoma for study opportunities in higher education.[1] Because of the increasing number of students going to college and because of limited facilities available to accommodate them on some campuses, an individual cannot be assured that he will always be able to enroll at the institution of his first choice. However, through proper planning and coordination, he will be able to pursue his education beyond the high school somewhere in the Oklahoma State System of Higher Education.

The following principles served as guidelines for the state regents in developing policy for first-

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[1] Admission and Retention Policies for the Oklahoma State System of Higher Education, (January, 1967), p. 1.

time-entering students at institutions in the state system, and should be helpful to administrators as they interpret and administer the policy:

1. Any Oklahoma resident, upon graduation from an accredited high school, should have the opportunity of continuing his education at some institution in the Oklahoma State System of Higher Education.

2. Admissions policies should recognize and be consistent with the functions, purposes, and programs of respective institutions in the Oklahoma State System of Higher Education.

3. Two or more criteria should be used to determine the admissibility of students.

4. There should be sufficient flexibility to permit institutions to make exceptions in worthy and extraordinary cases.

5. Admissions policies should be stated in such a manner as to lend themselves to ease of understanding by high school students, parents, counselors, and the public generally.

6. Admissions policies should be administratively feasible.

7. Residents of Oklahoma should be given preference.

8. Policies should be periodically and systematically reviewed.

9. Admissions policies should be considered minimal, allowing for change by individual

> institutions on approval of the state regents.[2]

In prescribing standards for retention of students at institutions in the state system, the state regents are concerned that every student make the most of his college opportunity, and that he make satisfactory progress toward achieving his study objective. It is to this end that policies adopted are expected to serve the educational welfare of the student and at the same time make possible maximum use of resources. The following principles served as guidelines for the state regents in developing policy regarding retention of students in institutions in the state system, and should be helpful to administrators as they interpret and administer the policy.

1. Students should make satisfactory progress toward an educational objective within a reasonable period of time.

2. Retention policies should recognize and be consistent with the admissions policies of individual institutions.

3. Students should be given a second opportunity before being suspended for academic reasons.

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[2] Ibid., p. 1.

4. Students who are suspended for academic reasons should, after a reasonable period of time and upon application, be considered for readmission.

5. Retention policies should provide for uniformity in the transfer of students among institutions.

6. The retention policy should be considered minimal, allowing for change by individual institutions on approval of the state regents.[3]

Staying in College

For the candidate, the admissions process is successfully completed when he accepts admission to a college he has chosen. But for the college, success is not established until the freshman year has been satisfactorily completed. Even in the most carefully selected freshman class, one student out of every twenty fails to return for his sophomore year. In less carefully selected classes, the loss may be as high as one student out of five, while in those colleges where there is no selection before admission it may be two students out of five.[4]

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[3] Ibid., p. 28.

[4] Alexander W. Austin. Who Goes Where to College? (Chicago: Science Research Associates, 1965), p. 41.

Not all of these students fail their courses. There are many reasons why students leave college. But, in my own opinion, the school administration considers every student who drops out of college a school failure. The failure may be a failure by the college - a case of a mistake in admissions, or poor placement in classes, or teaching which loses the student's interest. But more often, the failure is the student's inability to use his new freedom as a college student, a failure to understand the pace of college and to adjust to it, and perhaps a failure to study or to understand the rules by which colleges work.

Student Retention

College enrollments in Oklahoma, as well as nationally, have increased since World War II. However, the proportion of the population remaining in college through the bachelor's degree is only 2-in-10 nationally. Approximately 22 of every 100 Oklahomans currently go on to graduate from college with a bachelor's degree.

It is important to note that not everyone who enters a post-high school institution should be expected to proceed to the bachelor's degree. However, about 90 per

cetn of the college-bound boys and 80 per cent of the college-bound girls in Oklahoma last year announced their intention to proceed to the bachelor's degree or higher. There is a significant gap between students' expectations and current reality.[5]

Wilbur Brookover and others in their investigations of self-concept of ability and school achievement concluded that the investigation has shown that role expectations and self-concepts of ability are significant factors in influencing the student's academic performance. Further, it showed that the student's self-concept of ability could be modified by significant others and thereby affect his achievement. In this context the investigation has shed some light on strategies for self-concept enhancement. In light of these findings, it is suggested that current educational practices which assume relatively fixed characteristics of students be re-evaluated.[6]

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[5] "ACT High School Profile Report, Students Tested 1968-69 School Year," American College Testing Program.

[6] Wilbur Brookover, Self-Concept of Ability and School Achievement, (East Lansing, Michigan: Bureau of Educational Research Service, College of Education, 1965). p. 115.

E. Jackson Baur, in his study of achievement and role definition of the college student, arrives at the conclusion that the development of students' relations with professors shows certain typical sequences. Characteristically, freshmen begin their classwork in awe of their professors and with attitudes of helpless passivity. But nearly all of them learn from experience that most of their instructors are interested in students and their problems. An occasional professor arouses their enthusiasm for his subject. Skillful teaching and extensive knowledge earn the respect of most students. Some try to live up to their professors' expectations of high standards of scholarship. Through these influences, which students see as emanating from the faculty, they are drawn into closer relations with their teachers and a more active participation in the academic enterprise. A few identify personally with individual professors and accordingly decide to pursue a graduate degree or even become professors themselves.[7]

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[7] E. Jackson Baur, Achievement and Role Definition of the College Student, (Lawrence, Kansas: Department of Sociology, University of Kansas, 1963), p. 82.

Heckhausen, from his book The Anatomy of Achievement Motivation, explains that highly motivated students with little achievement anxiety obtain better final grades (and also think they have learned more) from those teachers who organize their courses less along achievement lines and who do not try to activate the students through frequent feedback about success and failure. Large amounts of feedback, stimulation, and even achievement pressure improve the performance of the students with low motivation as long as they are not also anxious about achievement. For the highly motivated student, such pressure obviously interferes with his spontaneous achievement orientation. Failure-motivated persons may experience the absence of feedback as so threatening that they "leave the field."[8]

Heckhausen goes on to say, in his paragraph on achievement in school and college, that one ought also to consider the mediating dimension of reinforcement for accomplishment when he seeks the connection between motivation and achievement in school and college or career.

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[8] Heinz Heckhausen, The Anatomy of Achievement Motivation, (New York and London: Academic Press, 1967), p. 121.

This question is less "academic" than the one dealing with the interactions of motivation and intelligence. It is of great practical importance to be able to predict the future achievement of individuals. A great many investigations have been carried out on this point. Most of these report relations between high, or success-related, motivation and educational accomplishment. This is not surprising since the functional relationship is more direct than can exist for the interactions of much longer duration between motivation and intelligence. Highly motivated pupils and college students do better in school and in college.[9]

In the achievement motivation games, there are two experimental conditions. One, in which the students estimate the probabilities of success before playing the games, the other in which no probability estimates are obtained.

In the behavior condition (no probability estimates), achievement-oriented students select tasks of intermediate difficulty significantly more often than do failure-oriented students. Achievement-oriented

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[9] Ibid., p. 125.

students give higher probability estimates than do failure-oriented students, but not in games where objective cues are present. Estimates of the amount of money that should be awarded as a prize for hitting the target in a ring toss game are interpreted as estimates of valence and shown to be a product of motive and incentive value.[10]

Pauk states that men commonly say they learn more out of the classroom than in it, that "college life" in the end proves the real teacher. Usually the men who make that statement are entirely sincere, but they rarely reveal how much interest they take with them to the classroom and how capable intellectually they are of receiving anything from it. One dean always tells the incoming freshmen that they are in college for one great purpose and that purpose is to study. He is right, but only half right! Study is not an end in itself. Students are going to college for something greater than study, of which study is only a part. Most of the men who receive more from "college life" than

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[10] John W. Atkinson, A Theory of Achievement Motivation, (New York: Wiley, 1966), p. 115.

they do in the classroom recognize the fact that study alone cannot give them all the fruits of college, but they do not recognize the equally important fact that study is a ladder on which they can climb to the highest part of the academic tree, where the most luscious fruits grow. Really, the distinction just made between college life and study is an anomaly: rightly considered, study is the richest, the most delightful part of college life.[11]

Terrell and Wyer make the statement that the acknowledged desire to receive good grades is generally related positively to academic performance. However, the stated desire to seek and to receive academic recognition is not substantially related to performance, at least among entering freshmen. Academic recognition as an end in itself, independent of its instrumentality in more primary goal attainment, may not be a sufficiently strong incentive to inspire achievement. On the other hand, a general striving for success in all forms of goal-directed activity may be manifested in the academic

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[11] Walter Pauk, Successful Scholarship, (Englewood Cliffs, New Jersey: Prentice Hall, 1966), p. 63.

area and therefore may predict academic success; students who report trying to do well in everything they undertake perform better than other students.[12]

One paragraph of Terrell and Wyer concludes with the statement that students who believe that academic achievement is a necessary condition for attaining the goal that is most important to them perform better than students who believe that achievement is not so essential. However, the belief that academic achievement will facilitate primary goal attainment is not a sufficient condition for actual achievement. Students who feel that academic success is only one of a number of ways of attaining primary goals, but is not necessary, may often be unwilling to expend the effort required to achieve academic success. The finding that performance is not related to the perceived relevance of college either for vocational goal attainment or for intellectual (vs. social), broadening is consistent with the conclusion.[13]

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[12] Glenn Terrell and Robert S. Wyer, Jr., Non-Intellective Factors Associated with Scholatic Achievement, (Chicago: University of Illinois, 1966), p. 187.

[13] Ibid., p. 193.

Little acknowledgement is given to sex, but Terrell and Wyer do manage to write this, "Nevertheless, sex is often a contingency in the relationship of non-intellective factors to academic achievement. Furthermore, sex differences in performance appear often to be accounted for by differences in the social roles ascribed to males and females."[14]

Other statements taken from Terrell and Wyer conclude that while interest in personal achievement is not a sufficient condition for success in college, it nevertheless may be a necessary one. Underachievers, before entering college, report working for a substantially lower grade point average than they feel they are able to attain. Furthermore, underachievers conform less than do other students to group judgments when the judgmental task is associated with achievement potential. Although other interpretations of this result are possible, the finding is consistent with the view that these students have little interest in appearing competent in achievement-related activity.[15]

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[14] Ibid., p. 196.

[15] Ibid., p. 194.

In studies of level of aspiration behavior, it has been observed that the most typical reaction to a success is a moderate rise in level of aspiration and that the usual reaction to failure is a moderate drop in level of aspiration. However, a minority of subjects, on occasion, react to success or failure in an apparently paradoxical manner. That is, they respond to failure by raising level of aspiration and to success by lowering it. A model of risk taking recently developed by Atkinson, which is a modified form of the resultant valence conception (Lewin, Demba, Testinger, and Sears)[16] clearly implies that reactions to success and failure, whether they are typical or atypical, are predictable from a knowledge of individual differences in the relative strength of motives to achieve success and to avoid failure.[17]

Atkinson's risk-taking model predicts that individuals high in fear of failure and low in need for achievement may react in an atypical manner to success

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[16] Walter Pauk, Successful Scholarship, (Englewood Cliffs, New Jersey: Prentice Hall, 1966), p. 56.

[17] John William Atkinson, A Theory of Achievement Motivation, (New York: Wiley, 1966), p. 174.

or failure experiences.[18]

Two of the major factors that determine a person's suitability for a particular vocation are ability and interest. Therefore, if one is to be considered realistic in his choice of occupation, his interest pattern should be congruent with that of most people in his chosen field. So the statement here is that persons who are fearful of failure tend to be unrealistic in their vocational choices with respect to both ability and interest.[19]

Review of Studies and Literature Related to Dropouts

It would seem that the problem of the dropout has been approached in a crash sense, in that educators are running off in many directions, all breathing determination that something will be done for this unfortunate person called the dropout, although not much time is spent asking him what he thinks about himself and what he would like to do about it. The late President Kennedy mentioned dropouts in his State of the Union message, and this does bring the problem to national

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[18] Ibid., p. 171.

[19] Ibid., p. 172.

attention. However, it may tend to push people to find a cure before they know what it is they are trying to cure; any sort of frenzy tends to some extent to center on doing something about the symptom but ignoring the cause. It is somewhat like the concept that the way to answer the problem of unemployment is to create new jobs.[20]

The pressure to make sure that no one drops out of school may seem to imply that in this way all of one's job problems of the future will be solved. It is forgotten that throughout our history, including today, the major reason the vast majority of mankind works is to be able to eat and have some clothing and shelter - in short, to remain alive. The question, "Do you like your work?" is a rather amusing, but meaningless statement to the vast majority of the world's, including America's, workers. A great many neither like nor dislike their work. They have learned to accept the idea that living and working go together. They want to live, so they work. It is only in the truly

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[20] Dugold S. Arbuckle, Counseling Philosophy, Theory, and Issues, (Boston: Allyn and Bacon, 1965), p. 72.

affluent society that the question "What would you like to do for your life work?" can be anything but a cruel joke.

The major reason, also, given for the pressure applied to children to stay in school is usually the fact that this is the way to get a better job and earn more money. Statistics are numerous showing the number of dollars a young person can earn during his lifetime if he graduates from high school, as compared with his earnings if he doesn't, and how much more he is worth if he manages to get that symbol of cultural purity, a college degree. The emphasis is pragmatic, and education in the sense of greater knowledge and understanding is seldom mentioned as the reason why one should either stay in high school or go on to college. It almost seems as if what happens to one as a result of the educational process really were of no concern whatsoever - the only important thing being the end result, the college board score, the certificate, the degree.[21]

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[21] Ibid., p. 78.

A further problem is that there is little agreement as to who dropouts are, although this should really be known by this time. The School Dropouts Newsletter quotes a recent Bureau of Labor Statistics report showing that of some 4,000 dropouts, nearly 70 per cent possess normal or higher intelligence quotients.[22] This broadly agrees with various studies such as those reported by Brown,[23] Dillon,[24] Gragg,[25] Lenoir,[26] and Hutson,[27] which generally tend to indicate that intelligence test scores of dropouts are below average. In the same newsletter, S. M. Miller,[28] is quoted as saying, at the last symposium on this subject, that dropouts are not exclusively from the working class, low class, or low income families; that there is danger

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[22] School Dropouts Newsletter, (Vol. 1, No. 2, February, 1963), p. 6.

[23] Ibid., p. 6.

[24] Ibid., p. 6.

[25] Ibid., p. 6.

[26] Ibid., p. 6.

[27] Ibid., p. 6.

[28] Ibid., p. 6.

of making dropouts a problem of personal inadequacy, subcultural values, and the like; and that they are neither knights nor hoods.[29] They may be neither knights nor hoods, but studies by Dillon,[30] Lenoir,[31] Rimel,[32] and Allen[33] seem to indicate that dropouts tend to live in the not-so-good parts of the city, that their parents represent a lower education group, that their fathers are employed as unskilled or semi-skilled workers, and that many come from broken homes.[34] Any group of individuals can hardly be "exclusively" anything, but the vast majority of children who are categorized as dropouts, a la definition of the Cooperative Project on Pupil Accounting for Local and State School Systems, could be described in fairly general and accurate terms.[35]

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[29] Ibid., p. 39.

[30] Ibid., p. 39.

[31] Ibid., p. 39.

[32] Ibid., p. 39.

[33] Ibid., p. 39.

[34] Ibid., p. 40.

[35] Cooperative Project on Pupil Accounting for Local and State School Systems, p. xxii.

Regardless of the validity of the various studies, it would surely seem that the real or fancied lack of "intelligence" of the "low intelligence" group looms much larger in the school than anywhere else. A low IQ that may prove to be a disastrous handicap in school may be a very minor irritation out of school. Grades in school have little predictive value regarding later occupational success. It is tragic that children must be taught that they have a handicap.

Arbuckle gives his view of the counselor and the dropout by concluding that if students who are school dropouts are alienated, sullen, and unhappy, it is not because of what they lack, but because of what they have been taught to believe they lack. Most of what the school dropout can't do, including reading, he could have learned to do. The counselor can help the client, such as the person who is a school dropout, to learn that he is somebody, but only if the counselor, deep in his bones, feels that both he and the client actually are somebody.[36]

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[36] Dugold S. Arbuckle, Counseling Philosophy, Theory, and Issues, (Boston: Allyn and Bacon, 1965), p. 64.

CHAPTER III

DESIGN OF THE STUDY

One purpose of this study is to investigate first time entering student veterans at the University of Oklahoma to determine whether their academic achievement during the first semester participation in a veterans' program exceeds their predicted GPA.

Also to be investigated will be the question of whether there are significant differences in achievement among minority groups of Blacks, Native Americans, and Chicanos who particpate in the program.

H_{01} --There will be no statistically significant difference in the number of veteran students who achieve above their predicted GPA and those who achieve below their predicted GPA.

H_{02} --There will be no statistically significant difference in the number of female veteran students who achieve above their predicted GPA and male veteran students who achieve above their predicted GPA.

H_{03} --There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Native American veteran students who achieve above their predicted GPA.

H_{04} --There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

H_{05} --There will be no statistically significant difference in the number of Native American veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

H_{06} --There will be no statistically significant difference in the percentage of entering in the fall veteran students who achieve above their predicted GPA and entering in the fall Threshold students who achieve above their predicted GPA.

H_{07} --There will be no statistically significant difference in the percentage of veteran students who achieve below 1.4 GPA and the percentage of students in the freshman class with ACT composite scores of 16 or below, who achieve below 1.4 GPA for fall semester.

H_{08} --There will be no statistically significant difference in the percentage of dropouts of veteran students and the percentage of dropouts in the entire freshman class at the end of the fall semester.

H_{01} --There will be no statistically significant difference in the percentage of veteran females who drop out at the end of the fall semester, and the percentage of freshman females, not in the veterans' program, whose ACT composite is 16 or below, who drop out at the end of the fall semester.

H_{010} --There will be no statistically significant difference in the percentage of veteran males who drop out at the end of the fall semester, and the percentage of freshman males, not in the veterans' program, whose ACT composite is 16 or below, who drop out at the end of the fall semester.

Data Collection

Data necessary for computing a Predicted GPA for each student were obtained in the following manner:

A copy of the high school transcript for each first semester veteran student was examined and the high school average (HSA) computed from mathematics, English, social science, and natural science subjects. These data were compared with the ACT composite score. Through the use of specially compiled tables perfected by Donald Hoyt from the Research Division of American College Testing Program, a formula involving the use of Regression Constants was used to arrive at the student's

predicted GPA. Exact procedures for obtaining a student's Predicted GPA were as follows:

1. The student's ACT composite score was recorded and the HSA (High School Average). The HSA was computed on a four point scale: A = 4; B = 3; C = 2; D = 1; F = 0. A table showing the possible grade combinations appears in Appendix A.

2. Table A-1 or Table A-2 (Appendix A) was used to develop a "general academic potential" index for the student. A general academic potential index can be determined by finding the column corresponding to the student's HSA, finding the row corresponding to the ACT composite score, and finding the cell where this row and column intersect.

3. This index was then converted into a predicted GPA by adding the college constant for the University of Oklahoma recorded in Table A-3 (Appendix A). Predictions were obtained by using the four point scale described above where A = 4; B = 3; C = 2; D = 1; and F = 0.

4. The student's Achieved GPA was recorded from official University IBM Grade Reports based on the same four point scale.

Population

Data for this study were collected from the student veterans enrolled in the veterans' cost of instruction program at the University of Oklahoma during the fall semester of 1973. Total enrollment of this group numbered 132 which included Blacks, Native Americans, Chicanos, and Caucasians.

From the original group of 132 students the following eliminations were necessary to fully test the hypotheses as derived from the problem:

Forty-three students were transfers from other colleges and could not be considered first time entering freshmen.

This left a total of 89 students who were being exposed to college for the first time in the fall semester of 1973. The racial distribution was as follows: 3, Blakcs; 4, Native Mareicans; 1, Chicano; and 81, Caucasians. Complete data on these students were compiled to test the hypotheses.

Forty-two students who participated in the

fall Threshold program were used for comparative purposes in Testing H_{06}.

Data Treatment

To test the hypotheses, a statistical procedure which would compare an observed frequency, in this case the achieved GPA, with a theoretical frequency, which is the predicted GPA, was used. The data permitted the assumption of nominal or ordinal measurement to be met and these factors dictated the use of Chi Square to test hypotheses one, two, and three.[1]

Fisher's exact test was used to test hypotheses four, five, and six.[2]

The type of data needed for comparison of the veteran group with other members of the freshman class dictated the use of a Chi Square test since the data were collected from two independent samples. These samples were from assumed normal distributions and

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[1] George A. Ferguson, Statistical Analysis in Psychology and Education, (New York: McGraw Hill, 1966), p. 191.

[2] Ibid., p. 260.

possessing homogeneity of variance, while yielding at least an interval or ratio level of measurement. Therefore, the student Chi Square test was used to test hypotheses seven, eight, nine, and ten.[3]

Significance was set at the .05 level, 1 tail.

Instrumentation

The standardized instrument used in this study is: The American College Test.[4] A description and rationale for the selection of this instrument for this study follows:

The American College Test

More than six hundred colleges and universities require or recommend that entering students take the American College Testing (ACT) Program tests. Colleges use ACT scores for guidance and course placement, as well as in considering students for financial aid and admissions.

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[3] Ibid., pp. 167-168.

[4] ACT, The American College Testing Program, P.O. Box 168, Iowa City, Iowa, 52240.

The test is made up of four subtests: English (appropriateness and effectiveness of written expression); mathematics (mathematical reasoning ability); social studies (ability to inperpret and evaluate reading selections, knowledge of sources of information); and natural sciences (understanding of the methods of science selections). The English and mathematics subtests are especially designed to be used as aids in placing students in freshman English and mathematics classes where they will have the best chance for success. A total score provides an overall estimate of a student's general ability to succeed in college studies. The test items in all areas are intended to measure as directly as possible the student's ability to perform the same kinds of complex intellectual task that college students are asked to perform. That is, the test is concerned with general intellectual skills and abilities.

The American College Testing Program (ACT) founded in 1959, serves as a central agency for the collection, anlysis, processing, and reporting of information for use in educational planning by college bound students and their partents, high school counselors,

college administrators, and educators.

As of 1960 more than 1,300 institutions of higher education participate in the ACT program and the test battery is administered at more than 2,000 test centers located in fifty states, Canada, Mexico, and overseas.

Summary

Ten hypotheses were developed from the problem of the study. An ex-post-facto design was used which allowed use of data from academic records in addition to ACT composite scores which were needed to arrive at a predicted GPA for each student in the sample. Another measure, the achieved GPA, was obtained from actual grades received by each student. at the end of the fall semester. Comparative data on the number of dropouts were determined from IBM institutional rolls.

The population used to obtain data for the study were members of the Veterans' Cost of Instruction Program at the University of Oklahoma, students in Project Threshold, and the freshman class of the University

of Oklahoma in 1973.

Statistics employed to test the hypotheses were the Chi Square formula and Fisher's Exact method. Significance was set at the .05 level, 1 tail. The instrument used for testing was the American College Test (ACT).

CHAPTER IV

PRESENTATION AND ANALYSIS DATA

Answers to the following questions are sought:

1. Do returning veteran students achieve above their predicted grade point average without having prior college time?

2. Are there significant differences in achievement and retention among Blacks, Native Americans, and Chicanos who participated in this program?

3. How do veterans compare in achievement and retention with students in Project Threshold and other freshmen?

TABLE 1

FALL VETERAN STUDENTS

RESEARCH DATA

STUDENT	SEX	H.S. GPA	ACT COMP.	DER. SCORE	ADD CONST.	PRED. GPA	ACH. GPA	DER.
GA	M	3.18	20	2.41	-.46	1.95	2.53	+ .58
SA	M	2.65	17	2.03	-.46	1.57	2.20	+ .63
OA	M	1.24	18	1.53	-.46	1.07	1.59	+ .52
TA	M	3.00	20	2.41	-.46	1.95	1.21	- .74
FB	M	2.60	16	1.98	-.46	1.52	1.37	- .15
RB	M	2.10	16	1.76	-.46	1.30	2.20	+ .90
JB	M	2.00	16	1.76	-.46	1.30	2.64	+1.34
JB	M	2.03	16	1.76	-.46	1.30	1.70	+ .40
LB	F	3.05	18	2.50	-.52	1.98	1.65	- .33
MB	F	3.61	20	2.86	-.52	2.34	2.19	- .15
JB	M	2.96	17	2.15	-.46	1.69	2.31	+ .62
RB	M	1.86	20	1.98	-.46	1.52	1.87	+ .35
FC	M	1.50	17	1.48	-.46	1.02	2.31	+ .29
JC	M	2.38	17	1.92	-.46	1.46	1.75	+ .29
JC	M	2.27	20	2.09	-.46	1.63	1.81	+ .18
FC	M	1.96	17	1.76	-.46	1.30	1.54	+ .24
RC	M	3.80	20	2.75	-.46	1.29	2.75	+1.46
TC	F	4.00	19	3.10	-.52	2.58	2.09	- .49
JC	M	3.75	20	2.75	-.46	1.29	1.92	+ .63
SC	M	1.62	17	1.48	-.46	1.02	1.48	+ .46
SD	M	2.28	17	1.81	-.46	1.35	2.15	+ .80
OD	M	2.00	16	1.76	-.46	1.30	1.76	+ .46
DD	M	2.00	20	1.98	-.46	1.52	1.98	+ .46
CD	F	3.62	20	2.86	-.52	2.34	2.41	+ .07
MD	M	2.28	20	2.09	-.46	1.63	1.53	- .10
JE	M	2.00	20	1.98	-.46	1.52	2.03	+ .51
CE	M	1.44	16	1.54	-.46	1.08	2.41	+ .33
DE	M	1.44	16	1.54	-.46	1.08	2.74	+ .66
DF	F	3.50	17	2.68	-.52	2.16	3.10	+ .94
JG	M	2.55	16	1.98	-.46	1.52	2.20	+ .68
WG	M	2.00	16	1.76	-.46	1.30	2.62	+1.32
JH	F	3.80	17	2.80	-.52	2.28	1.67	-1.11
DH	M	2.00	16	1.76	-.46	1.30	2.44	+1.14
HH	M	1.50	16	1.54	-.46	1.08	2.80	+1.72

TABLE 1 - CONTINUED

STUDENT	SEX	H.S. GPA	ACT COMP.	DER. SCORE	ADD CONST.	PRED. GPA	ACH. GPA	DER.
GH	M	1.54	20	1.75	-.46	1.29	2.68	+1.39
TH	M	2.03	16	1.76	-.46	1.30	2.15	+ .85
MH	F	2.93	17	2.44	-.52	1.92	2.03	+ .11
RJ	F	2.00	13	1.67	-.52	1.15	3.50	+1.35
DJ	M	2.00	16	1.76	-.46	1.30	3.10	+1.80
RL	M	2.65	16	2.09	-.46	1.63	2.86	+1.23
GL	M	2.36	18	2.09	-.46	1.63	2.50	+ .87
ML	M	2.50	20	2.20	-.46	1.74	1.98	+ .24
AL	M	2.60	16	1.98	-.46	1.52	2.34	+ .82
JL	M	3.19	16	2.31	-.46	1.85	2.58	+ .73
EL	M	2.00	19	1.92	-.46	1.46	2.98	+1.52
EM	M	1.65	20	1.87	-.46	1.41	1.51	+ .11
MM	M	2.14	16	1.76	-.46	1.30	1.63	+ .33
TM	M	2.68	20	2.31	-.46	1.85	2.16	+ .31
SM	F	2.62	14	2.03	-.52	1.51	2.28	+ .77
DM	M	3.07	16	2.19	-.46	1.73	1.92	+ .19
MM	M	2.66	16	1.98	-.46	1.52	1.15	- .37
PM	F	2.00	20	2.15	-.52	1.63	2.10	+ .47
WM	M	2.50	17	1.92	-.46	1.46	1.68	+ .22
JM	M	1.77	16	1.65	-.46	1.19	2.22	+1.03
JM	M	2.00	17	1.70	-.46	1.24	1.95	+ .71
RM	M	3.50	20	2.64	-.46	2.18	1.57	- .61
SM	M	3.83	18	2.64	-.46	2.18	1.07	-1.11
JM	M	2.52	14	1.87	-.46	1.41	1.95	+ .54
RM	M	3.05	20	2.41	-.46	1.95	1.57	- .38
KM	M	1.35	17	1.37	-.46	.91	1.07	+ .18
VN	F	3.70	18	2.86	-.52	2.34	1.95	- .39
JN	M	2.40	17	1.92	-.46	1.46	1.52	+ .06
MN	M	1.00	14	1.21	-.46	.75	1.30	+ .55
DN	M	2.00	20	1.98	-.46	1.52	1.69	+ .17
JN	M	1.57	15	1.48	-.46	1.02	1.02	+ .00
MN	M	1.79	15	1.59	-.46	1.13	1.46	+ .33
MN	M	2.50	20	2.20	-.46	1.74	1.63	- .11
DO	M	3.50	20	2.64	-.46	2.18	1.29	- .89
WO	M	2.00	20	1.98	-.46	1.52	1.08	- .44
RP	F	2.90	20	2.62	-.52	2.10	1.35	- .75
MP	M	1.95	20	1.98	-.46	1.52	1.29	- .43

TABLE 1 - CONTINUED

STUDENT	SEX	H.S. GPA	ACT COMP.	DER. SCORE	ADD CONST.	PRED. GPA	ACH. GPA	DER.
LP	M	3.04	20	2.41	-.46	1.95	1.85	- .10
RP	M	2.21	20	2.09	-.46	1.63	1.41	- .22
GP	M	2.25	20	2.09	-.46	1.63	1.85	+ .22
CR	M	3.79	20	2.75	-.46	1.29	1.73	+ .44
HR	M	2.01	16	1.76	-.46	1.30	1.19	- .11
FR	F	3.00	20	2.62	-.52	2.10	1.24	- .86
LT	M	2.27	16	1.87	-.46	1.41	2.18	+ .77
JT	M	2.19	16	1.87	-.46	1.41	1.74	+ .33
JT	M	2.38	20	2.09	-.46	1.63	1.91	+ .28
WV	M	2.50	20	2.20	-.46	1.74	1.75	+ .01
CW	F	3.14	13	2.20	-.52	1.68	1.13	- .45
KW	F	4.00	20	3.10	-.52	2.58	1.74	- .54
SW	M	1.84	20	1.87	-.46	1.41	1.41	+ .00
KY	F	3.20	20	2.74	-.52	2.22	2.07	- .15
WY	M	3.50	20	2.64	-.46	2.18	2.50	+ .32
LS	M	1.65	20	1.87	-.46	1.41	2.15	+ .73
ES	M	1.74	20	1.87	-.46	1.41	1.48	+ .07
CV	M	3.35	20	2.53	-.46	2.07	1.92	- .15
TT	M	2.00	19	1.92	-.46	1.46	2.00	+ .54

TOTALS		ACT COMP		PRED. GPA	ACH. GPA
N = 89	$\bar{X}$	17.88	$\bar{X}$	1.60	1.95
	S.D.	2.05	S.D.	3.38	4.89
	S^2	4.21	S^2	1.14	2.39

TABLE 2

FALL THRESHOLD STUDENTS

RESEARCH DATA

STUDENT	SEX	H.S. GPA	ACT COMP.	DER. SCORE	ADD CONST.	PRED. GPA	ACH. GPA	DIF.
LA	F	1.55	19	1.85	-.52	2.37	.55	-1.82
MB	M	2.80	12	1.87	-.46	2.33	2.50	+ .17
AB	M	2.45	10	1.65	-.46	2.11	3.57	+1.46
RB	F	3.00	17	2.44	-.52	2.96	3.75	+ .79
VC	M	1.71	19	1.81	-.46	2.27	1.71	- .56
KC	F	2.00	19	2.09	-.52	2.61	.93	- .68
AC	M	3.50	20	2.64	-.46	2.10	1.60	- .50
JD	M	3.12	20	1.92	-.46	2.38	2.25	- .13
EF	M	2.35	20	1.60	-.46	2.06	1.46	- .60
SG	M	2.05	12	1.54	-.46	2.00	2.09	+ .09
CG	M	1.50	12	1.27	-.46	1.73	1.25	- .48
AG	M	2.75	12	1.87	-.46	2.33	1.89	- .44
LH	F	2.16	12	1.79	-.52	2.31	2.25	+ .06
NH	F	2.00	4	1.31	-.52	1.83	.00	-1.83
MH	M	2.88	4	1.92	-.46	2.38	1.75	- .63
CH	F	2.88	12	2.14	-.52	2.66	2.50	- .16
MH	F	2.50	16	2.15	-.52	2.67	2.00	- .67
RH	F	2.00	17	1.97	-.52	2.49	3.00	+ .51
MH	F	2.50	10	1.79	-.52	2.31	1.67	- .64
TH	M	3.11	17	2.15	-.46	2.61	3.00	+ .39
DH	M	2.00	18	1.87	-.46	2.33	2.75	+ .42
MH	F	2.80	12	2.03	-.52	2.55	1.15	-1.40
RS	M	3.00	20	2.41	-.46	2.87	3.70	+ .83
TJ	M	2.14	7	1.38	-.46	2.84	1.90	- .94
KJ	F	2.43	17	2.21	-.52	2.73	1.62	-1.11
LK	M	2.51	13	1.82	-.46	2.28	3.25	+ .97
IK	M	3.14	16	2.31	-.46	2.77	2.92	+ .15
NK	M	2.00	20	1.98	-.46	2.44	1.67	- .77
RL	M	2.00	19	1.92	-.46	2.38	1.77	- .61
RM	M	3.00	12	1.98	-.46	2.44	3.08	+ .64
DM	F	2.00	20	2.15	-.52	2.67	1.75	- .92
KM	M	2.00	20	1.98	-.46	2.44	.00	-2.44
BM	F	3.00	12	2.14	-.52	2.66	2.50	- .16
JR	M	3.00	9	1.81	-.46	2.27	2.80	+ .53
BR	F	1.20	12	1.31	-.52	1.83	.00	-1.83

TABLE 2 - CONTINUED

STUDENT	SEX	H.S. GPA	ACT COMP.	DER. SCORE	ADD CONST.	PRED. GPA	ACH. GPA	DIF.
RR	F	2.40	13	1.97	-.52	2.49	.00	-2.49
CS	F	2.20	12	1.79	-.52	2.31	1.00	-1.31
GS	F	3.36	20	2.86	-.52	3.38	1.53	-1.85
JS	F	2.65	14	2.15	-.52	2.67	2.75	+ .08
JS	M	2.50	15	1.93	-.46	2.39	1.70	- .69
MS	F	3.40	15	2.32	-.52	2.82	3.50	+ .68

TOTALS		ACT COMP		PRED. GPA	ACH. GPA
N = 42	$\bar{X}$	14.14	$\bar{X}$	2.37	1.96
	S.D.	17.26	S.D.	2.35	1.01
	S^2	2.95	S^2	5.52	1.02

TABLE 3

RACIAL DISTRIBUTION FALL VETERAN GROUP

SEX	CAUCASIAN	BLACK	NATIVE AMERICAN	CHICANO
Male	66	2	4	1
Female	15	1	0	0
Total	81	3	4	1

Male (N = 73) Female (N = 16) Total N = 89

TABLE 4

RACIAL DISTRIBUTION THRESHOLD GROUP

SEX	CAUCASIAN	BLACK	NATIVE AMERICAN	CHICANO
Male	5	7	6	0
Female	6	12	6	0
Total	11	19	12	0

Male (N = 18) Female (N = 24) Total N = 42

TABLE 5

FALL VETERAN GROUP MEAN

MEAN ACT COMPOSITE	MEAN PREDICTED GPA	MEAN ACHIEVED GPA
$\bar{X}$ 17.88	$\bar{X}$ 1.60	$\bar{X}$ 1.95

Group means for the ACT Composite, the Predicted GPA and the Achieved GPA for the fall group are recorded in Table 5. Similar data on the Threshold group is recorded in Table 6.

TABLE 6

THRESHOLD GROUP MEAN

MEAN ACT COMPOSITE	MEAN PREDICTED GPA	MEAN ACHIEVED GPA
14.14	2.37	1.96

Testing the Hypotheses

H_{01} There will be no statistically significant difference in the number of students who achieve above their predicted GPA and those who achieve below their predicted GPA.

The data used to test this hypothesis are found in Table 7 below.

TABLE 7

VETERAN STUDENTS WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

TOTAL	NUMBER ACHIEVING ABOVE PREDICTED GPA	NUMBER ACHIEVING BELOW PREDICTED GPA
89	65	24

$(X^2) = 9.56 \quad P < .01 \quad df = 1$

Application of the Chi Square formula indicates differences to be statistically significant at the .01 level of probability among those who achieved above their predicted GPA (N = 65) and among those who achieved a GPA below what was predicted for them (N = 16). H_{01} is rejected.

H_{02} There will be no statistically significant difference in the number of female veteran students who achieve above their predicted GPA and male veteran students who achieve above their predicted GPA.

The data used to test this hypothesis are presented in Table 8 below.

TABLE 8

VETERAN MALES AND FEMALES WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

SEX	NUMBER WHO ACHIEVED ABOVE	NUMBER WHO ACHIEVED BELOW
MALES N=73	59	14
FEMALES N=16	6	10
TOTAL N=89	65	24

$(X^2) = 12.506$ df = 1 $P > .01$

Application of the Chi Square formula indicates that the number of females who achieved above predicted GPA when compared to males who achieved above predicted GPA was statistically significant. H_{02} is rejected.

H_{03} There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Native American veteran students who achieve above their predicted GPA.

The data used to test this hypothsis are found in Table 9 below.

TABLE 9

VETERAN BLACKS AND NATIVE AMERICAN WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

GROUP	NUMBER WHO ACHIEVED ABOVE	NUMBER WHO ACHIEVED BELOW
BLACKS N = 3	2	1
NATIVE AMERICANS N = 4	4	0

$P = 0.43$ $P > .01$

Application of Fisher's exact formula indicates that there is no significant difference in the number of Black veteran students who achieve above their predicted GPA and Native American veteran students who achieve above their predicted GPA. H_{03} is accepted.

H_{04} There will be no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

The data used to test this hypothesis are found in Table 10 below.

TABLE 10

VETERAN BLACKS AND CHICANOS WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

GROUP	NUMBER WHO ACHIEVED ABOVE	NUMBER WHO ACHIEVED BELOW
BLACKS	2	1
CHICANOS	1	0

$P = .075$ $P > .001$

Application of Fisher's exact formula indicates that there is no statistically significant difference in the number of Black veteran students who achieve above their predicted GPA and the number of Chicano veteran students who achieve above their predicted GPA. H_{04} is accepted.

H_{05} There will be no statistically significant difference in the number of Native American veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA.

The data used to test this hypothesis are found in Table 11 below.

TABLE 11

VETERAN NATIVE AMERICANS AND CHICANOS

WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

GROUP	NUMBER WHO ACHIEVED ABOVE	NUMBER WHO ACHIEVED BELOW
NATIVE AMERICANS N = 4	4	0
CHICANOS N = 1	1	0

P = 1.00

Application of the Fisher's exact formula indicates there is no statistically significant difference in the number of Native American veteran students who achieve above their predicted GPA and Chicano veteran students who achieve above their predicted GPA. H_{05} is accepted.

H_{06} There is no statistically significant difference in the number of fall veteran students who achieve above their predicted GPA and the number of fall Threshold students who achieve above their predicted GPA.

The data used to test this hypothesis are found in Table 12 below.

TABLE 12

VETERAN FALL AND THRESHOLD STUDENTS

WHO ACHIEVED ABOVE OR BELOW PREDICTED GPA

GROUP	NUMBER WHO ACHIEVED ABOVE	NUMBER WHO ACHIEVED BELOW
FALL VETERANS N = 89	65	24
FALL THRESHOLD STUDENTS N = 42	15	27

$(X^2) = 16.716$ df = 1 $P > .01$

Application of the Chi Square formula indicates these differences to be statistically significant when comparing veteran students in the fall program with Threshold students in the fall program who achieved above predicted GPA. H_{06} is rejected.

H_{07} There will be no statistically significant difference in the percentage of veteran students who achieve below 1.4 GPA and the percentage of students in the freshman class with ACT composite scores of 16 or below who achieve below 1.4 GPA.

The data used to test this hypothesis are found in Table 13 below.

TABLE 13

PERCENTAGE OF VETERAN AND FRESHMAN CLASS STUDENTS WHO ACHIEVED BELOW 1.4 GPA

GROUP	TOTAL WITH ACT COMP. OF 16 OR BELOW	NUMBER WHO ACHIEVED BELOW 1.4	PERCENTAGE
VETERANS N = 89	30	13	43%
FRESHMEN N = 5,017	142	218	7%

$(X^2) = 9.34$

Application of the Chi Square formula indicates there is a statistically significant difference in the percentage of veteran students who achieve below 1.4 GPA and the percentage of students in the freshman class, with ACT composite scores of 16 or below, who achieve below 1.4 GPA. H_{07} is rejected.

H_{08} There will be no statistically significant difference in the percentage of dropouts of veteran students and the percentage of dropouts in the entire freshman class at the end of the fall semester.

The data used to test this hypothesis are found in Table 14 below.

TABLE 14

PERCENTAGE OF VETERAN AND FRESHMAN CLASS DROPOUTS

GROUP	TOTAL	TOTAL DROPOUTS	PERCENTAGE OF DROPOUTS
VETERANS	89	11	12%
FRESHMEN	5,017	912	18%

$(X^2) = 5.47$ df = 1 P = $>$ .01

Application of the Chi Square formula indicates the differences not to be statistically significant at the .01 level when comparing the percentage of university freshmen who dropped out of school at the end of the fall semester and the percentage of fall veterans who dropped out. H_{08} is accepted.

H_{09} There will be no statistically significant difference in the percentage of veteran females who drop out at the end of the fall semester, and the percentage of freshmen females whose ACT composite is 16 or below who drop out at the end of the fall semester.

The data used to test this hypothesis are found in Table 15 below.

TABLE 15

PERCENTAGE OF VETERAN AND FRESHMAN CLASS FEMALE DROPOUTS

GROUP	TOTAL	TOTAL DROPOUTS	PERCENTAGE
VETERANS	16	6	38%
FRESHMEN	2,259	437	19%

$(X^2) = 19.60$ df = 1 P = $>$ .01

Application of the Chi Square formula indicates the differences to be statistically significant at the .01 level when the percentage of female veteran students who dropped out at the end of the fall semester is compared to the percentage of female freshman students with ACT composite scores of 16 or below who dropped out at the end of the fall semester. H_{09} is rejected.

H_{010} There will be no statistically significant different in the percentage of veteran males who drop out at the end of the fall semester and the percentage of freshman males, not in the veterans' program, whose ACT composite is 16 or below who drop out at the end of the fall semester.

The data used to test this hypothesis are found in Table 16 below.

TABLE 16

PERCENTAGE OF VETERAN AND FRESHMAN CLASS MALE DROPOUTS

GROUP	TOTAL	TOTAL DROPOUTS	PERCENTAGE
VETERANS	73	5	7%
FRESHMEN	2,758	475	17%

$(X^2) = 4.22$ df = 1 P = > .01

Application of the Chi Square formula indicates the differences to be statistically significant at the .01 level when comparing the percentage of veteran males who dropped out at the end of the fall semester with the percentage of freshman males with ACT composite scores of 16 or below who dropped out at the end of the fall semester. H_{010} is rejected.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study is to attempt to determine if there is a significant positive amount of achievement recorded by individual veteran students who are entering the University of Oklahoma for the first time. These students have no previous college time. Answers to the following questions are sought:

1. Do veteran students achieve above their predicted grade point average without having prior college time?

2. Are there significant differences in achievement among minority groups such as Blacks, Native Americans, and Chicanos who participate in this program?

In light of the influx of Viet Nam veterans to the campus one purpose of the study is to provide a

pilot study from which new investigators could do further research.

The review of research and related literature provdes information important for future student personnel workers, such as studies involving admissions, academic achievement, and retention, and the need for support services and referral to these support services.

The population consists of students who are first time entering students at the University of Oklahoma for the fall semester of 1973. The first group consists of a total of 89 veteran students and the comparison group a total of 42 Threshold students, and freshman students with 16 or below ACT composite scores. Each group is composed of Blacks, Native Americans, Chicanos, and Caucasians.

A total of ten (10) null hypotheses are derived from the problem of the study. Statistical treatment of the data is by use of the Chi Square, Yates correction method and Fisher's exact method which enabled the rejection of hypotheses one, two, six, seven and nine, and acceptance of hypotheses

three, four, five, eight, and ten.

Instruments used in this study are the American College Test (ACT), the high school average chart, the grade prediction chart for men, the grade prediction chart for women, and the ACT Composite Means and Regression Constants Chart for 985 Four Year Colleges.

Findings

Analysis of the data produces the following:

1. There is a significant number of veteran students who achieved above their predicted grade point average.

2. A significant number of male as compared to female veteran students achieved above the level that had been predicted for them.

3. From the small sample available, there is no statistically significant difference in the number of Black veterans who achieved above the predicted GPA when compared to Native American veterans who achieved above the predicted GPA.

4. There is no statistically significant difference in the number of Black veterans who achieved above the predicted GPA when compared to Chicano veterans who achieved above the predicted GPA.

5. There is no statistically significant difference in the number of Native American veterans who achieved above their predicted GPA and the number of Chicano veterans who achieved above their predicted GPA.

6. The number of fall veteran students who achieved above the predicted GPA was higher than the number of fall Threshold students who achieved above the predicted GPA.

7. The percentage of veteran students who achieve below 1.4 GPA is less than the percentage of students in the freshman class, with ACT composite scores of 16 or below, who achieve below 1.4 GPA.

8. Differences are not statistically significant at the .01 level when comparing the percentage of university freshmen who dropped school at the end of the fall semester and the percentage of fall veterans who dropped.

9. There were more veteran females who dropped out at the end of the first semester than freshmen females with ACT composite scores of 16 or below who dropped out at the end of the fall semester.

10. There were fewer veteran males who dropped out at the end of the fall semester than freshman males with ACT scores of 16 or below who dropped out at the end of the fall semester.

Recommendations

1. Regular follow-up studies should be made on the veteran program, with special attention to the Viet Nam veterans.

2. Similar studies should be made on other campuses, which have special service projects for selected student groups.

3. A study should be made to determine which supportive services were utilized by the individual member veterans.

4. Studies should be made comparing veterans with non-veterans on the basis of race, age, financial status, and similar environmental background.

5. Further studies should be made of maturation or age factor and what effect it has on choice of major field and eventual career choices, and persistence in college.

6. Studies should be made comparing veteran women with non-veteran women on the basis of race, age, financial status, education, and similar environmental background and some consideration should be given to special staffing patterns.

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APPENDIX A

HIGH SCHOOL AVERAGE CHART

High School Grades	HSA
AAAA	4.00
AAAB	3.72
AAAC; AABB	3.50
AAAD; AABC; ABBB	3.25
AAAF; AACC; AABD; ABBC; BBBB	3.00
AABF; AACD; ABBD; ABCC; BBBC	2.75
AACF; AADD; ABBF; ABCD; ACCC; BBBD; BBCC	2.50
AADF; ABCF; ABDD; ACCD; BBBF; BBCD; BCCC	2.25
AAFF; ABDF; ACCF; ACDD; BBCF; BBDD; BCCD; CCCC	2.00
ABFF: ACDF; ADDD; BBDF; BCCF; BCDD; CCCD	1.75
ACFF; ADDF; BBFF; BDDD; BCDF; CCCF; CCDD	1.50
ADFF; BCFF; BDDF; CCDF; CDDD	1.25
AFFF; BDFF; CCFF; CDDF; DDDD	1.00
BFFF; CDFF; DDDF	0.75
CFFF; DDFF	0.50
DFFF	0.25
FFFF	0.00

Procedures: From the student's transcript, determine his most recent term grade, prior to his senior year, in English, mathematics, social studies and natural science. Then from the chart determine his HSA.

GRADE PREDICTION FOR WOMEN

High School Average (HSA)
A-2

ACT Composite Score	4.00	3.75	3.50	3.25	3.00	2.75	2.50	2.25	2.00	1.75	1.50	1.25	1.00	0.75	0.50
20	3.10	2.98	2.86	2.74	2.62	2.51	2.39	2.27	2.15	2.03	1.91	1.79	1.67	1.56	1.44
19	3.04	2.92	2.80	2.68	2.56	2.45	2.33	2.21	2.09	1.97	1.85	1.73	1.61	1.50	1.38
18	2.98	2.86	2.74	2.62	2.50	2.39	2.27	2.15	2.03	1.91	1.79	1.67	1.55	1.44	1.32
17	2.92	2.80	2.68	2.56	2.44	2.33	2.21	2.09	1.97	1.85	1.73	1.61	1.49	1.38	1.26
16	2.86	2.74	2.62	2.50	2.38	2.27	2.15	2.03	1.91	1.79	1.67	1.55	1.43	1.32	1.20
15	2.80	2.68	2.56	2.44	2.32	2.21	2.09	1.97	1.85	1.73	1.61	1.49	1.37	1.26	1.14
14	2.74	2.62	2.50	2.38	2.26	2.15	2.03	1.91	1.79	1.67	1.55	1.43	1.31	1.20	1.08
13	2.70	2.56	2.44	2.32	2.20	2.09	1.97	1.85	1.73	1.61	1.49	1.37	1.25	1.14	1.02
12	2.62	2.50	2.38	2.26	2.14	2.03	1.91	1.79	1.67	1.55	1.43	1.31	1.19	1.08	0.96
11	2.56	2.44	2.32	2.20	2.08	1.97	1.85	1.73	1.61	1.49	1.37	1.25	1.13	1.02	0.90
10	2.50	2.38	2.26	2.14	2.02	1.91	1.79	1.67	1.55	1.43	1.31	1.19	1.07	0.96	0.84
9	2.44	2.32	2.20	2.08	1.96	1.85	1.73	1.61	1.49	1.37	1.25	1.13	1.01	0.90	0.78
8	2.38	2.26	2.14	2.02	1.90	1.79	1.67	1.55	1.43	1.31	1.19	1.07	0.96	0.84	0.72
7	2.32	2.20	2.08	1.96	1.84	1.73	1.61	1.49	1.37	1.25	1.13	1.01	0.90	0.78	0.66
6	2.26	2.14	2.02	1.90	1.78	1.67	1.55	1.43	1.31	1.19	1.07	0.95	0.84	0.72	0.60

Procedure. Find the student's HSA in one of the columns across the top; then find his ACT Composite in one of the rows down the side. The "Derived score" for the student is given in the cell where this row and column intersect. Add the college constant (-.52) to the "derived score" to obtain the predicted Grade Point Average (GPA) for women at the University of Oklahoma.

GRADE PREDICTION FOR MEN

High School Average (HSA)
A-1

ACT COMPOSITE SCORE	4.00	3.75	3.50	3.25	3.00	2.75	2.50	2.25	2.00	1.75	1.50	1.25	1.00	0.75	0.50
20	2.86	2.75	2.64	2.53	2.41	2.31	2.20	2.09	1.98	1.87	1.75	1.64	1.53	1.42	1.31
19	2.81	2.70	2.59	2.48	2.36	2.25	2.14	2.03	1.92	1.81	1.70	1.59	1.48	1.37	1.26
18	2.76	2.64	2.53	2.42	2.30	2.20	2.09	1.98	1.87	1.76	1.65	1.53	1.42	1.31	1.20
17	2.70	2.59	2.48	2.25	2.15	2.03	1.92	1.81	1.70	1.59	1.48	1.37	1.26	1.15	1.04
16	2.65	2.54	2.42	2.31	2.19	2.09	1.98	1.87	1.76	1.65	1.54	1.43	1.31	1.20	1.09
15	2.59	2.48	2.37	2.26	2.14	2.04	1.93	1.82	1.70	1.59	1.48	1.37	1.26	1.15	1.04
14	2.54	2.43	2.32	2.20	2.08	1.98	1.87	1.76	1.65	1.54	1.43	1.32	1.21	1.09	0.98
13	2.48	2.37	2.26	2.15	2.03	1.93	1.82	1.71	1.60	1.48	1.37	1.26	1.15	1.04	0.93
12	2.43	2.32	2.21	2.10	1.98	1.87	1.76	1.65	1.54	1.43	1.32	1.21	1.10	0.99	0.87
11	2.37	2.26	2.15	2.04	1.92	1.82	1.71	1.60	1.49	1.38	1.27	1.15	1.04	0.93	0.82
10	2.32	2.21	2.10	1.99	1.87	1.77	1.65	1.54	1.43	1.32	1.21	1.10	0.99	0.88	0.77
9	2.27	2.16	2.04	1.93	1.81	1.71	1.60	1.49	1.38	1.27	1.16	1.04	0.93	0.82	0.71
8	2.21	2.10	1.99	1.88	1.76	1.66	1.55	1.44	1.32	1.21	1.10	0.99	0.88	0.77	0.66
7	2.16	2.05	1.93	1.82	2.70	1.60	1.49	1.38	1.27	1.16	1.05	0.94	0.83	0.71	0.60
6	2.10	1.99	1.88	1.77	1.65	1.55	1.44	1.33	1.21	1.10	0.99	0.88	0.77	0.66	0.55

Procedure. Find the student's HSA in one of the columns across the top; then find his ACT Composite in one of the rows down the side. The "derived score" for the student is given in the cell where this row and column intersect. Add the college constant (-.46) to the "derived score" to obtain the predicted Grade Point Average (GPA) for men at the University of Oklahoma.

ACT Composite Means and Regression Constants

For 985 Four-Year Colleges*

Oklahoma Colleges Section

College Name	Predicted Measures ACT Comp. Mean** Interval	Constant Men	Constant Women
Bethany Nazarene	18.1-21.1	- .15	- .19
Central State Univ.	16.6-19.7	- .22	- .24
East Central State	17.1-20.2	- .13	- .16
Langston Univ.	14.4-17.5	- .03	- .05
Northeastern State	16.7-19.8	- .15	- .17
Northwestern State	18.1-21.1	- .12	- .15
Okla. Baptist Univ.	19.3-22.4	- .24	- .28
Okla. City Univ.	21.1-24.2	- .44	- .49
Okla. Col. Lib. Arts	14.3-17.4	- .20	- .22
Okla. State Univ.	20.2-23.3	- .43	- .48
Panhandle State	16.3-19.4	- .13	- .15
Phillips Univ.	19.5-22.6	- .20	- .24
Southeastern State	16.4-19.4	- .06	- .08
Southwestern State	18.2-21.3	- .27	- .30
UNIV. OF OKLAHOMA	21.0-24.1	- .46	- .52
Univ. of Tulsa	19.9-23.0	- .35	- .40

*ACT Research Report No. 27. 1968.

** Predicted mean ± 1 Standard Error of Estimate