A DESCRIPTIVE STUDY OF ACADEMICALLY UNSUCCESSFUL ARTS AND SCIENCES FRESHMEN

By

JAMES FRANKLIN CALDWELL II

Bachelor of Arts
University of Tulsa
Tulsa, Oklahoma
1962

Bachelor of Divinity
Duke University
Durham, North Carolina
1966

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1971

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
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Thesis Approved:

Thesis Adviser

Bill F Elsom

Kenneth P. Sanford

Norman N Durham

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

The fact that first year college students fail out of colleges and universities when it appears that many of those failing should be successful presents a continuing problem for college faculties and administrators. Many theories and rationales have been offered in an attempt to explain the phenomenon, but the fact remains many apparently capable students fail during their first year in higher education. Though many of these students eventually do succeed academically in higher education it is at a later date, and, sometimes at a lower level, than some factors, such as, high school grade point average and ACT scores, would indicate.

While apparently capable students are sometimes failing in their first year of collegiate studies, the situation of academic success and failure is complicated by the academic success of students who appear to be destined for academic failure, according to traditional indicators. These apparent deviations from the expected norms keep alive the issue of factors related to academic success and failure among first year college students.

Need for the Study

The continuing problem of academic failure in our colleges and universities indicates that more needs to be known about students in

the area of academic success and failure. The College of Arts and Sciences at Oklahoma State University has in recent years shown particular concern for those who fail out and then return to the University to try again to achieve academic success. A variety of approaches have been used in attempting to assist these students who have failed out to achieve this goal of academic success upon their return to the University.

The phenomenon of academic failure continues to occur even to students who insist that they do want a "college education." And, this phenomenon of academic failure often happens more than once to students who fail out at the end of their first year in college.

This problem of failure is sometimes the case in instances where previous indicators, such as high school grades and entrance test scores indicate that the student should succeed in college, academically. Also, the opposite is sometimes true. That is, students who appear to have low chances of academic success are successful. However, the concern here is primarily with students who have been unsuccessful, academically.

Conversations with student personnel workers in the College of Arts and Sciences as well as with faculty members, indicate that in general these people believe that there is intrinsic value in a college education. There seems to be a pervading attitude that students should be assisted wherever possible in being successful in their program of higher education. The attitude of the College of Arts and Sciences, generally speaking, is that there should be an opportunity for the individual student to earn a college degree. If the student decides for some reason that he does not want that degree and drops out of the

University, that is one thing. But it is quite another thing for the University to tell a person that he has failed and cannot continue to pursue his degree and education.

Therefore, the need for this study is borne out in that apparently capable students continue to fail out of college, especially in their first year; and, those who fail in the first year often fail again. Second, students appearing to have only marginal chances for academic success are sometimes successful. Third, it appears that factors other than academic preparedness and native intelligence are involved in academic success and failure. Fourth, though many studies have been done in the area of academic success and failure, it is felt that this study can point out some useful directions in exploring this area more fully. Fifth, this study is intended to enable the College of Arts and Sciences at Oklahoma State University to work more satisfactorily with students who have failed out of the University and return to the University to try again to achieve academic success.

Purpose of the Study

The purpose of this study is to explore some factors relating to academic success and failure of Arts and Sciences freshmen at Oklahoma State University. The intent is to determine some of the relationships if any, which exist between the successful and the unsuccessful freshmen. The means by which these relationships or lack of relationships will be explored will be presented in Chapter III of this study. Let it suffice at this point to say that various dimensions of the students will be investigated, such as, academic preparedness indicators, motivational indicators, and life-style indicators.

Statement of the Problem

The problem under investigation in this study could be stated as follows: What selected life-style relationships exist between unsuccessful and successful students at the completion of their first year of college study? More specifically, this study will attempt to describe and examine selected factors related to academic preparedness and achievement, study habits and attitudes, motivation, and interpersonal relationships.

Definition of Terms

The following operational definitions for terms of particular importance to this study are presented to facilitate the reader's understanding of the study. These definitions will be applicable throughout the study.

Fail out - To fail out means a student has been suspended from Oklahoma State University for "academic deficiency," which, for this study, means a student has earned

> . . . less than a 2.00 (grade point) average over his last semester attempted and his cumulative average for his last two semesters is less than 1.4 or his cumulative average for his last two semesters is less than a 2.00 and his cumulative average for all hours attempted falls below the following:
>
> | Total hours attempted | Minimum grade point average required |
> |---|---|
> | less than 36 | 1.4 |
> | 36 through 54 | 1.5 |
> | 55 through 73 | 1.6 |
> | 74 through 90 | 1.7 |
> | 91 through 108 | 1.8 |
> | over 108 | 2.0 |
>
> (OSU Catalog, 1972, p. 39)

Reinstatement - Reinstatement is the process through which a student placed on academic suspension (that is, a fail out) must go in order to gain readmission to the University as a student. An "application for readmission will be considered by the dean of the college in which the student wishes to enroll on the merits of the individual case" (Catalog, 1972, p. 39). A student who has been placed on academic suspension and has gained readmission to the University as a student is said to be "reinstated."

Successful student - A successful student, for the purposes of this study, is any student enrolled in the College of Arts and Sciences at Oklahoma State University who has completed one year at the University as a student, who has been a full time student each semester he has enrolled in the University, who has failed no courses at the University, and who has earned a cumulative grade point average of 2.0 or better.

Unsuccessful student - An unsuccessful student is any student who has completed one year at Oklahoma State University, who was failed out of the College of Arts and Sciences at Oklahoma State University at the end of the 1974 spring semester, and who was reinstated for the 1974 fall semester (see the operational definitions for fail out and reinstatement above).

2.0 grade point average - A 2.0 grade point average is a "C" average at Oklahoma State University, which uses the conventional four-point grading scale of A=4 points per credit hour, B=3 points per credit hour, C=2 points per credit hour, D=1 point per credit hour, and F=0 points per credit hour in determining grade point averages.

Native student - A native student is a student who has attended only Oklahoma State University for his post-high school education.

Purpose-in-life - Purpose-in-life is a concept defined as an indicator of general motivation and refers to the sense of meaning and purpose-in-life which an individual experiences.

Purpose-In-Life Test (PIL) - The PIL is a test developed by James C. Crumbaugh and Leonard T. Maholick designed to measure a person's sense of meaning and purpose in life.

American College Testing Program Examination (ACT) - The ACT is a test designed to measure the abilities a student has to use in his college academic work. The ACT provides a Composite Score which is intended to reflect a student's total educational development in English usage, mathematics usage, social studies reading, and natural science reading.

Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) - The FIRO-B is a test designed by William Schutz to measure how a person interacts with other people. The test yields a total of six scores by providing an expressed and wanted score in each of three categories--inclusion, control, and affection.

Survey of Study Habits and Attitudes (SSHA) - The SSHA is a test developed by William F. Brown and Wayne H. Holtzman designed to measure a student's study habits and attitudes. The SSHA yields a total Study Orientation score by combining the Study Habits score (constituted of a Delay Avoidance score and a Work Methods score) and the Study Attitudes score (constituted of a Teacher Approval score and an Education Acceptance score).

Effective Study Test (EST)- The EST is a test developed by William F. Brown designed to measure a student's knowledge of effective study procedures. The EST yields a Total Study Effectiveness Score by combining the scores of the five subscales, the: Reality Orientation Scale, Study Organization Scale, Writing Behavior Scale, Reading Behavior Scale, and Examination Behavior Scale.

Hypotheses

The first hypothesis below will be examined for each of the following variables as measured by the ACT: English, Mathematics, Social Studies, Natural Sciences, and the Composite score. The second hypothesis will be examined for each of the variables in the SSHA: Delay Avoidance, Work Methods, Study Habits, Teacher Approval, Education Acceptance, Study Attitudes, and Study Orientation. The third hypothesis will be examined for each of the variables on the EST: Reality Organization, Study Organization, Writing Behavior, Reading Behavior, Examination Behavior, and Total Study Effectiveness. The fourth hypothesis will be examined on the PIL total score. Finally, the fifth hypothesis will be examined for each of the following variables as measured by the FIRO-B: Expressed Inclusion, Wanted Inclusion, Expressed Control, Wanted Control, Expressed Affection, and Wanted Affection.

The following null hypotheses will be examined for significance at the .05 level of probability. They are:

1. There is no relationship between unsuccessful and successful native freshman students on their respective ACT scores.
2. There is no relationship between unsuccessful and successful native freshman students on their respective SSHA scores.

3. There is no relationship between unsuccessful and successful native freshman students on their respective EST scores.
4. There is no relationship between unsuccessful and successful native freshman students on their respective PIL scores.
5. There is no relationship between unsuccessful and successful native freshman students on their respective FIRO-B scores.

Limitations of the Study

The data collected from this research are one approach to comparing some characteristics of academically unsuccessful and successful freshman students. The setting and limited size of the unsuccessful and successful students cautions against generalizing the findings to other persons or settings.

This study is limited to full-time Arts and Sciences freshman students. Other freshman students are unsuccessful, but due to carrying less than a "full" academic load of 12 semester hours and the University's increased liberalization and leniency in withdrawal policies from both classes and the University they were spared being suspended. Consequently, they were excluded from the study.

The voluntary characteristics of the group of successful students and the compulsory conditions under which the group of unsuccessful students worked may be variables to be considered. As stated above, the unsuccessful students had to participate in the study, that is, complete the instruments used in this study in order to meet the conditions of reinstatement. By contrast, the successful students were given the choice to participate or not participate through a letter inviting them to be a part of the study.

The study is not intended to be an exhaustive examination of characteristics of unsuccessful and successful students. Rather, the study is designed to examine selected characteristics of unsuccessful and successful students.

This study should be seen as an exploratory study which may lead to more research. Conclusions drawn from this study should not be seen as inferring causal relationships.

Organization of the Report

Chapter I includes an introduction to the problem, a need for the study, purpose of the study, a statement of the problem, a definition of selected terms, hypotheses, limitations and this statement of the organization of the study. Chapter II contains a review of literature pertinent to this study. Chapter III includes a description of subjects in this study and their selection for the study, a description of the instruments used in the study, and the method of data collection and analysis. Chapter IV contains a presentation and analysis of the data of the study and a discussion of the findings of the study. Chapter V includes a summary of the study, conclusions, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

A substantial amount of research has been generated by the phenomenon of academic failure. However, college students continue to fail, academically. They are looked on in a variety of ways by others. "Their problems are loudly worried about, but ultimately swept under the academic carpet" (Pitcher and Blaushild, 1970, p. 3). Though the problem persists in that hundreds of thousands fail each year and numerous approaches and attempts have been made at resolving it, Pitcher and Blaushild state the apparent status of the situation rather succinctly: "No one seems to know what to do with this huge army of human beings" (Pitcher and Blaushild, 1970, p. 3).

Academic Potential for College

Many attempts have been made in assessing students' academic potential in collegiate studies. One of the more successful attempts at this kind of assessment is the ACT (American College Testing) Assessment Program. ACT materials are of importance to this study since they are a criterion for admission at Oklahoma State University. Some features which the ACT Assessment Program claims for itself are to:

- provide estimates of a student's academic and out-of-class abilities.

- provide interest inventory results to help students select college majors.
- provide students with information about their college choices.
- provide dependable and comparable information for precollege counseling in high schools and for on-campus educational guidance.
- help colleges place freshmen in appropriate class sections in introductory courses in English, mathematics, social studies and natural sciences.
- help colleges identify students who would profit from special programs such as honors, remedial, and independent study (Using ACT, 1973-74, p. 1).

The ACT Assessment program is intended to be a comprehensive assessment program to be used by students planning post-high school education (Using ACT, 1974-74).

Binning (Binning, 1968) highlights the error involved even in careful admissions practices when he points out that colleges with selective admissions policies base their selection of students primarily on high school grades and academic aptitude test scores. Binning vividly points out the error in this practice when he states that "more than 350,000 students flunk out of college each year" (Binning, 1968, p. 116).

After reviewing fifty-one papers concerning academic underachievement written since 1960, Kornrich (Kornrich, 1965) concludes that academic success is determined by a complex of factors both external and internal to the student. Pitcher and Blaushild mention several areas they see as important to academic success. These factors include the student's level of high school preparation as compared with the preparation of other college students, emotional disturbances that may have affected academic development and/or success, language skills, and values--for example, where he places academic achievement

in his hierarchy of values (Pitcher and Blaushild, 1970, pp. 94-102).

Some educators, such as Pitcher and Blaushild, and H. L. Heller, believe that students who fail can often be rehabilitated into academically successful students (Pitcher and Blaushild, 1970; Heller, 1968). Others, however, have concluded that remedial programs, as opposed to rehabilitative programs such as Pitcher's, do not really help the academically underprepared student (Losak, 1972).

Academic Achievement

The reasons for academic failure have been expounded by many. Some students of academic achievement and non-achievement believe that failure in college is not always a reflection on the individual's intellectual ability. It is concluded by some that poor achievement may be a choice made by the student, and, therefore, not necessarily related to his ability to achieve (Roth and Meyersburg, 1963). The reasons behind a student's choice for failure may have a variety of points of origin, but "The psychogenesis of the non-achievement syndrome," according to Roth and Meyersburg, may involve "a series of very subtle devaluations of the child, stemming from the parent-child relationship" (Roth and Meyersburg, 1963, p. 538).

Roth and Meyersburg offer these constructs for academic non-achievement:

1. The student's poor academic achievement does not arise from an incapacity to achieve. There are other factors preventing achievement.

2. Poor achievement is an expression of the student's choice.

3. The student's choice for poor achievement operates in the preparation he makes for achievement.

4. Poor achievement is a function of the preparation for achievement which a student makes.

5. Poor academic skills are related to poor achievement and are an outgrowth of previous choices for poor achievement.

6. The choice for poor achievement may be expressed as over-all limited achievement or as achievement in deviant channels.

7. The patterns of choice for poor achievement are enduring and do not undergo spontaneous change.

8. Achievement patterns, like other enduring behavior patterns, can be considered to be related to 'personality organizations' (Roth and Meyersburg, 1963, pp. 535-6).

Most reasons for academic failure are variations of themes quite familiar to professional educators. Some studies indicate that students can give quite dispassionate and accurate appraisals of themselves and their reasons for failure. And, for some students, "dismissal may be a relief from the obligation of doing something which they themselves did not want in the first place" (Miller, 1962, p. 209). It is also interesting to note that some applying for readmission after being academically suspended have indicated that their suspension was good for them (Miller, 1962). On the other hand other studies indicate that though some students may be able and willing to analyze themselves rather objectively, most students place the responsibility for their failure on factors related to the teacher (Lambert, 1969).

In a lecture on the Oklahoma State University campus in 1973 Robert Pitcher discussed five ways (which he stated that he arbitrarily selected to discuss) college students fail.

1. The motivational structure in which students function is at odds with the structure of the higher education system. Students are interested in things that pay off quickly. That is, they have short-range rather than long-range goals. One consequence of an affluent society is that people do not save to obtain something. They want a quick "pay-off."

2. Many students are still going through a dependence-independence battle with their parents. Their lack of performance is a means of striking out at their parents.

3. About twenty-five per cent of college students today suffer from inadequate development of basic language skills. This should be one of the first points of investigation when a student is failing. A student does not flunk out because of a particular subject, but it is impossible to succeed without being able to read, listen, speak, write.

4. Some students prefer to manipulate people rather than to produce. The more concerned one is about the future the more vulnerable he is to those who enjoy manipulating people. These students are "con artists" in the academic setting.

5. Some students have an inadequate concept of work. These students often do two things: (a) they overestimate the quality of their work; (b) they underestimate the difficulty of their courses (Pitcher, 1973a).

A complex factor related to students' academic success or lack of it is their personalities. Centi reports that lower ranking students show poorer adjustment than do higher ranking students (Centi, 1962). Stotland and Hilmer seem to concur in their conclusion

that students with low self-esteem can only assimilate information relating to themselves which is compatible and consistent with their self-concept (Stotland and Hilmer, 1962). Gilbreath (Gilbreath, 1967) concludes that the emotional patterns of academic underachievers include a strong need for dependent relationships, an inferior self-concept, an inability to overtly express feelings of anger, an ego strength weakness, and ambiguous or unrealistic purposes, goals, and values. Leventhal and Perlow conclude through their study that

> . . . high self-esteem subjects . . . are more readily influenced by optimistic, gratifying, potentially self-enhancing communications than by pessimistic, threatening ones. Low self-esteem subjects . . . showed the opposite effect (Leventhal and Perlow, 1962, p. 387).

In a study assessing three personality characteristics of successful and unsuccessful students (test anxiety, achievement orientation, and intellectual achievement responsibility), Weiner and Potepan found:

> Success is associated with high achievement orientation, low test-anxiety, self-attribution for success to both effort and ability, and a belief that failure was not caused by a lack of ability (Weiner and Potepan, 1970, p. 150).

In considering academic achievement and its relationship to personality William Glasser makes the poignant point that the philosophy in our educational system seems to be "that somehow or other we can teach children how to succeed by failing them" (Glasser, 1969, pp. 10-11). Glasser goes on to say: "The people who are succeeding in our world are able to become involved with other human beings in responsible relationships" (Glasser, 1969, p. 13). To reach this goal of successful and responsible interpersonal relationships Glasser is calling for educators to spend less time and effort evaluating others and to spend more time and effort evaluating themselves so that

students will be enabled to realistically evaluate themselves in relation to others and their environments (Glasser, 1969).

When faced with academic failure, students often try to maintain a favorable and congruent self-attitude. However, this may lead to some defensiveness as found by Boshier (Boshier, 1972).

Motivation for achievement has been the focus of some studies. Mehrabian reports that

> . . . high achievers have more positive feelings aroused by success than they have negative feelings aroused by failure; whereas, low achievers have more negative feelings aroused by failure than they have positive feelings aroused by success (Mehrabian, 1968, p. 494).

Mehrabian lists a series of characteristics which he sees as distinguishing high achievers from low achievers: (1) High achievers have been indulged by their parents in childhood less than low achievers have. (2) High achievers are more independent than low achievers in their interpersonal relationships and they are less susceptible to pressures to conform than are low achievers. (3) High achievers are able to delay gratification more than are low achievers. (4) High achievers prefer activities involving skill or competition, and therefore striving, to activities which involve chance or co-operation, while just the opposite is true for low achievers (Mehrabian, 1968). Mehrabian concludes that high achievers have a stronger motive to achieve than to avoid failure whereas low achievers have a stronger motive to avoid failure than to achieve (Mehrabian, 1968).

Kestenbaum and Weiner come to some conclusions similar to Mehrabian's. They report that achievement motivation is positively related to test performance whereas test anxiety is negatively related

to test performance (Kestenbaum and Weiner, 1970).

Brown (Brown, 1972), through various kinds of research and over a number of years, concluded that motivational orientation is a key factor in academic success. Though other factors figure into a student's potentiality for academic success, motivation is a key factor in the probability of a student's academic success. Caple follows this theme of the relationship between motivation and achievement in a study reporting a relationship between achievement motivation and grades. He concludes that motivation for achievement is a strong factor in a student's success or failure in college (Caple, 1969).

Academic failure is a complex matter and so is academic success. Many approaches have been suggested for assisting students who have failed. Richard Morton suggests some practical steps which can and, he feels, should be taken by instructors to assist their students to avoid failure and thereby achieve, rather than just standing by and doing nothing while students fail. Morton states that in many cases instructors share responsibility in a student's failure (Morton, 1972). Some of the practical steps Morton suggests to instructors in helping their students succeed in their classes are: (1) Take a couple of class sessions to explain the purpose of the course and how the material has been arranged and why. (2) Suggest a short-hand or abbreviation system which students may find useful and allow them to record more information faster. (3) Help a student who is struggling with a course to identify what he is failing to do right. (4) It is not necessary to have a quota of D or F grades to be assigned. There is no need to see a student sliding into failure and do nothing about it (Morton, 1972).

Algier reports on a program of academic rehabilitation at Eastern Kentucky University which theoretically presupposes that certain factors, such as, self-concept, the failure syndrome, peer pressures, and simple inertia are directly related to the intellectual aspects of academic achievement. This program contains some definite structure, such as, a conditional readmission based on: (1) a twelve-hour maximum class load, and (2) nine hours per week must be devoted to a program prescribed by the university's Academic Counseling and Learning Laboratory (Algier, 1972).

Generally, the literature surveyed for this study supported the idea that counseling, individual or group counseling, aided low achieving students toward improved academic achievement. However, there are exceptions. For example, Goodstein and Crites report that vocational-educational counseling as typically practiced does not enhance the academic achievement of low ability college students (Goodstein and Crites, 1961). On the other hand, Roth, Mauksch, and Peiser report that probationary students involved in therapeutic treatment do function more successfully, academically. They contend that poor academic performance is a choice by the student which enables him to maintain an immature and dependent relationship with his family and further enables him to avoid independence and taking responsibility for his own life (Roth, Mauksch, and Peiser, 1967). Still others, such as Dickenson and Truax, contend that counseling can be helpful to low-achieving students, but it is not so much what happens in the therapy as to how it happens in therapy. They report that underachieving students are facilitated in becoming achieving students when aided by therapists and counselors offering relatively

high levels of accurate empathy, warmth, and genuineness. They further conclude that mediocre counselors are not helpful and that poor counselors may even be harmful (Dickenson and Truax, 1966).

Failing students, as may be suspected, sometimes have difficulties in their interactions with people around them. In a study by Gibbs it was reported that failing students are often not very successful in their relationships with other people due to antisocial tendencies, that failing students perceive themselves and their families as failures more often than passing students did, and failing students have poor occupational relations (Gibbs, 1965). Shaw also accepts that there is a relationship between achievement and environment, but takes something of a different approach. He says that students can absorb much of the shock of the collegiate environment and adjust satisfactorily. However, this adjustment is made more easily when most of the environment is consistent with the student's expectations. The more inaccurate a student's expectations are of his college environment, the more likely he is to transfer within the university or move out of it altogether (Shaw, 1968).

Similarities and Differences Between Successful and Unsuccessful Students

William Hannah has done a study on academic "drop-outs" and "stay-ins." Though drop-outs and not necessarily failures, one cannot succeed as a student without staying-in. Hannah does report some interesting findings. He finds the following characteristics in drop-outs: (1) they think at a less simplistic level; (2) they exhibit a greater tolerance for ambiguity and experimentation; (3) they express

their impulses in overt actions; (4) they tend to be more hostile, aggressive and anxious; and (5) they make poorer personal impressions. Hannah attributes the following characteristics to persisting students: (1) they make higher scores on standardized tests; (2) they have less tolerance for diverse thinking; (3) they are more conforming and more willing to accept authority; (4) they are less likely to express hostility and aggression; and (5) they are more cautious and their anxiety levels are lower than drop-outs' (Hannah, 1971).

Weiner and Potepan conducted a study assessing three personality characteristics of successful and unsuccessful students (test anxiety, achievement orientation, and intellectual achievement responsibility). They concluded that success is related with high achievement orientation, low test anxiety, and a belief that failure is not caused by a lack of ability (Weiner and Potepan, 1970).

Two concepts frequently mentioned in the literature reviewed for this study--which have been mentioned in earlier portions of this chapter--and which differ in successful and unsuccessful students are those of self-concept and motivation. Many studies pointed out the importance of self-concept to academic success (e.g., Stotland and Hilmer, 1962; Boshier, 1972; Glasser, 1969; Leventhal and Perloe, 1962; Thelan and Harris, 1968). Also, many studies pointed out the importance of motivation to academic success. There were several in addition to some of those mentioned above (e.g., Mehrabian, 1968; Kestenbaum and Weiner, 1970; Caple, 1969).

Study skills are an important factor in academic achievement. Heller emphasizes the development of "intellectual honesty" on the part of underachieving students that they may more adequately and

realistically evaluate their own work. Therefore, he advocates constantly confronting these students with their own inadequacies to encourage them to deal with them (Heller, 1968). Others have also recognized the importance of the development of particular skills in relation to academic success in college-level studies. Heller reports on The Educational Development Center begun in 1964 by Dr. Fred E. Harris and Dr. Robert W. Pitcher. The Educational Development Center is intended to assist students who indicate an ability to succeed in college to develop skills they have not yet developed, and consequently, have been dismissed as academic underachievers. Actually, the Center offers these students an opportunity to help themselves. The Educational Development Center is a practical, task-oriented approach to the development of skills (Heller, 1968).

Many colleges have formulated programs to deal with student failure based on hypotheses rather than fact. The fact is that some adults still have not acquired the physiological skills--such as auditory, visual, and tactile systems, and interrelationships--they need to learn through normal means. This raises questions about whether failing students are lazy, unmotivated, lacking in ability, or suffering from a learning disability. It also causes one to wonder how these questions are resolved (McAllister, Cowgill, and Stephenson, 1972).

Some approaches combine guidance and counseling programs with study skills programs. Kaye recognizes that there is no concensus in the literature delineating the most satisfactory method for dealing with the problem of academic failure, especially in the freshman year (Kaye, 1972).

Other approaches dispute the efficacy of counseling on academic achievement. For example, Hill and Grienecks raise the possibility that the apparent support for counseling effectiveness may be accounted for by statistical regression. They point out that underachievers raise their grade point averages more than overachievers lower their grades. They conclude that grade point average is not reflecting the effectiveness of academic counseling, if it is supposed to be positively affecting grade point average (Hill and Grienecks, 1966).

Selected Literature Related to Instruments Utilized in This Study

Studies related to the prediction of academic performance have been numerous in recent years (Lavin, 1965). These studies have investigated the effects and relationships of both intellectual and non-intellectual variables and performance. Also, the relationship of the educational environment and academic achievement is another area deserving investigation (Lavin, 1965).

An increased concern for improved student academic performance has been witnessed in recent years (Howes, 1970; Holtzman, 1970). This increased concern may be seen as a consequence of many forces coming to bear on our educational system, such as the launching of Sputnik, student unrest of the 1960's, civil rights legislation, economic prosperity, a growing adolescent population, etc. (Howes, 1970; Holtzman, 1970).

To assist in gathering data for this study several instruments were selected to use. One of the instruments used in this study is the Survey of Study Habits and Attitudes (SSHA) developed by

Wayne H. Holtzman and William F. Brown. In it the study habits and attitudes of high school and college students were evaluated by Brown and Holtzman who reported validity coefficients consisting of correlations between SSHA total scores and grade point averages that ranged from .32 to .66 with an average of .49 (Holtzman and Brown, 1968). They examined the scores of 10,888 students in this study. Scholastic aptitude and grade correlations ranged from .19 to .83, with an average of .57.

The SSHA has been a primary instrument in studies investigating the relevance of study habits and attitudes and their relationship to academic achievement. Brown and Holtzman intended to investigate the relationship between study habits and attitudes, and achievement among high school students (Brown and Holtzman, 1954). They also intended to investigate these relationships during the transition to college. They concluded that study habits and attitudes are important in academic achievement and that these habits and attitudes appear to remain stable as students enter college.

Anderson and Kuntz in evaluating the SSHA's effectiveness in identifying successful and unsuccessful students concluded that the two groups did not differ significantly from each other, but that they were significantly different from the normal population (Anderson and Kuntz, 1959). Others, however, such as DeSena, have concluded that the SSHA does differentiate between successful and unsuccessful college students (DeSena, 1964). And Brown and Dubois reported a significant correlation between grade point averages and SSHA scores (Brown and Dubois, 1964). This finding is not always confirmed, though, as indicated in a study by Ahmann, Smith, and Glock. In a study designed to indicate the

usefulness of the SSHA to predict first-semester grade point averages they report finding non-significant correlations (Ahmann, Smith, and Glock, 1958).

Lum compared overachievers and underachievers using the SSHA. She equated three groups of female students on scholastic aptitude and other variables and concluded that overachievers differed significantly from groups of normal and underachiever students (Lum, 1960).

Reviewers (Shay, Higgins, Roark and Harrington) of the SSHA in Buros' Seventh Mental Measurements Yearbook (Buros, 1972) generally concur that the 1965 revision of the SSHA is an improvement over the original edition. However, they do raise questions as to the inventory's use as a predictor (Shay), its weaknesses as a self-report inventory (Roark and Harrington), and its limitations due to its susceptibility to faked scores (Roark and Harrington). The reviewers do see the SSHA as having usefulness in counseling (Shay, Higgins) and in research (Roark and Harrington). Shay is careful to point out in his review that the SSHA has particular usefulness to students who are frank in their responses to the instrument and who are motivated to improve.

Generally, these studies indicate that evidence points toward a positive relationship between study habits and attitudes and academic achievement. However, as indicated in the studies cited above, this indication is not always borne out with statistical significance.

A second instrument used in this study is the Purpose-in-Life Test (PIL) developed by James C. Crumbaugh and Leonard T. Maholick. Part A of the PIL is an attitude scale designed to measure the degree to which the individual experiences a sense of meaning and purpose in life (Crumbaugh and Maholick, 1969). Since Viktor Frankl has defined

the concept of "purpose-in-life" as a general indicator of motivation (Frankl, 1963), the PIL is of interest to this study because motivation is assumed to be a variable related to one's academic success (Crumbaugh and Maholick, 1969; Brown, 1972). Through experimental studies Crumbaugh and Maholick (Crumbaugh, 1968; Crumbaugh and Maholick, 1964) have concluded that the PIL is a valid and reliable measure of Frankl's concept of purpose-in-life" (Crumbaugh and Maholick, 1969). Crumbaugh and Maholick also suggest the PIL for use with students in vocational and educational counseling as well as with other persons and situations (Crumbaugh and Maholick, 1969).

A third instrument used in this study is the FIRO-B. In his review of the FIRO-B Bloxom (Bloxom, 1972) points out that the FIRO scales are a self-report questionnaire designed to assess personal needs in interpersonal relationships. Repeatedly, Bloxom makes the point that only the FIRO-B of the six FIRO scales has been studied enough to be recommended for use in research. While recommending the FIRO-B questionnaire for use in research, Bloxom cautions against using it in guidance and counseling.

In a study designed to evaluate the construct validity of the FIRO-B, Ryan, Maguire, and Ryan (Ryan, Maguire, and Ryan, 1970) concluded that the FIRO-B is not a valid measure of the interpersonal needs Schutz (who developed the FIRO scales) intends for it to measure. By taking 48 Ss in each of three vocational fields, policemen, life insurance salesmen, and workers from a volunteer service agency Ryan, Maguire, and Ryan tried to test the constructs of the FIRO-B--inclusion, control, and affection, both expressed and wanted. They conclude in their study that the FIRO-B is not a valid measure of all

of all the constructs in FIRO theory on the basis that: (1) there is some doubt that the items adequately cover the scope of theory of interpersonal behavior as presented in FIRO theory; (2) the FIRO-B is structurally inadequate in that it does not meet .90 reproducibility standards; (3) the evidence of this study indicates that all six constructs are not being measured.

Others also have attempted to study the validity of the FIRO-B. For example, Kramer (Kramer, 1967), in an attempt to test the construct validity of the FIRO-B, had some students predict their scores on the FIRO-B after having completed the instrument. This prediction of their scores came after a brief lecture on the FIRO-B. By following this procedure Kramer was assuming that normal Ss should be able to tell us some things about their own personality. Kramer found that the correlation between predicted scores and actual scores on the FIRO-B reached the .05 level of significance on all categories except the expressed inclusion category. Kramer then concluded that these results contributed to the construct validation of the FIRO-B.

Froehle (Froehle, 1970) attempted a partial replication of Kramer's study, but did not find the significance which Kramer found. In computing the levels of significance between the obtained FIRO-B scores and the Ss' estimated scores, Froehle found that only the expressed control value attained the .05 level of significance.

Another instrument used in this study is the Effective Study Test (EST) developed by William F. Brown. This instrument was designed to measure students' knowledge of effective study procedures. It is constituted of 125 items, each of which is evaluated on a self-report basis by the student as "mostly true" or "mostly false." In the 125

items of the EST are five subscales which will be discussed more completely in Chapter III. However, the five subscale scores are combined into a composite Total Study Effectiveness Score.

Some researchers (Brown, 1964; Seals, 1964) report that the EST is a valid predictor of academic achievement in both high school and college. Being a relatively new instrument, research findings on the EST are not as accessible as for some instruments. However, Brown and his associates have continued to conduct research on the EST and report that it measures academic success about as well as the SSHA (Seals, 1964).

The literature reviewed suggests that the whole issue of academic failure is still a perplexing one. Many approaches have been taken to cope with the problem of academic failure ranging from remedial programs to rehabilitative programs to suspension programs. It appears that no common theory base is operational at this time. It may be that the issue of academic failure must be dealt with individually--since the reasons behind failure are often personal and individualized.

CHAPTER III

DESIGN AND METHODOLOGY

The purpose of this chapter is to present an outline of this study. Therefore, included will be: (1) an explanation of the selection of the subjects and a description of the subjects investigated in this study, (2) a presentation of the instruments utilized in the study, and (3) a description of the data collection and analysis procedures.

The problem to be dealt with in this study is to determine if there is a life-style relationship between successful and unsuccessful university students as they are defined in this study. Particular attention will be accorded such factors as study habits and attitudes, purpose-in-life attitudes, aptitude and achievement levels, and interpersonal relationship attitudes. Therefore, this study is intended to be a descriptive study which will provide data about freshmen university students who have failed out at Oklahoma State University and have returned to school. These failing students will be contrasted with students who have been academically successful at the University.

Selection and Description of Subjects

The subjects of primary interest are the unsuccessful students, that is, those who were suspended for academic reasons at the end of the 1974 spring semester and reinstated for the 1974 fall semester.

All Arts and Sciences freshmen who fit this description were included in this study. Thirty-one such students constitute this group of primary interest. Since the total population of unsuccessful students was used, no sampling technique was needed at this point in the study. There are 21 males and 10 females in this group. However, their reinstatement was contingent upon their participation in the testing program used in this study.

A second group was drawn from students who were also completing their first academic year in the College of Arts and Sciences at Oklahoma State University in the 1974 spring semester. This group is constituted of 25 students succeeding in their freshman year.

This successful group was selected through the use of random digits. All Arts and Sciences freshmen who appeared to be "successfully" completing their first academic year as native students were included in the population from which the sample would be drawn. Any student not completing his freshman year as a successful student would be dropped from the successful group.

A sample of 100 students was selected through the use of random digits. These students were sent a letter inviting them to participate in this study (see Appendix A for a copy of this letter). Twenty-eight students responded to this invitation. However, before the end of the semester three of these students transferred to other undergraduate colleges at Oklahoma State University which denied access to their records and their participation in the study. Therefore, the size of the comparison group was reduced to 25. There are eight males and seventeen females in this group.

The Instruments

Instruments were selected for this study to assist in providing measureable data relating to various aspects of a student's life style as a student. The ACT was selected as an indicator of academic ability; the Effective Study Test (EST) was selected as an indicator of academic adjustment; the Survey of Study Habits and Attitudes (SSHA) was selected as an indicator of academic attitude. The Purpose-In-Life Test (PIL) was selected for use in this study as a general indicator of motivation, and the Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) was selected as an indicator of interpersonal interaction.

The ACT is used as an admission standard at Oklahoma State University (Catalog, 1972). The test battery is intended to be a comprehensive assessment of the student (ACT Technical Report, 1965). It is also one of the two most widely used college admission testing programs in the United States, but is overly dependent upon reading comprehension (Buros, 1972). The reviewer in The Seventh Mental Measurements Yearbook, Volume I (Buros, 1972), states that the ACT's most important property is the highly satisfactory predictive validities it displays against criteria for college grades.

The ACT is composed of four tests, which, together, constitute the ACT Composite score. The four tests are: English, Mathematics, Social Studies, and Natural Sciences.

The English test is a 40-minute, 75-item, multiple-choice test designed to measure the student's understanding and use of basic elements of correct and effective writing. A greater emphasis is given to expression than to a recall of grammatical rules.

The Mathematics test is a 50-minute, multiple-choice test designed to measure the student's mathematical reasoning ability. The test emphasizes solving practical quantitative problems and reasoning in a quantitative context, rather than memorization of formulas, knowledge of techniques, and computational skills.

The Social Studies test is a 35-minute, 52-item test designed to measure evaluative reasoning and problem-solving skills required in the social studies. This is a multiple-choice test drawing on a student's reading comprehension ability and on general knowledge obtained in high school social studies courses.

The Natural Sciences test is a 35-minute, 52-item test designed to measure a student's critical reasoning and problem-solving skills required in the natural sciences. This is a multiple-choice test on reading comprehension and general information about science.

The ACT composite score is a numerical average of the four subtest scores--English, Mathematics, Social Studies, and Natural Sciences. All of these scores are standard scores which have been adjusted from the raw scores (Using ACT, 1973).

The Effective Study Test (EST) was developed by William F. Brown. This instrument was designed to measure students' knowledge of effective study procedures. It is constituted of 125 items, each of which is evaluated on a self-report basis by the student as "mostly true" or "mostly false." There are five subscales on the EST: Reality Orientation Scale, Study Organization Scale, Writing Behavior Scale, Reading Behavior Scale, and Examination Behavior Scale. These five subscale scores are combined into a composite Total Study Effectiveness Score. See Table I for a more complete description of

these subscales and the composite score.

TABLE I

EFFECTIVE STUDY TEST SUBSCALES

EST Reality Orientation Scale measures your realistic understanding of the problems connected with developing effective study habits.
EST Study Organization Scale measures your knowledge about effective methods for budgeting your study time and organizing your study area.
EST Writing Behavior Scale measures your knowledge about effective methods for taking your class notes and writing your themes and reports.
EST Reading Behavior Scale measures your knowledge about effective methods for reading your textbooks and remembering the material that you read.
EST Examination Behavior Scale measures your knowledge about effective methods for preparing for and taking your objective and essay tests.
EST Total Study Effectiveness Score combines your scores on all five scales to provide a single overall measure of your knowledge about effective study methods and the factors influencing their development (Brown, 1964).

Some researchers (Brown, 1964; Seals, 1964; Brown, 1972) report that the EST is a valid predictor of academic achievement in both high school and college. Being a relatively new instrument, access to research on the EST is not as available as with some instruments. However, Brown and his associates have continued to conduct research

on the EST reporting that it measures academic success about as well as the SSHA (Seals, 1964).

The Survey of Study Habits and Attitudes (SSHA) is a self-rating inventory consisting of 100 items. It is designed to measure students' academic motivation in terms of study behavior and attitudes. Each of the items on the SSHA is answered by the student rating himself on a five-point continuum ranging from "rarely" to "almost always." The SSHA yields subscale scores for Delay Avoidance and Work Methods, which are combined into a Study Habits score. It also yields subscale scores for Teacher Approval and Education Acceptance, which are combined into a Study Attitudes score. The Study Habits and Study Attitudes scores are then combined into a composite Study Orientation score. See Table II for a more complete description.

The Purpose-in-Life Test (PIL) consists of three parts, A, B, and C. Only Part A is objectively scored and only Part A is used in this study. Parts B and C are for clinical interpretation (and are not used in this study). Part A consists of twenty (20) scaled items. Each of the 20 items is placed on a seven-point scale. The score for Part A is simply the sum of the numerical values a student has circled in response to each item. This raw score suggests the presence of definite purpose and meaning in life if it is 113 or above. Raw scores of 91 or below suggest the lack of clear meaning and purpose, and scores between 92 and 112 represent somewhat uncertain definition.

TABLE II

SURVEY OF STUDY HABITS AND ATTITUDES SUBSCALES

Study Habits

SSHA Delay Avoidance measures your promptness in completing academic assignments, lack of procrastination, and freedom from wasteful delay and distraction.

SSHA Work Methods measures your use of effective study procedures, efficiency in doing academic assignments, and how-to-study skills.

SSHA Study Habits combines the scores on the Delay Avoidance and Work Methods scales to provide a measure of academic behavior.

Study Attitudes

SSHA Teacher Approval measures your opinions of teachers and their classroom behavior and methods.

SSHA Education Acceptance measures your approval of educational objectives, practices, and requirements.

SSHA Study Attitudes combines the scores on the Teacher Approval and Education Acceptance scales to provide a measure of scholastic beliefs.

Study Orientation

SSHA Study Orientation combines the scores on the Study Habits and Study Attitudes scales to provide an overall measure of study habits and attitudes (Brown and Holtzman, 1967).

Viktor Frankl has defined the concept of "purpose-in-life" as an index of general motivation (Frankl, 1963). Therefore, the PIL is of interest to this study because motivation is assumed to be a variable related to one's academic success, according to several of the authors whose works were reviewed for this study (see Chapter II). The PIL is used in this study as an indicator of general motivation. Through numerous studies Crumbaugh and Maholick have concluded that the PIL is a valid and reliable measure of Frankl's concept of "purpose-in-life" (Crumbaugh and Maholick, 1969). Crumbaugh and Maholick also suggest the PIL for use with students in vocational and educational counseling as well as with other persons and situations (Crumbaugh and Maholick, 1969).

The Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) is designed to measure a person's characteristic behavior toward other people in the areas of inclusion, control, and affection. That is, it is designed to measure how a person acts in interpersonal situations.

The fundamental dimensions of the FIRO-B, as stated above, are: inclusion, control, and affection. These are behaviorally defined (Schutz, 1967, pp. 4-5:

1. The interpersonal need for inclusion is the need to establish and maintain a satisfactory relationship with people with respect to interaction and association.

2. The interpersonal need for control is the need to establish and maintain a satisfactory relationship with people with respect to control and power. Control behavior refers to the decision-making process between people.

3. The interpersonal need for affection is the need to establish and maintain a satisfactory relationship with others with respect to love and affection.

The FIRO-B consists of six scales. There is Expressed and Wanted behavior in each of the areas of inclusion, control, and affection. This instrument contains only six basic questions. Each question is repeated with slight variation nine times. This results in a total of 54 items to be answered. For each of the 54 items on the test a person is asked to select one from any of six possible responses ranging from "usually," for example, to "never." Because each basic question is asked nine times (with slight variations), the subject has nine chances to reveal whether or not he accepts or rejects each of the six basic questions. The FIRO-B is scored with a scoring key, which can be done simply and rapidly.

Recognizing that all but the ACT are self-report instruments it is assumed that the Ss in this study know something about themselves. Certainly their responses on the instruments say something of what they perceive their life-situations to be.

Data Collection and Analysis

The data for this study were collected during the spring and summer of 1974 on both the unsuccessful and successful students. Those unsuccessful students who missed completing the instruments used in this study during the spring semester were given an opportunity to complete them as they applied for reinstatement. Completion of the instruments, exclusive of the ACT--which had been completed before their college enrollment--usually required about seventy to eighty minutes.

The data used in this study are: grade point average, ACT scores, SSHA scores, EST scores, PIL scores, and FIRO-B scores. The point-biserial r (correlation) will be used in determining what statistical relationships, if any, exist as stated in the hypotheses. The point-biserial r will be used because it is more generally applicable than is the biserial r. Guilford (Guilford, 1965) states that:

> Since the (point-biserial r) coefficient is not restricted to normal distributions in the dichotomous variable, it is much more generally applicable than is (the biserial r) . . . it should probably be used more than it is (p. 324).

Also, it is much simpler to test the significance of the departure of the correlation coefficient from zero with the point-biserial r than with the biserial r. A t test of the difference between means will be used to accomplish this.

Because the FIRO-B renders six scores, the point-biserial r will be used on all six scores to examine the relationship between the unsuccessful and the successful students.

As stated above, the data for the unsuccessful students were collected at the time they applied for reinstatement if they had not completed the instruments prior to that time. The successful students completed the instruments used in the study during the spring as they were successfully completing their first year of college. These students were invited to participate in this study in a letter mailed as an instrument of the Dean's office of the College of Arts and Sciences. They completed the instruments used in this study, exclusive of the ACT, on an evening at a time of limited choice (see Appendix A for copies of this letter).

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The presentation and analysis of data for this research will be reported as they relate to each of the hypotheses. As stated above, wherever hypotheses were statistically tested, it was assumed that differences were not statistically significant unless they were at or above the .05 level of significance. In this chapter each hypothesis will be stated followed by a presentation of an analysis of the related data.

Hypothesis I

Hypothesis I: There is no relationship between unsuccessful and successful native freshmen students on their respective ACT scores.

Table III presents the point-biserial correlation coefficient between the unsuccessful students and the successful students on their respective ACT composite scores. The t-test value of -4.854 indicates a correlation significant at the .001 level, therefore the hypothesis of no relationship is rejected. This finding indicates a tendency for unsuccessful students to have lower ACT Composite scores than successful students. Table IV presents similar data for the ACT subscales.

TABLE III

POINT-BISERIAL *r* FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON ACT COMPOSITE

Group	Number	Point-Biserial *r*	*t* Value*	Significance Level
Unsuccessful Students	29			
		-0.558	-4.854	.001
Successful Students	25			

*Critical value of *t* at .05 level is 2.000.

TABLE IV

POINT-BISERIAL *r* FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON ACT SUBSCALES

ENGLISH

Group	Number	Point-Biserial *r*	*t* Value*	Significance Level
Unsuccessful Students	29			
		-0.537	-4.586	.001
Successful Students	25			

TABLE IV (Continued)

MATHEMATICS

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	29			
		-0.426	-3.391	.001
Successful Students	25			

SOCIAL STUDIES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	29			
		-0.450	-3.636	.001
Successful Students	25			

NATURAL SCIENCES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	29			
		-0.494	-4.100	.001
Successful Students	25			

*Critical value of t at .05 level is 2.000 on all of the above scales.

Hypothesis II

Hypothesis II: There is no relationship between unsuccessful and successful native freshman students on their respective SSHA scores.

Table V presents the point-biserial correlation coefficient between the unsuccessful students and the successful students on their respective SSHA Study Orientation scores. The t-test value of -3.545 indicates a correlation significant at the .001 level, therefore the hypothesis of no relationship is rejected. This finding indicates a tendency for unsuccessful students to have lower SSHA Study Orientation scores than successful students.

Table VI presents similar data for the SSHA subscales. The subscale findings are generally similar to those of the SSHA Study Orientation score with one exception. The "Teacher Approval" scores of the SSHA shows a tendency for no relationship between the scores of the two groups of students.

TABLE V

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON SSHA STUDY ORIENTATION (Composite Score)

Group	Number	Point-Biserial r	t-Value*	Significance Level
Unsuccessful Students	31	-0.434	-3.545	.001
Successful Students	25			

*Critical value of t at .05 level is 2.000.

TABLE VI

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON SSHA SUBSCALES

DELAY AVOIDANCE

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31			
		-0.456	-3.761	.001
Successful Students	25			

WORK METHODS

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31			
		-0.478	-4.001	.001
Successful Students	25			

STUDY HABITS

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31			
		-0.498	-4.221	.001
Successful Students	25			

TABLE VI (Continued)

Group	Number	Point-Biserial r	t Value*	Significance Level
TEACHER APPROVAL				
Unsuccessful Students	31			
		-0.160	-1.193	NS
Successful Students	25			
EDUCATION ACCEPTANCE				
Unsuccessful Students	31			
		-0.346	-2.706	.01
Successful Students	25			
STUDY ATTITUDES				
Unsuccessful Students	31			
		-0.257	-3.545	.001
Successful Students	25			

*Critical value of t at .05 level is 2.000 on all of the above scales.

Hypothesis III

Hypothesis III: There is no relationship between unsuccessful and successful native freshmen students on their respective EST scores.

Table VII presents the point-biserial correlation coefficient between the unsuccessful students and the successful students on their respective EST Total Study Effectiveness scores. The t-test value of -1.804 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE VII

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON EST TOTAL STUDY EFFECTIVENESS (Composite Score)

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.235	-1.804	NS
Successful Students	25			

*Critical value of t at the .05 level is 2.000.

Table VIII presents similar data for the EST subscales. The subscale findings are generally similar to those of the EST Total Study Effectiveness scores with one exception. The "Writing Behavior" scores of the EST show a tendency for unsuccessful students to score lower than the successful students. The t-test value of -3.133 indicates a correlation significant at the .01 level. Therefore, on the Writing Behavior subscale the hypothesis of no relationship is rejected.

TABLE VIII

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON EST SUBSCALES

REALITY ORIENTATION				
Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.026	-0.191	NS
Successful Students	25			

STUDY ORGANIZATION				
Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.116	-0.855	NS
Successful Students	25			

TABLE VIII (Continued)

Group	Number	Point-Biserial r	t Value*	Significance Level
WRITING BEHAVIOR				
Unsuccessful Students	31			
		-0.392	-3.133	.01
Successful Students	25			
READING BEHAVIOR				
Unsuccessful Students	31			
		-0.158	-1.179	NS
Successful Students	25			
EXAMINATION BEHAVIOR				
Unsuccessful Students	31			
		-0.180	-1.345	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000 on all of the above scales.

Hypothesis IV

Hypothesis IV: There is no relationship between unsuccessful and successful native freshmen students on their respective PIL scores.

Table IX presents the point-biserial correlation coefficient between the unsuccessful students and the successful students on their respective PIL scores. The t-test value of -3.329 indicates a correlation significant at the .01 level, therefore the hypothesis of no relationship is rejected. This finding indicates a tendency for unsuccessful students to have lower PIL scores than successful students.

TABLE IX

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON PIL

Group	Number	Point-Biserial r	t Value	Significance Level
Unsuccessful Students	31			
		-0.413	-3.329	.01
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Hypothesis V

Hypothesis V: There is no relationship between unsuccessful and successful native freshmen students on their respective FIRO-B scores.

Tables X through XV present data for unsuccessful and successful students on their respective FIRO-B scores. Since there is no composite score for the FIRO-B, it was deemed necessary to include data for the six scores rendered by the FIRO-B in tabular form.

Table X presents the point-biserial correlation coefficient between the unsuccessful students and the successful students of their respective FIRO-B expressed Inclusion scores. The t-test value of -1.499 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE X

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B EXPRESSED INCLUSION SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.200	-1.499	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Table XI presents the point-biserial correlation coefficient between the unsuccessful students and the successful students of their respective FIRO-B wanted Inclusion scores. The t-test value of -0.994 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE XI

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B WANTED INCLUSION SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.134	-0.994	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Table XII presents the point-biserial correlation coefficient between the unsuccessful students and the successful students of their respective FIRO-B expressed Control scores. The t-test value of -0.391 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE XII

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B EXPRESSED CONTROL SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.053	-0.391	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Table XIII presents the point-biserial correlation coefficient between unsuccessful and successful students of their respective FIRO-B wanted Control scores. The t-test value of -1.091 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE XIII

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B WANTED CONTROL SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.147	-1.091	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Table XIV presents the point-biserial correlation coefficient between the unsuccessful students and the successful students of their respective FIRO-B expressed Affection acores. The t-test value of -1.031 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE XIV

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B EXPRESSED AFFECTION SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.139	-1.031	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Table XV presents the point-biserial correlation coefficient between the unsuccessful students and the successful students of their respective FIRO-B wanted Affection scores. The t-test value of -1.310 is not significant, therefore the hypothesis of no relationship is accepted. This finding indicates a tendency for no relationship between the scores of the two groups of students.

TABLE XV

POINT-BISERIAL r FOR UNSUCCESSFUL AND SUCCESSFUL STUDENTS ON FIRO-B WANTED AFFECTION SCORES

Group	Number	Point-Biserial r	t Value*	Significance Level
Unsuccessful Students	31	-0.176	-1.310	NS
Successful Students	25			

*Critical value of t at .05 level is 2.000.

Discussion of the Findings

The findings reported in the preceding pages call for additional comment. The reported ACT data indicated that successful students as a group have higher ACT scores than unsuccessful students. Research literature from the ACT (see Chapters II and III) claims these findings show that successful students have better reasoning development in the areas tested by ACT than do unsuccessful students. Therefore, the present investigation supports existing research which states that the ACT results do provide a good indicator for future academic success.

The findings of the SSHA indicated better study habits and attitudes on the part of successful students as opposed to unsuccessful students. However, there was one exception to the relationships between the two groups on the SSHA. In the area of "Teacher Approval" there was no significant relationship between successful and unsuccessful students in their opinions of their teachers and their teachers' classroom behavior and attitudes. This finding is important in that it indicates that both successful and unsuccessful students in the present investigation have a positive attitude toward the teaching faculty of the University.

Responses of both groups of students to the EST indicated that both the successful and unsuccessful students generally know what kind of study behavior leads to academic success. The one exception was in the area of "Writing Behavior." It was found that unsuccessful students do not know effective methods of taking class notes and writing themes and reports. Unsuccessful students, according to this data, simply do not express themselves well in writing, and furthermore,

do not know effective methods of written expression. This information has important implications in several areas. First, it indicates that unsuccessful students have difficulty taking good class notes. Consequently, these people may well be handicapped when it comes to reviewing class lecture materials for exams simply because their notes are inadequate. Second, if these students cannot express themselves well in writing, they may labor under a handicap any time they are required to take an essay examination. Third, the College of Arts and Sciences has an English Proficiency requirement which must be met in order for a student to graduate. The present proficiency requirement is usually met during the sophomore year. If a student cannot communicate well in writing, he will have difficulty in meeting this requirement. The results of this study support an increased effort toward identifying this deficiency earlier in the student's college career.

Also, since the EST measured what the students know about effective study methods and the SSHA measured how the students actually perform, any significance in response to these two measures would provide useful data for potential counseling programs. For example, it raises a question of motivation: If students know what kind of behavior leads to academic success, why do they reject it?

The responses of both groups of students on the PIL showed that successful students are significantly more motivated than unsuccessful students. This means that successful students experience significantly more meaning and sense of purpose in life than unsuccessful students do. This probably also means that there is more interest in and concern for what they are doing with their lives.

Responses of students in this study related to the FIRO-B demonstrated that there are no significant relationships in the way successful and unsuccessful students interact with other persons. These FIRO-B findings coupled with the other findings reported in the preceding pages suggested that, generally, unsuccessful students know what kind of behavior leads to academic success, but that they do not practice this behavior. This may be because their attitudes are different; or because they are not motivated to practice this behavior. This finding supports the consideration of other variables such as values and expectations students hold for their whole educational experience, or perhaps a combination of some or all of these factors.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to explore some factors relating to academic success and failure of Arts and Sciences freshmen at Oklahoma State University. The intent was to determine some of the life-style relationships, if any, which exist between unsuccessful and successful students. Particular attention was paid to such factors as aptitude and achievement levels, study habits and attitudes, purpose-in-life attitudes, and interpersonal relationship attitudes.

Summary

The present study consisted of a descriptive effort which was designed to provide new information concerning students who had failed out of the University after one year of study and had been reinstated. The research was designed to investigate relationships between that group and students who had successfully completed one year of study. A point-biserial correlation was computed on the basis of the subjects' responses to five standardized instruments.

The students constituting the study were selected in two ways. The unsuccessful students in this study are those who failed out of the University at the end of the 1974 spring semester and were then reinstated, upon their request, for the 1974 fall semester. The total population of these reinstated students was used in the study.

The contrasting group of successful students was selected by the use of a table of random numbers. One hundred students who appeared to be completing their first year of college successfully were sent a letter inviting them to participate in the study. Twenty-eight (28) responded to this invitation, but three changed colleges before the completion of the semester and had to be dropped from the study since access to their records was lost. This reduced the number of successful students in this study to twenty-five (25).

All students in the study completed the Survey of Study Habits and Attitudes, the Effective Study Test, the Purpose-in-Life Test, and the Fundamental Interpersonal Relationship Orientation-Behavior test. The American College Test (ACT) was already a part of their records. The unsuccessful students had to complete these instruments as a condition for their reinstatement to the University. In calculating correlations from data provided by responses to these instruments, the point of significance used was the .05 level of probability.

Briefly stated, the five hypotheses of the study were: there is no relationship between unsuccessful and successful students on their respective ACT scores, SSHA scores, EST scores, PIL scores, and FIRO-B scores. The data led to a rejection of the first, second, and fourth hypotheses since significant relationships were found to exist at these points. The third hypothesis was accepted. However, there was a significant relationship between student status and writing behavior. The fifth hypothesis was accepted.

Conclusions

The findings of the analyses of the data in this study warrant the following conclusions:

1. Successful students tend to have higher scores on the ACT than unsuccessful students. This conclusion supports the claim of the American College Testing Program that the ACT test is a good predictor of academic success.
2. As defined and determined by the SSHA, successful students tend to have better study habits and attitudes, and, consequently, a better study orientation than unsuccessful students except in the case of "Teacher Approval." There is no relationship in the opinions these two groups have of their teachers.
3. As defined and determined by the EST, there is no relationship in knowledge of effective study methods between successful and unsuccessful students except in the case of writing behavior. Generally, unsuccessful students know what to do, but simply do not get it done. However, in the case of writing behavior, the findings of this study show that the unsuccessful students are not knowledgeable of what effective writing behavior is.
4. According to the findings of this study, as defined by the PIL, successful students tend to be more motivated and experience more meaning and sense of purpose in life than do unsuccessful students.

5. Findings of this study indicated there was no significant relationship in patterns of interpersonal interaction between unsuccessful and successful students.

Recommendations

The findings and conclusions of this study lead to several recommendations. First, additional studies should be done in the relationship between motivation and ability. Does one stem from the other? If so, which precedes the other? And, how is the first of these factors instilled in, or acquired by, an individual?

Second, this study was not intended to be an exhaustive study of the life-styles of unsuccessful and successful students. Rather this study was intended to look at some carefully selected factors within the life-styles of these students. It is recommended that more research is needed in the area of the life-styles of unsuccessful and successful students. This recommendation seems especially appropriate in a time when universities are drawing students from a broader and more heterogeneous population than ever.

Third, further study is needed to establish ways of preventing academic failure before it occurs. The results of such studies should be used to assist in prescribing programs of academic development.

Fourth, it is further recommended that studies be carried out that seek to discover which factors in individuals' life-styles are most directly related to academic success and failure. The fact is, capable people still fail out of college.

The findings of this research are one attempt and one approach to understanding more fully the relationship between unsuccessful and successful students. Due to the limited number of students used as subjects in this research, and because of the limited settings from which they are drawn, one is cautioned against generalizing the findings of this study to other individuals or settings.

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APPENDIX A

LETTERS TO SUCCESSFUL STUDENTS

April 12, 1974

As a part of the Arts and Sciences academic dean's office, we are trying to gather some information on freshman students completing their first year at Oklahoma State University. We would like for you to assist us in this task.

What we are asking of you is about 60 to 90 minutes of your time during the weeks of April 15-19 or April 22-26. During this time you will be given some tests to take. Incidentally, there are no "right" and "wrong" answers to these tests. Also, we can assure you that your test scores will remain confidential. And, if you are interested in an interpretation of the tests you take, they will be available upon request.

It would be most convenient if you could meet me in LSE 217 at 6:30 p.m. on Thursday, April 18. (The northeast door of the building will be open.)

If this is not a convenient time for you, you can drop by our office, Life Sciences East 202, anytime during the week of April 15-19 and take the tests there.

Your cooperation in this matter will be greatly appreciated.

Sincerely,

Jay Caldwell
Counselor

JC:zf

April 12, 1974

As a part of the Arts and Sciences academic dean's office, we are trying to gather some information on freshman students completing their first year at Oklahoma State University. We would like for you to assist us in this task.

What we are asking of you is about 60 to 90 minutes of your time during the week of April 15-19. During this time you will be given some inventories to take. Incidentally, there are no "right" and "wrong" answers to these instruments which deal with attitudes and life styles. Also, we can assure you that your scores will remain confidential. And, if you are interested in an interpretation of your scores, they will be available upon request.

It would be most convenient if you could meet me in LSE 217 at 8:00 p.m. on Thursday, April 18. (The northeast door of the building will be open.)

If this is not a convenient time for you, you can drop by our office, Life Sciences East 202, anytime during the week of April 15-19 and take the inventories there.

Your cooperation in this matter will be greatly appreciated.

Sincerely,

Jay Caldwell
Counselor

JC:zf

April 16, 1974

As a part of the Arts and Sciences academic dean's office, we are trying to gather some information relating to academic success of freshman students completing their first year at Oklahoma State University. We would like for you to assist us in this task.

What we are asking of you is about 60 to 90 minutes of your time during the week of April 22-26. During this time you will be given some inventories to take. Incidentally, there are no "right" and "wrong" answers to these instruments which deal with attitudes and life styles. Also, we can assure you that your scores will remain confidential. And, if you are interested in an interpretation of your scores, they will be available upon request.

It would be most convenient if you could meet in LSE 217 at 6:30 p.m. on Thursday, April 25. (The northeast door of the building will be open.)

If this is not a convenient time for you, you can drop by our office, Life Sciences East 202, anytime during the week of April 22-26 and take the inventories there.

Your cooperation in this matter will be greatly appreciated.

Sincerely,

Jay Caldwell
Counselor

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Jay Caldwell
Counselor

JC:zf

APPENDIX B

SUMMARY OF DATA

SUMMARY OF DATA

Group	Instrument	Subscale/ Composite	Number	Mean	Standard Deviation	Point Biserial r	t Value	Significance Level
Unsuccessful			29	18.034				
	ACT	Composite		20.667	5.077	-0.558	-4.854	.001
Successful			25	23.720				
Unsuccessful			29	16.759				
	ACT	English		19.148	4.795	-0.537	-4.586	.001
Successful			25	21.920				
Unsuccessful			29	17.552				
	ACT	Mathematics		20.315	6.993	-0.426	-3.391	.001
Successful			25	23.520				
Unsuccessful			29	17.379				
	ACT	Social Studies		20.093	6.490	-0.450	-3.636	.001
Successful				23.240				
Unsuccessful			29	20.103				
	ACT	Natural Sciences		22.833	5.949	-0.494	-4.100	.001
Successful			25	26.000				
Unsuccessful			31	81.871				
	SSHA	Study Orientation		93.589	30.033	-0.434	-3.545	.001
Successful			25	108.120				
Unsuccessful			31	12.903				
	SSHA	Delay Avoidance		16.625	9.097	-0.456	-3.761	.001
Successful			25	21.240				

SUMMARY OF DATA (Continued)

Group	Instrument	Subscale/ Composite	Number	Mean	Standard Deviation	Point Biserial r	t Value	Significance Level
Unsuccessful			31	20.209				
	SSHA	Work Methods		24.589	10.011	-0.478	-4.001	.001
Successful			25	29.920				
Unsuccessful			31	33.194				
	SSHA	Study Habits		41.214	17.932	-0.498	-4.221	.001
Successful			25	51.160				
Unsuccessful			31	26.613				
	SSHA	Teacher Approval		27.946	9.265	-0.160	-1.193	NS
Successful			25	29.600				
Unsuccessful			31	22.065				
	SSHA	Education Acceptance		24.429	7.618	-0.346	-2.706	.01
Successful			25	27.360				
Unsuccessful			31	48.677				
	SSHA	Study Attitudes		52.375	16.001	-0.257	-3.545	.001
Successful			25	56.960				
Unsuccessful			31	98.258				
	EST	Total Study Effectiveness		100.429	10.135	-0.235	-1.804	NS
Successful			25	103.120				

SUMMARY OF DATA (Continued)

Group	Instrument	Subscale/ Composite	Number	Mean	Standard Deviation	Point Biserial r	t Value	Significance Level
Unsuccessful	EST	Reality Orientation	31	20.677	3.106	-0.026	-0.191	NS
				20.750				
Successful			25	20.840				
Unsuccessful	EST	Study Organization	31	19.387	2.810	-0.116	-0.855	NS
				19.679				
Successful			25	20.040				
Unsuccessful	EST	Writing Behavior	31	18.774	2.720	=0.392	-3.133	NS
				19.732				
Successful			25	20.920				
Unsuccessful	EST	Reading Behavior	31	20.226	2.932	-0.158	-1.179	NS
				20.643				
Successful			25	21.160				
Unsuccessful	EST	Examination Behavior	31	19.194	2.448	-0.180	-1.345	NS
				19.589				
Successful			25	20.080				
Unsuccessful	PIL	Composite	31	105.097	12.990	-0.413	-3.329	.01
				109.911				
Successful			25	115.880				

SUMMARY OF DATA (Continued)

Group	Instrument	Subscale/ Composite	Number	Mean	Standard Deviation	Point Biserial *r*	*t* Value	Significance Level
Unsuccessful			31	4.935				
	FIRO-B	Expressed Inclusion		5.286	1.951	-0.200	-1.499	NS
Successful			25	5.720				
Unsuccessful			31	4.968				
	FIRO-B	Wanted Inclusion		5.375	3.382	-0.134	-0.994	NS
Successful			25	5.880				
Unsuccessful			31	2.419				
	FIRO-B	Expressed Control		2.518	2.063	-0.053	-0.391	NS
Successful			25	2.640				
Unsuccessful			31	3.194				
	FIRO-B	Wanted Control		3.464	2.054	-0.147	-1.091	NS
Successful			25	3.800				
Unsuccessful			31	4.194				
	FIRO-B	Expressed Affection		4.536	2.743	-0.139	-1.031	NS
Successful			25	4.960				
Unsuccessful			31	5.161				
	FIRO-B	Wanted Affection		5.589	2.715	-0.176	-1.310	NS
Successful			25	6.120				

Critical Value of *t* at .05 level is 2.000.

VITA

James Franklin Caldwell

Candidate for the Degree of

Doctor of Education

Thesis: A DESCRIPTIVE STUDY OF ACADEMICALLY UNSUCCESSFUL ARTS AND SCIENCES FRESHMEN

Major Field: Student Personnel and Guidance

Biographical:

Personal Data: Born in Tulsa, Oklahoma, January 18, 1940, the son of Mr. and Mrs. F. E. Caldwell.

Education: Completed Kindergarten and grades one through twelve in the public schools of Tulsa, Oklahoma, graduating in the spring of 1958; received the Bachelor of Arts degree with a major in History from the University of Tulsa in June, 1962; received the Bachelor of Divinity degree from Duke University in June, 1966; received the Master of Science degree from Oklahoma State University with a major in Student Personnel and Guidance in May, 1971; completed requirements for the Doctor of Education degree at Oklahoma State University with a major in Student Personnel and Guidance, July, 1976.

Professional Experience: Parish Minister of the Phenix, Virginia Methodist Charge, June, 1964 to June, 1966; Parish Minister of the Catoosa, Oklahoma Methodist Church, June, 1966 to June, 1968; District Director of Young Adult Work, Tulsa District of The Methodist Church, 1967-1968; Campus Minister at the Wesley Foundation, Stillwater, Oklahoma, 1968-1970; Part-time Instructor in the Religion Department at Oklahoma State University, 1968-1969; directed church youth camps and worked on camp staffs, 1964-1970; Counselor, Academic Adviser, Coordinator of Freshman Orientation, and Teacher in the College of Arts and Sciences at Oklahoma State University, 1970 to present.