A STUDY OF SELECTED FACTORS CONTRIBUTING TO STUDENTS' FAILURE AT THE FRESHMAN LEVEL AT RIYADH UNIVERSITY

Dissertation for the Degree of Ph. D.
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IBTISSAM ABDULRAHMAN AL-BASSAM

1973

THESIS

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ABSTRACT

A STUDY OF SELECTED FACTORS CONTRIBUTING TO STUDENTS' FAILURE AT THE FRESHMAN LEVEL AT RIYADH UNIVERSITY

By

Ibtissam Abdulrahman Al-Bassam

The Setting:

This study was conducted at Riyadh University, the largest institution of higher education in Saudi Arabia.

The Purpose of the Study:

The purpose of this study was to determine whether a relationship existed between certain scholastic and non-scholastic factors and academic achievement at the freshman level at Riyadh University.

Procedures:

The following procedures were utilized in the preparation conduct and analysis of this study.

1. The sample: The sample consisted of 320 freshman students failing in more than two subjects and achieving a total score below the "pass" level and of 220 successful freshman students achieving a total score above

the pass level. The two groups represented 82 per cent of the failures and 86 per cent of the high achievers among all freshman students enrolled for the first time at Riyadh University in 1972-1973.

2. Methods: A questionnaire encompassing 49 factors hypothesized to contribute to freshman students' failure was distributed to 320 freshman students who were, as measured by the university annual examination, failing in more than two subjects and achieving a total score average below the "pass" level, and 220 freshman students who were, as measured by the same annual examination, achieving a total score above the "pass" level. The two groups represented 82 per cent of the failures and 86 per cent of the high achievers enrolled for the first time in the freshman year of 1972-1973.

Other Data:

The high school total score average of the students who participated in answering the questionnaire was obtained from their records.

Conclusions:

The results of this study show that the failing freshman students differ from the high achieving freshman students. As compared to the high achievers, the failures are likely to (1) be non-married, (2) have farmer fathers

or illiterate fathers, (3) have attended high school in small communities, (4) live with non-university friends, (5) be less dissatisfied with their college education, (6) be unhappy with their academic majors, and be more willing to change them, (7) be less adjusted to the university atmosphere, (8) be less dependent upon instructors for academic advice, (9) miss more classes, (10) have experienced failure in their secondary school years, (11) take their study seriously only late in the academic year, and (12) achieve low on the senior high school public examination.

A STUDY OF SELECTED FACTORS CONTRIBUTING TO STUDENTS' FAILURE AT THE FRESHMAN LEVEL AT RIYADH UNIVERSITY

By

Ibtissam Abdulrahman Al-Bassam

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CHAPTER I

THE PROBLEM

Introduction

Saudi Arabia, a long-isolated, poor, and static country is passing through a highly significant period of transition. Oil was first exploited in 1938 with an average daily production of 1,357 barrels. By 1971-1972, ARAMCO[1] was producing an average of 2,597,063 barrels a day. At present, Saudi Arabia is the largest oil producing country in the Middle East and possesses almost one-half of the proved oil resources in the world.[2]

> The largest scale exploitation of oil brought into the country modern technology and large injections of capital which established the basis for previously unimagined economic growth and development.[3]

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[1]ARAMCO is one of four oil companies operating in Saudi Arabia.

[2]Saudi Arabia Ministry of Information, Saudi Arabia: Land of Achievement (Jeddah: 1969).

[3]Norman C. Walpole, Area Handbook for Saudi Arabia (Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office, 1966).

One critical problem, which according to the authors of the Economic Report tends to limit the pace of development, is the acute shortage of specialized manpower.[4]

As of 1968, the Economic Report indicates over 80 per cent of the professionals in the private sector, 85 per cent of the physicians and medical technicians, 80 per cent of the engineers and engineering technicians, 50 per cent of the elementary school teachers, 72 per cent of the intermediate and secondary school teachers, and over 96 per cent of the college instructors were foreigners.

To be sure, sincere efforts have been and are being made to develop the country's human resources, both as an integral part of and as an essential requisite for the overall development. The government's budget for education has increased from $3.1 million in 1952-53 to $187.5 million in 1971-1972.[5] This lavish allocation went to support an expanding free system of elementary, secondary, and higher education. The table below shows the rise in students' participation rate at the various levels:

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[4]Saudi Arabian Central Planning Organization, The Economic Report, 1967-1968 (Riyadh: Central Planning, 1968).

[5]"Saudi Arabian Budget for 1971-1972," ALMADEENH (Saudi Arabia), August 22, 1971, p. 6.

	1952-1953	1971-1972
Elementary	38,000	425,364
Secondary	2,105	74,128
Higher	600	10,520[6]

While efforts are still being put forth for greater expansion, especially at the secondary level, little is being done regarding the high rate of attrition, the growing number of unfinished products at all levels of the educational ladder.

Through a series of examinations and certifications a large segment of the school population is progressively eliminated from the school system. It is reported that over 30 per cent of the pupils who enter the elementary school fail to go beyond the fifth grade, 15 per cent of those who enter the intermediate school fail to go beyond the ninth grade, and over 20 per cent of those who enter high school leave before they finish this cycle.[7]

The highest rate of mortality occurs among the freshman students and is connected with the high rate of failure and low academic achievement among this group of

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[6]Saudi Arabia, Ministry of Education, Summary of Educational Development in Saudi Arabia. Report submitted to the Conference of Arab Ministers of Education, Rabat, Morocco, 1969-70.

[7]Saudi Arabia, Ministry of Education, Attrition Rate among Elementary and Secondary School Students, 1970-71 (Riyadh: 1971).

students. As available data indicate, the average yearly rate of failure is 61 per cent in the Faculty of Letters, 74 per cent in the Faculty of Commerce, 55 per cent in the Faculty of Agriculture, 52 per cent in the Faculty of Science, and 46 per cent in the Faculty of Pharmacy. No similar data exists for the Faculty of Engineering, the Faculty of Education or the Faculty of Medicine. Moreover, a large percentage of the failing students fail to go beyond the freshman year. As of 1968-1969, it was reported that over 46 per cent of the students who failed the 1968-1969 freshman year either dropped out or were dismissed. The figures are even higher for the year 1969-1970. For this year, approximately 60 per cent of the freshman students, unable to pass the annual examination either voluntarily or involuntarily withdrew.[8]

Statement of the Problem

This study undertakes to determine the extent to which certain factors influence students' failure at the freshman level at Riyadh University. The following factors will be considered.

1. Student's age.
2. Student's marital status.

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[8]Saud Jammaz, "Riyadh University; Historical Foundations, Current Status, Critical Problems, and Suggested Solutions." Unpublished doctoral dissertation, 1973.

3. Father's occupation.
4. Father's education.
5. Mother's education.
6. Father's financial condition.
7. Location of high school.
8. Student's present type of dwelling.
9. Student's housing, food, and recreational conditions.
10. Student's psychological and health conditions.
11. Student's daily travel time to college.
12. Student's initial contemplation of going to college.
13. Primary source of influence on student's decision to go to college.
14. Family feeling towards the student's decision to go to college.
15. Student's primary reason for going to college.
16. Student's attitude about his college education in relation to future vocation.
17. Student's intention to stay in college until graduation.
18. Student's willingness to continue in college in spite of experiencing failure.
19. Source of influence on student's choice of academic major.
20. Student's attitude towards his majors.
21. Student's assessment of his progress in college.
22. Student's associations.

23. Student's experience of transition from high school to college.
24. Student's relationship with other fellow students.
25. Student's participation in university co-curricular activities.
26. Student's relationship with his instructors.
27. Student's attitude towards counseling services.
28. Student's attitude towards class attendance.
29. Student's study habits.
30. Student's previous experience of success or failure.
31. Student's score on the secondary school public examination.

Need for the Study

When each year over 50 per cent of the freshman class of Riyadh University are stamped as failures, and when almost one-half of those failing make their exit prematurely, the potential leadership for Saudi Arabia is indeed in jeopardy. The puzzling question, why such a large number of students do poorly in their first academic year and voluntarily or involuntarily withdraw, has remained unanswered. Of course, our general knowledge of the antecedents leading to poor academic work has been expanding due to research efforts in advanced countries. However, our knowledge of the causes of the phenomenon in different academic cultural

settings[9] and indeed in different localities is extremely limited.[10] As far as the situation in Saudi Arabia is concerned, no research has ever delved into this problem. This study, examining the problem of failure at the freshman level at Riyadh University, is the first in this direction. It is hoped that it will be only the beginning in a long line of contributions that researchers will make in this realm.

Hypothesis

The following null hypothesis is postulated for this study: There are no significant differences between failures and high achievers with regard to the aforementioned factors, i.e., failure and high achievement are not related to these factors.

Limitations of the Study

This study is limited to the first-time male students of the freshman classes of 1972-1973 in the various faculties of Riyadh University.

Definition of Terms Used

Academic success: this term as used here refers to the students' ability to pass the annual examination.

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[9] Nevitt Sanford, Ed., The American College (New York: John Wiley & Sons, Inc., 1962) pp. 632-633.

[10] Philips H. Combs, The World Educational Crisis (New York: Oxford University Press, 1968).

Academic failure: this term as used here refers to students' failure in more than two subjects with a total average score below the pass level.[11]

Dependent variables: in the treatment of the data the dependent variable is the failure criterion defined as students' failure in more than two subjects with a total average score below the pass level.

Independent variables: this term refers to each of the factors selected for the analysis of their relationship to students' failure at the freshman level.

Secondary school examination: this term refers to the government examination administered by the Central Office of Examination in the Ministry of Education to high school students at the end of their senior year. Passing this examination qualifies the students to obtain the General Certificate of high school.

Organization of the Dissertation

The report of the study is divided into five chapters.

Chapter I has defined the problem, the need for the study, the limitations of the study, and certain terminology necessary to an understanding of the study.

Chapter II is a review of related literature which provided a source of reference for the study.

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[11]At Riyadh University there are five grading scales; excellent, very good, good, pass, fail.

Chapter III contains a brief description of the methodology utilized in the preparation, conduct, and analysis of the study.

Chapter IV contains the computed data, their analysis, and the findings.

The final chapter, Chapter V, presents a recapitulation of the main points of the study, states conclusions drawn from the findings, and offers certain educational and research recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter reports some of the findings from the literature which provided a frame of reference for the study. The first section deals with research findings concerning the relationship of various intellectual and scholastic factors to academic achievement. The second section deals with research findings concerning the relationship of non-intellectual factors to academic achievement.

Intellectual and Scholastic Factors and Academic Achievement

Numerous studies have investigated the relationship of various intellectual and scholastic factors to college students' academic performance. These studies are so essentially alike that reference to a few will serve as an adequate example.

Stalnaker,[1] in a four year study of the freshman class of 1935 at the West Virginia University, concluded that a significantly larger percentage of students with

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[1]Elizabeth M. Stalnaker, "A Four Year Study of Freshman Class of 1935 at the West Virginia University," Journal of Educational Research, XXXVI (October, 1942), 100-18.

higher intelligence test scores graduated than did students with lower intelligence test scores.

Basing her conclusions upon a study of 157 college students who were failing, Miss Sungrin[2] gave lower intelligence as the most important reason for college students' failure.

A similar conclusion was reached by Brown[3] in a study dealing with failure among normal school students, and by Dolly[4] in his study of the causes of failure among freshman students at the University of Michigan.

Perhaps more significantly related to academic achievement than scores on intelligence are the high school grades. As Giusti[5] pointed out, the review of the literature in the field of high school averages as a predictor of college success from 1926 to 1953 indicates that there is unquestionable superiority and stability of the high school grade point average as a single source for

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[2]Ruby B. Sungrin, "Some Reasons Why Students Fail In The University." Unpublished Master's thesis (1932).

[3]Gilbert L. Brown, "Day Dreams, Cause of Mind Wandering and Inferior Scholarship," Journal of Educational Research,

[4]Jesse E. Dolly, "A Study of Freshman Failures In The University of Michigan 1926-7, 1927-8, 1928-9." Unpublished Master's thesis (1930), University of Michigan, Ann Arbor.

[5]Joseph P. Giusti, "High School Average As Predictor of College Success," College and University, XXXIX, No. 2 (Winter, 1964).

predicting college success. Median coefficients of correlations of six studies appearing from 1934-1935 run between .63 and .68.

Fishman[6] reported that for 263 studies during the period of 1949 to 1959, the high school grade point average correlated roughly .50 with comprehensive year intellective criteria.

In one of the most recent, and perhaps most careful studies, Brown and Lofgren[7] attempted to isolate some of the characteristics of the relationship existing between scholastic aptitude, reading ability, and high school preparation and college success in a group heavily weighted with students who were failing to achieve an acceptable level of scholarship in their college work. Failing students were selected from among those who completed four semesters of work at the University of California and were receiving special attention from the dean of their college because of their low scholarship. To these were added successful students who were comparable to the failures in terms of the number of semesters of work completed and the number of courses attempted. Some of the conclusions were:

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[6]Joshua Fishman, "College Admission Selection Studies," Review of Educational Research, XXX, No. 4 (October, 1960), 298-310.

[7]C. W. Brown and T. V. Lofgren, "The Nature of Some of the Difficulties of Students Failing the First Two Years of College," Journal of Experimental Psychology, IX, No. 3 (March, 1941), 209-215.

1. In the three variables of high school achievement, reading ability, and scholastic aptitude, the most inferior performance of failing students was in the variable of high school achievement.

2. Failing students achieved their highest relative performance in the variable of reading ability.

3. When high school achievement in the four fields of subject matter were examined, the failing students were found to give their lowest relative performance in English language and social science; and their highest relative performance in mathematics and natural science.

4. In the reading tests utilizing different types of subject matter, the failing groups achieved their lowest relative performance in reading English and language material, and their highest relative performance in reading material in natural science.

5. In the scholastic aptitude tests the lowest relative performance of the failing students was made in reading comprehension.

6. The range of variation in performance in the different part of each of the three principal variables tended to be greater in the failing group than in the successful group.

7. The pattern of achievement of the failing group in the different high school subject matters did not vary greatly from the pattern of the successful group.

8. In the reading tests and scholastic aptitude there was some evidence that the pattern of achievement of the failing groups differed from the pattern of the successful group.

9. The most outstanding difference in the performance of the failing and successful groups was not a difference in pattern of achievement, but rather a difference in level of achievement, the performance of the failing group being depressed in all of the measures studied.

10. The rate of increase in performance associated with increase in college scholarship was found to be higher for all measures between the levels of .85 and 1.18 grade points than between any other level investigated. The most rapid change falls between the level of scholastic failure and the level of scholastic success.

Non-Intellectual Factors and Academic Achievement

Despite the importance of intellectual ability, a considerable portion of the difference between achieving and non-achieving college students must be accounted for in other forms. No one can say with certainty what the factors contributing to a student's failure are without a careful analysis of his innate and acquired capacities, and his social milieu. Undoubtedly, the student's emotions

determine his application and exertions; his instincts influence his emotions, his social reactions guide his intelligence and his intelligence determines his social experiences. Moreover, the educational system affects the totality of his being, and his entire personality affects his school standing and his relations in the school.

Socioeconomic Background and Academic Achievement

Literature on the relationship of socio-economic background to college student's academic performance is extensive. Factors such as parent's education, father's occupation, family income, divorced parents, deceased parents, and ordinal position in the family are all covered in the literature. Largely, however, the findings in this area have been inconclusive.

Pearlman,[8] in his study of the factors related to academic achievement among intellectually superior students at Brooklyn College, noted a positive correlation between the level of parents' education and the student's academic achievement. According to Pearlman, the achievers were more likely to come from families where the father had undertaken studies beyond the baccalaureate level or where the mother had completed at least the high school.

[8]Samuel Pearlman, "An Investigation of the Problems of Academic Under Achievement Among Intellectually Superior College Students." Unpublished Ph.D. dissertation, New York University, 1952.

Pearlman's investigation has, however, failed to establish any significant relationship between the level of academic achievement and other factors such as parental ages and nativity, home language usage, parental occupation, and family income.

In a study that was made to find if certain socio-economic factors, such as divorced parents, deceased parents, and only child status, affected college success Weitz and Wilkinson[9] noted a significant correlation between low academic achievement and only child status. As for the other factors, the investigators reported that no conclusive evidence was found to substantiate the existence of a relationship between these factors and college success.

An interesting approach to the study of socio-economic background was attempted by Barger and Hall.[10] The investigators undertook to determine (1) whether the relationships of socio-economic variables such as parents' marital status, family income, father's education, religious preference, ordinal position and family size to dropping out of college are the same for different ability levels (2) and whether there is a relationship

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[9]Henry Weitz and H. Jean Wilkinson, "The Relationship Between Certain Non-Intellectual Factors and Academic Success In College," Journal of Counseling Psychology, IV, No. I (1957).

[10]Ben Barger and Everette Hall, "The Interaction of Ability Levels and Socio-economic Variables In the Prediction of College Dropouts And Grade Achievement," Educational And Psychological Measurement, XXV, No. 2 (1965).

between these variables and grade achievement when ability is controlled.

The sample included all freshmen and sophomores entering the University of Florida in the fall of 1961. The sample (2,348 males and 1,296 females) was divided, males and females separately, into three groups of approximately equal size. With School and College Ability scores available for the subjects, the resulting groups represent, for each sex, the upper, middle, and lower levels of ability.

The three ability groups were compared by χ^2 in terms of their distribution for the aforementioned variables. Then, within each ability level, those students who failed to complete the academic year (600 males and 309 females) were compared by use of χ^2, on each variable, to the students who completed the year. These two steps provided a measure of the relationship of each variable to ability, as well as a comparison for different ability levels, of the relationship of these variables to dropping out of college. As a next step, those students who completed the academic year were divided into three equal groups on the basis of their SCAT scores. Their distributions for each socio-economic variable were then compared by use of χ^2.

For each of the three ability groups, another division into three equal groups was made on the basis of

grade point average for the academic year. This made possible a comparison, within ability levels, of the ways in which differential achievements relate to variables studied, with ability controlled.

Some of the conclusions reported for the study were as follows:

1. In studying the relationship between socio-economic variables and dropping out of college, investigators should employ some method of controlling ability.

2. There is a strong relationship between some socio-economic factors and ability in the general population, and these relationships may be altered sharply by selection factors in college populations.

3. At the University of Florida, knowledge of socio-economic background adds to the prediction from ability scores of grades achieved in college by females. For males, however, when ability is controlled, there are no significant relationships between the socio-economic variables studied and grades achieved.

4. Various socio-economic variables may have considerably different meanings physchologically for males and females who come to college.

Type and Size of High School

Feder[11] attempted to isolate two factors--size and type of high school, and time elapsed between high school graduation and college entrance--and to determine their effects upon the ability and first year achievement of students in the college of Liberal Arts of the State University of Iowa. His sample was drawn from the freshman classes of the year 1929-1933 inclusive, with the total number of students in each year ranging from 620 to 850. Some of his conclusions were:

1. Students from the larger and out-of-state high schools were best equipped for college in terms of their status on the Freshman Qualifying Examinations.

2. Graduates of parochial schools were the poorest college risks in terms of ability and showed poorest achievement.

3. Graduates of small in-state high schools seemed to be less well-prepared for college as indicated by their qualifying examination. However, their subsequent achievement records suggested that they were able to overcome this apparent handicap.

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[11]Daniel D. Feder, "Factors Which Affect Achievement and Its Prediction At the College Level," Journal of the American Association of Collegiate Registrars, XV (January, 1940).

4. Prediction coefficients for first semester and first year were consistently lower for out-of-state students and graduates of the larger high schools.

5. Students coming directly from high schools seemed to have best preparation for college as measured by the qualifying examinations.

6. Although the students who were out of school contacts longest seemed to be about equal in ability to the group who came directly to college, in actuality they were better as is evidenced by their markedly superior achievement.

7. Students out of school contacts one-half to two years showed poorest achievement in their first year in college; those out of school two and one-half years and more achieved grade averages notably in excess of predictions made for them.

8. Students who migrate seemed to have greater problems of adjustment in their first year at college as indicated by the marked divergence between ability and achievement.

Other findings tend to substantiate the fact that different types of high schools do differ in their effects upon students with regard to college achievement.

Weitz and Wilkinson[12] in their study of freshman students at Duke University found that the graduates of

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[12]Weitz, op. cit., pp. 54-58.

military academies and private preparatory schools were, as groups, somewhat inferior to normal college freshmen with regard to academic achievement.

Personality and Academic Achievement

Several investigators attempted to assess the relationship of certain personality factors to college students' academic performance.

Osmon[13] attempted to determine the personality pattern of the freshman students who enrolled at Indiana State College the first semester in 1961, and withdrew failing during or at the end of their first year. Osmon hypothesized that "the personality pattern of the students who withdrew failing would be significantly different from the personality patterns of the general college population that was used as the norm group." Some of the general conclusions which Osmon reached in his study were:

1. Withdrawing failing freshmen were more extrovertive than the norm group, but at the same time were suspicious of those they were associating with.

2. Withdrawing failing freshmen were more insecure and anxious in their social relationship and tended to be more tense and irritable.

---

[13]William R. Osmon, "The Personality Pattern of Failing Freshmen, Indiana State College," College Journal, XXXV, No. 1 (Winter, 1963), 61-65.

3. Withdrawing failing freshmen were dependent upon others for role and behavior models.

In a study conducted at the University of Kentucky, Smith[14] found that non-achievers were more dissatisfied with the department staff than the achievers.

Jourard and Powell,[15] reported on a study of eighty sophomore college students, noted that underachievers tended to be less mature, have less feeling of personal security and lesser closeness of relationship with friends than the achievers.

Bayliss,[16] studying the factors contributing to the unsatisfactory achievement of first year women students at the University of Wisconsin, noted that emotional disturbances and immaturity were definitely related to unsatisfactory academic achievement.

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[14]Leland Smith, "Significant Difference Between High Ability Achieving and Non-Achieving College Freshman as Revealed by Interview Data," Journal of Educational Research, LIX, No. 1 (September, 1963), 10-12.

[15]S. M. Jourard and W. J. Powell, "Some objective evidence of Immaturity In Underachieving College Students," Journal of Counseling Psychology, X (1935), 276-282.

[16]Joe Burrell Bayliss, "A Study of the Factors Contributing to the Unsatisfactory Scholastic Attainment of First Year Women Students," Journal of Educational Research, XXVII (May, 1934), 687-697.

Educational Goals and Academic Achievement

Several research findings provide a substantial evidence on the relationship between educational goals and academic achievement. In the study by Bayliss, cited before, data indicated that one outstanding factor for students' failure was the lack of clarity of educational goals.

Another study by Farnsworth[17] supports the above finding. According to him, many failures, though comparing favorably in intellectual level and college board scores with the successful students, showed little value for learning per se and, in particular, for the liberal arts. They were more vocationally or "in anthropological terms, 'Doing' oriented."

Gekoske[18] in his study of students' mortality points out that students who were unable to see a real vocational use of their curriculum tended to achieve poorly. On the other hand, studies by Alexander and Woodruff; Fredricksen and Schrader; Iffert; Rust and Ryan[19] show the students with clearly defined vocational choices are more likely to be high achievers.

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[17] D. S. Farnsworth, "Some Non-Academic Causes of Success and Failure In College Students," College Admissions, II (1955), 72-78.

[18] N. Gekoski and S. Schwartz, "Student Mortality and Related Factors," Journal of Educational Research, LIV (January, 1961), 192-194.

[19] Nevitt Sanford (ed.), The American College (New York: John Wiley and Sons, Inc., 1967).

CHAPTER III

METHODOLOGY

This chapter focuses on the presentation of the methodology utilized for this study. The material presented falls into four parts: (1) a description of the setting of the study, (2) the method of sample selection, (3) preparation, development, and administration of the questionnaire, and (4) the statistical procedures employed in the analysis of the data.

Setting of the Study

The study was conducted at Riyadh University--the largest of four universities in Saudi Arabia. It is exclusively a male institution and accepts females only in its correspondence program.

Riyadh University, inaugurated in 1957, was the first institution of higher education in the country to deal with secular subjects. It opened with a Faculty of Letters enrolling fewer than twenty-five students. In 1971-72 it housed eight faculties--the Faculty of Letters, the Faculty of Commerce, the Faculty of Pharmacy, the Faculty of Science, the Faculty of Engineering, the Faculty of Medicine, the Faculty of Education, and the Faculty of

Agriculture. By 1971 enrollment in all schools reached the figure of 3,438.[1]

According to the University's Five Year Developmental Plan,[2] Riyadh University will receive 50 per cent of the country's high school graduates, and student enrollment will accordingly reach the figure of 7,000 students by 1974-1975. The university is national in character, and draws its students from the various provinces of Saudi Arabia.

Pertinent Admissions and Academic Regulations

To be eligible for admission to the university the applicant must have the high school certificate or its equivalent. In addition to this general requirement some faculties, such as the Faculty of Medicine and the Faculty of Engineering, require that their students have a higher level of performance on the final high school examinations.

Students' evaluation for promotion from one academic year to another depends on their performance in during-year assignments and the annual examinations held at the end of the academic year for each subject studied. Should a student fail in a certain subject, he may take a

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[1] Saud Jammaz, op. cit., Chapter VI.

[2] Riyadh University, Riyadh University's Suggested Five Year Plan, 1970-71--1974-75, Riyadh, 1970.

make-up examination at the beginning of the next academic year. Should he fail again, he is not promoted to a higher academic year, and he has to repeat those subjects in which he failed. The student has the right to repeat one academic year in case of failure. Should he fail the annual examination for the second time, he is automatically dismissed.

The Sample

The sample for this study consisted of two groups. First, an experimental group comprising all freshman students enrolled at Riyadh University in the year 1972-1973 who were, as measured by the university annual examination, failing in more than two subjects and achieving a total score average below the pass level. Second, a control group comprising all freshman students of the same year who were, as indicated by the university annual examination, successful and achieving a total score average above the "pass" level.

The Questionnaire

As indicated previously, the purpose of the present study was to determine the reasons for failure among freshman students at Riyadh University. After consultation with several sources in research methodology, the questionnaire was decided upon as the primary instrument for this investigation.

Development of the Questionnaire

After a rather extensive review of the literature in the field of college students' failure and academic achievement, certain factors were delineated which the investigator hypothesized might be related to the problem of academic failure among freshman students at Riyadh University.

The tentative form was then submitted to the investigator's doctoral committee chairman. Some of the items on the original questionnaire were modified in accordance with his suggestions. Later, committee approval was obtained.

Along with the questionnaire a cover letter was developed that would accompany each questionnaire. The purpose of the questionnaire was explained and participants were given instructions concerning the method of answering the questions.

A copy of the questionnaire and the accompanying cover letter form the appendix.

Pre-testing of the Questionnaire

With the investigator's doctoral committee's approval of the draft questionnaire, and in accordance with their suggestions, the questionnaire was pre-tested on 46 freshman students at Riyadh University. The main purpose

of the pre-test was to solicit the students' opinion as to the questionnaire's limitations, clarity, usefulness and difficulties encountered in answering the questions and any criticisms or additions they felt were appropriate to the questionnaire in general.

The pre-test response to the questionnaire was indeed gratifying. An analysis of the comments and criticisms was undertaken and subsequent changes were made in the questionnaire.

Distribution of the Questionnaire

After the questionnaire had been developed in its final form, copies were submitted to the rector of Riyadh University and the secretary general at the university in order to obtain their approval for the distribution of the questionnaire. Indeed, they were more than generous and were of invaluable assistance. A letter from the rector's office was sent to deans of schools communicating the university administration's approval for the distribution of the questionnaire and urging them to help in facilitating the procedure. The copies of the questionnaire were then submitted to the deans for distribution in their various schools. In their turn, the deans of schools instructed student counselors in each college to distribute copies to first time freshman students during class sessions. After answering the questionnaire, each student wrote his full

name on the form and returned it to the student counselors. The forms were later collected from the deans of schools.

By April 18th, one thousand and thirty-two returns were obtained. The returns represented 91.2 of the entire number of freshman students enrolled for the first time in 1972-1973 at Riyadh University.

Because the comparison had to be made between the failures and the high achievers--as measured by the annual examinations held at the end of the academic year--the investigator waited until the results of the examination were published. The results were then secured from the office of student personnel, and then the investigator sat to re-group the students' replies.

In accordance with the result, students with "good," "very good," and "excellent" grades were included in the control category. Students failing three or more subjects and attaining a total score average below the "pass" level were included in the experimental category. Students with a total score average at the pass level (whether successful or failure) were excluded from this study. Consequently, the investigator was left with two groups (1) a group of failures (320 in number) representing 82 per cent of the failures, and (2) a group of high achievers (220 in number) representing approximately 86 per cent of all the high achievers among the freshman students for 1972-1973.

Other Data

In addition to the data in the questionnaire, the senior high school total scores of the students who participated in answering the questionnaire were obtained almost entirely from the Office of Examinations in the Ministry of Education. A small number of these students had no records in that office. Their records were, therefore, obtained from their respective colleges.

Statistical Procedures Used

Two procedures were utilized in the analysis of this study. First, a distribution of percentages comparing the experimental group (the failures) and the control group (the high achievers) with respect to the factors delineated in the questionnaire was made.

Second, the χ^2 test of significance was decided upon as a test of independence. The null hypothesis of no association was assumed; that is, that there is no relationship between failure among freshman students at Riyadh University and the factors delineated. When a difference is stated as statistically significant, reference is made to 0.1 level of confidence.

Subsequent to the tabulation and coding of the data on IBM cards, the computer center of M.S.U. was utilized to derive the necessary computations.

CHAPTER IV

FINDINGS

As explained in Chapters I and III, certain factors were developed which were hypothesized to have an influence upon freshman students' academic achievement at Riyadh University.

The present chapter will proceed to examine each of the factors as they relate to failure or high academic achievement. For purposes of clarity and precision, each factor will be presented as a separate entity. Where two factors are considered two parts of one entity, overlap will occur and the two factors will be discussed together.

Age and Academic Achievement

Age was utilized as an independent criterion to be examined. Both failures and high achievers were grouped into four age brackets.

As can be seen from Table 1, the largest percentage of failures (59 per cent) and the largest percentage of high achievers (56 per cent) were in the age category 18-21. The smallest percentages of both groups were in the age category below 18 and over 24.

Table 1. Age and academic achievement.

Age	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Below 18	0	0	3	1.41	4.16	
18-21	175	59.32	118	55.66	0.27	
22-24	105	35.59	81	38.20	0.22	
Over 24	15	5.08	10	4.71	0.02	
					4.724	3

The χ^2 of 4.724 with 3 degrees of freedom, indicates that the difference between the two groups is not statistically significant. Thus it cannot be inferred that a correlation exists between age and academic achievement.

Marital Status and Academic Achievement

Table 2 deals with the distribution of both failures and high achievers with regard to marital status.

Table 2. Marital status and academic achievement.

Marital Status	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Non-married	279	94.25	180	85.30	1.08	
Married	17	5.74	31	14.69	10.41	
					11.509	1

Apparently, both groups represent a large number of non-married individuals (94 per cent of the failures and 85 per cent of the high achievers). As can be seen from the χ^2 column, a χ^2 of 1.08 shows that the difference is minimal. If we turn to the married group, we notice that the difference takes another picture. Fifteen per cent of the high achievers were married. This percentage is against only 6 per cent of the failures.

The χ^2 of 11.509 and 1 degree of freedom indicates a significant difference between the failures and the high achievers. Obviously, married students are more likely to achieve higher than non-married students. Consequently, we can say that a correlation does exist between marital status and academic achievement.

Father's Occupation and Academic Achievement

Research findings on the effect of father's occupation on college student's academic achievement are not decisive.[1] Question 3 on the questionnaire dwelt on this issue. Each student was asked to select one of the items listed on Table 3 which best describes his father's occupation. The responses were as follows:

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[1] C.F. Chapter II.

Table 3. Father's occupation and academic achievement.

Fathers Occupation	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Businessman	79	27.43	51	24.40	0.41	
Clerk	86	29.86	63	30.14	0.00	
Farmer	66	22.91	33	15.78	3.07	
Professional	14	4.86	36	17.22	18.39	
Technician	12	4.16	11	5.26	0.31	
Unemployed	31	10.76	15	7.17	1.67	
					23.917	5

When we examine the table, we find that while the proportion of failures to high achievers is almost the same among sons of businessmen, clerks, and technicians, differences exist among sons of professional, farmer, and unemployed fathers. It is clear, however, that the difference between failures and high achievers is sharper among those whose parents are professionals. The calculated χ^2 of 18.39 shows that sons of professionals have a better chance of achieving highly.

The χ^2 of 23.917 and 5 degrees of freedom indicates a difference that is statistically significant. We may, therefore, conclude that father's occupation is correlated with student's academic achievement.

Father's Education and Academic Achievement

In Chapter II, it was indicated that father's education has an important impact upon his son's academic achievement. In an effort to determine the validity of this finding with respect to different cultures, freshman students at Riyadh University were requested to indicate the level of their fathers' education. Table 4 depicts their answers:

Table 4. Father's education and academic achievement.

Father's Education	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Post graduate	2	0.67	5	2.39	2.61	
College graduate	23	7.74	37	17.70	10.25	
High School graduate	18	6.06	17	8.13	.75	
Junior High School	25	8.41	27	12.91	2.40	
Elementary School	46	15.48	33	15.78	0.00	
Literate, but no formal education	119	40.06	65	31.10	2.71	
Illiterate	64	21.54	25	11.96	6.40	
					25.192	6

Certainly, a χ^2 of 25.192 with 6 degrees of freedom represents a statistically significant difference between the failures and the high achievers. A careful examination of Table 4 reveals that differences are wider in the upper and

lower levels of education. While 20 per cent of the high achievers said that their fathers were college graduates or higher, only 8 per cent of the failures gave the same answer. On the other hand, a higher percentage of the failures (62 per cent) indicated that their fathers had no formal education or were illiterate. This is against 43 per cent of the high achievers.

We can conclude that the higher the father's level of education is, the more likely his son's achievement will be higher. On the other hand, the lower the father's level of education is, the more likely his son's achievement will be lower. Thus, a relationship does exist between father's education and student's academic achievement.

Mother's Education and Academic Achievement

Likewise, freshman students were asked to indicate the level of their mother's education. Because women's education in Saudi Arabia has a short history, the categories were limited to three as can be seen from Table 5.

Obviously, the largest percentage of both failures and high achievers (44 per cent of the failures and 46 per cent of the high achievers) had illiterate mothers. The second largest percentage (41 per cent of the failures and 44 per cent of the high achievers) said that their mothers were literate but had no formal education.

Table 5. Mother's education and academic achievement.

Mother's Education	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Elementary School and above	44	14.96	21	10.00	2.28	
Literate, but no formal education	120	40.52	93	44.28	0.31	
Illiterate	130	44.21	96	45.71	0.07	
					2.667	2

With a χ^2 of 2.667 and 2 degrees of freedom the difference between the two groups is not statistically significant. Thus it cannot be said that a correlation exists between freshman students' academic achievement and their mothers' education.

Father's Annual Income

One of the most common explanations of failure is lack of financial support.[1] In an attempt to examine the validity of this proposition, the researcher asked freshman students at Riyadh University to indicate their fathers' annual income in Riyals.[2] The following were their replies:

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[1]Nevill Sanford (ed.), op. cit., 646-647.

[2]In a typical Saudi family, the father's income represents the whole family income.

Table 6. Father's annual income and academic achievement.

Father's Annual Income	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Over 30 thousand	13	4.98	15	7.31	1.03	
20-30 thousand	34	13.02	40	19.51	3.03	
10-19 thousand	49	18.77	42	20.48	0.16	
5-9 thousand	83	31.80	65	31.70	0.00	
Less than 5 thousand	82	31.4	43	20.97	4.66	
					8.924	4

The data apparently reflect the fact that students with higher father's income tend to achieve better academically. This is especially noted in the second category where 20 per cent of the high achievers mentioned an income ranging from twenty to thirty thousand riyals as against 13 per cent among the failures who gave the same answer. On the other hand, a higher percentage among the failures (31 per cent) indicated an income lesser than five thousand riyals as against only 21 per cent of the high achievers.

The calculated χ^2 of 8.924 with 4 degrees of freedom indicates no significant difference between the two groups at 0.1 level. Thus, the findings indicate that academic achievement is not associated with the economic condition.

Population of the Town in Which the Students Attended High School and Academic Achievement

Question 7 in the questionnaire sought to determine if a relationship existed between the location of the high school and the subsequent failure or high academic achievement among freshman students. The respondents were requested to indicate the size of the population of the town in which they attended high school. Their answers are reflected in Table 7.

Table 7. Population of the town in which the students attended high school and academic achievement.

Population	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Over 50 thousand	132	44.59	127	59.90	5.67	
20-49 thousand	104	35.13	63	29.71	1.10	
10-19 thousand	55	18.58	18	8.49	8.74	
Less than 10 thousand	5	1.68	4	1.88	0.02	
					15.563	3

What do the findings reveal? The data indicate that the failures and the high achievers differ with regard to this issue. While only 45 per cent of the failures went to high schools in some of the largest Saudi communities, a larger percentage of the high achievers (60 per cent) went

to high schools in such communities. On the other hand a greater percentage of the failures attended high schools in small communities--20 per cent of the failures as against only 10 per cent of the high achievers.

With a χ^2 of 15.563 and 3 degrees of freedom, the difference between the two groups is statistically significant. Thus, we can say that freshman students who attended high schools in large communities are more likely to be high achievers, while students who attended high school in small communities have lesser chance of being high achievers.

Type of Dwelling and Academic Achievement

As mentioned earlier, Riyadh University draws its students from different parts of Saudi Arabia. The university, however, does not have housing facilities and students have, therefore, to live off campus. Students stay with relatives, friends, with other students, or all alone. The researcher attempted to determine whether a relationship existed between the type of dwelling freshman students had and their subsequent failure or high academic achievement. Students were asked to indicate the type of dwelling they occupied. Table 8 gives their responses.

The largest percentage of both the failures and the high achievers lived with their families (31 per cent of the failures and 41 per cent of the high achievers). The second largest percentage of both groups lived with other

Table 8. Type of dwelling and academic achievement.

Present type of Dwelling	Failure No.	%	High Achiever No.	%	χ^2	d.f.
Living with own family	93	31.41	86	40.75	3.03	
Living with college students	67	22.63	61	28.90	1.91	
Living with non-university friends	61	20.60	17	8.05	12.60	
Living with relatives	59	19.93	29	13.74	2.71	
Living alone	16	5.40	18	8.53	1.78	
					22.03	4

college students (23 per cent of the failures and 29 per cent of the high achievers). This is followed by "living with relatives," "living with non-university friends," and "living alone."

As apparent from the table, the χ^2 of 22.03 with 4 degrees of freedom indicates a statistically significant difference between the two groups. While the difference between failures and high achievers is minimal among students living alone and students living with relatives, obviously living with non-university friends tends to decrease the chance of high achievement and probably contributes to students' failure, while living with their own families tends to increase the possibility of high achievement.

Thus, we may conclude that with a χ^2 of 22.03 and 4 degrees of freedom the difference is statistically significant and a relationship does exist between the type of dwelling students occupy and academic achievement.

Housing Conditions and Academic Achievement

Housing conditions were considered an important criterion to be examined. Question 9 asked the students to evaluate their housing situation. They responded in the following manner:

Table 9. Housing conditions and academic achievement.

Housing Conditions	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Excellent	20	6.73	23	10.84	2.47	
Good	105	35.35	97	45.75	3.36	
Fair	128	43.09	68	32.07	3.89	
Poor	44	14.81	24	11.32	1.12	
					10.885	3

It is clear from the table that a large percentage of the high achievers enjoyed better housing conditions. Eleven per cent of the high achievers rated their housing conditions"excellent," 46 per cent rated it "good," and 32 per cent rated it "fair." This is against only

7 per cent of the failures who rated their housing conditions "excellent," 35 per cent "good," 43 per cent "fair," and 15 per cent "poor."

With a χ^2 of 10.885 and 3 degrees of freedom, the difference is not statistically significant. We can, therefore, conclude that housing conditions are not related to academic achievement.

Food Situation and Academic Achievement

Table 10 presents the results of a question dealing with the food situation of both the failures and the high achievers. It was assumed that if a difference existed between the food situation of the two groups the failure and high achievement at the freshman level might be due to this difference. Both groups were asked to appraise their food situation. The following are their appraisals:

Table 10. Food situation and academic achievement.

Food Situation	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Excellent	29	9.76	31	14.62	2.47	
Good	134	45.11	100	47.16	0.10	
Fair	126	42.42	74	34.90	1.77	
Poor	8	2.69	7	3.30	0.15	
					4.525	3

Although a small difference exists between the two groups in that a higher percentage of the high achievers indicated a better food condition, yet with a χ^2 of 4.525 and 3 degrees of freedom, the difference is not statistically significant. Thus, it cannot be concluded that food situation is related to academic achievement.

Recreational Situation and Academic Achievement

Question 11 in the questionnaire asked the students to rate their recreation situation. Table 11 reveals their evaluation.

Table 11. Recreational situation and academic achievement.

Recreational Situation	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Excellent	12	4.04	9	4.24	0.00	
Good	45	15.15	42	19.81	1.56	
Fair	119	40.06	88	41.50	0.05	
Poor	121	40.74	73	34.43	1.28	
					2.938	3

Obviously, the largest percentage among the failures (41 per cent) rated their recreational situation "poor." The second largest percentage of this group (40 per cent) said that it was "fair," while only 15 per cent mentioned

that it was "good," and 4 per cent described it as "excellent." The differences between this group and the group of the high achievers are indeed minimal. Forty-one per cent of the high achievers rated their recreational situation "fair," 34 per cent rated it "poor," 20 per cent rated it "good," and 4 per cent rated it "excellent."

With a χ^2 of 2.938 and 3 degrees of freedom, the difference between the failures and the high achievers is not statistically significant. Thus, we can say that the recreational situation is not correlated with academic achievement.

Physical and Psychological Condition and Academic Achievement

Physical and psychological conditions were utilized as independent criteria in an effort to discover what relationship existed between these two criteria and subsequent academic achievement at the freshman year. Both the failures and the high achievers were asked to describe their psychological and physical conditions. Tables 12 and 13 indicate their responses.

As can be seen from Table 12, with a χ^2 of .36 and 3 degrees of freedom the failures almost do not differ from the high achievers. Forty-two per cent of the failures rated their psychological condition "excellent," 29 per cent

Table 12. Psychological condition and academic achievement.

Psychological Condition	Failure No.	%	High Achievers No.	%	χ^2	d.f.
Excellent	135	41.69	90	42.45	.01	
Good	87	29.49	57	26.87	.25	
Fair	50	16.95	38	17.38	.04	
Poor	35	11.37	27	12.74	.06	
					.36	3

"good," 17 per cent "fair" and 11 per cent "poor." The percentages for the high achievers are almost the same.

Similarly, Table 13 indicates no significant difference between the failures and the high achievers. With a χ^2 of 3.720 and 3 degrees of freedom the difference, as mentioned before, is not statistically significant between the two groups. Thus we cannot conclude that there is a

Table 13. Physical condition and academic achievement.

Physical Condition	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Excellent	50	16.83	41	19.33	0.43	
Good	160	53.87	10.8	50.94	0.19	
Fair	79	26.59	51	24.05	0.31	
Poor	8	2.69	12	5.66	2.76	
					3.720	3

relationship between either the psychological or physical condition and academic achievement.

Daily Travel to College and Academic Achievement

The geographical distance from the students' homes to the university was considered a possible factor affecting freshman students' academic achievement. Question 14 asked the respondents to indicate the approximate time they spent travelling from their homes to the university. Table 14 reveals their answers:

Table 14. Daily travel to college and academic achievement.

Daily Travel to College	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Over an hour	28	9.42	33	15.63	3.95	
3/4 an hour	60	20.20	36	17.06	0.63	
1/2 an hour	84	28.28	55	26.54	0.12	
1/4 an hour	72	24.24	56	26.54	0.25	
less than 1/4 hour	53	17.84	30	14.21	0.99	
					5.996	4

When we look at the table we see that: First, a negligible difference exists between the failures and the high achievers who lived relatively close to the university (less than 1/4 hour, 1/2 hour, and 3/4 hour). Second, when

the distance requires more than an hour, a shift is noticed. A larger percentage of the high achievers (16 per cent) said that their daily travel to the university requires more than an hour as against only 9 per cent of the failures.

With a χ^2 of 5.996 and 4 degrees of freedom, the difference between the two groups is not statistically significant. Therefore, it cannot be concluded that academic achievement is correlated with daily travel to college.

Initial Contemplation of Going to College and Academic Achievement

Table 15 reveals that the largest percentage of both groups started seriously considering going to college while in intermediate school. The second largest percentage began to consider going to college while in high school. On the other hand, only 18 per cent of the failures and 8 per cent of the high achievers considered going to college after graduating from high school.

As we can see from the table, the χ^2 of 15.563 with 3 degrees of freedom indicates a significant difference between the failures and the high achievers. A re-examination of the table shows that the difference is sharper in the second and fourth category. Where only 45 per cent of the failures started thinking of going to college while in intermediate schools, 60 per cent of the high achievers did so. On the other hand, while only

Table 15. Initial contemplation of going to college and academic achievement.

Initial Contemplation of Going to College	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
In Elementary School	5	1.68	4	1.88	0.02	
In Intermediate School	132	44.59	127	59.90	5.67	
In High School	104	35.13	63	29.71	1.10	
After Completing High School	55	18.58	18	8.49	8.74	
					15.563	3

8 per cent of the high achievers thought of going to college after their graduation from high schools, 19 per cent of the failures did so. Column 4 shows a χ^2 of 5.67 for the second category, and 8.74 for the fourth category.

We can conclude that there is a relationship between students' initial contemplation of going to college and their academic achievement. This conclusion is based on the fact that a χ^2 of 15.563 with 3 degrees of freedom reveals a statistically significant difference.

Source and Influence on Students' Decisions to go to College and Academic Achievement

Table 16 deals with the distribution of the sources of influence on the decision of both the failures and the high achievers to go to college. The table reads as follows:

Table 16. Source of influence on students' decisions to go to college and academic achievement.

Who Influenced Your Decision Most to go to College	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Parents	65	22.03	50	23.58	0.12	
Brothers	58	19.66	55	25.94	2.18	
Teachers	25	8.47	16	7.54	0.12	
Friends	52	17.62	25	11.79	2.75	
Sheer Interest	95	32.20	66	31.13	0.03	
					5.256	4

What do the findings in the table reveal? It appears that the differences between the failures and the high achievers in terms of the source of influence are minimal. Although the χ^2 of 5.256 with 4 degrees of freedom indicates no statistically significant difference, it is interesting to notice that a higher percentage of the high achievers (26 per cent) and 20 per cent of the failures were influenced by brothers. On the other hand, a greater percentage of the failures (18 per cent) and 12 per cent of the high achievers were influenced by friends.

We can conclude that there is no relationship between the source of influence of students' decision to go to college, and their subsequent achievement.

Family's Feeling About College Education and Academic Achievement

Research findings indicate that family encouragement can form a motivating factor which may lead their sons to achieve highly. It may also form a discouraging factor which leads them to failure.[3] Whether the case at Riyadh University is in line with these findings is the point which the writer has attempted to discover.

Question 17 in the questionnaire focuses on the influence which the family's attitude towards their sons education exerts on the latter's academic achievement. The question asks, "How does your family feel about your going to college?" The answers are shown in Table 17.

Table 17. Family's feeling about going to college and academic achievement.

Family's Feeling About	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Greatly Encouraging	95	32.09	97	45.97	6.19	
Fairly Encouraging	80	27.03	52	24.64	0.29	
Partly Encouraging	61	20.61	32	15.17	2.16	
No Encouragement	60	20.27	30	14.22	2.24	
					10.88	3

[3] The American College, op. cit., pp. 641-642.

As we can see from Table 17, a higher percentage of the failures exhibited a greater degree of partial and no encouragement (41 per cent of the failures and 29 per cent of the high achievers).

The calculated χ^2 of 10.880 with 3 degrees of freedom shows no statistically significant difference.

We can, therefore, conclude that there is no relationship between family's feelings about going to college and students' academic achievement.

Reasons for Going to College and Academic Achievement

As seen in Chapter II, the literature reveals that students with definite vocational goals are likely to achieve higher than those who do not have such goals.

Question 18 asked both the failures and the high achievers what their primary reason for going to college was.

The data in Table 18 shows that differences between the two groups are minimal. The calculated χ^2 of 6.95 with 3 degrees of freedom indicates no statistically significant difference between the two groups. However, a higher percentage of the high achievers (43 per cent) indicated that their primary reason for going to college was to prepare for a certain profession. This is against only 34 per cent of the failures who noted the same reason. Furthermore, a higher percentage of the failures (22 per cent) had no

Table 18. Students' reasons for going to college and academic achievement.

Primary Reason for Going to College	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Prepare for certain profession	100	33.78	90	42.71	2.40	
For the sake of learning	87	29.39	64	30.37	0.03	
To get a job	43	14.53	27	12.79	0.23	
To be like other students and friends	66	22.29	30	14.22	4.29	
					6.95	3

specific reason for going to college. This is against only 14 per cent of the high achievers.

With a χ^2 of 6.95 and 3 degrees of freedom, the difference between the group of failures and the group of higher achievers is not statistically significant. Thus, it cannot be concluded that there is a relationship between students' reasons for going to college and subsequent academic achievement.

Students' Feelings About College Education in Relation to Future Vocation and Academic Achievement

For further validation of the previous question, both the failures and the high achievers were asked how they felt

about their college education in relation to their future vocation. Table 19 shows their answers:

Table 19. Students' feelings about their college education in relation to their future vocation and academic achievement.

Students' Feelings About Their College Education in Relation to Their Future Vocation	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Of Great Importance	108	36.49	101	47.87	3.85	
Important	79	26.69	60	28.43	0.12	
Helpful But Not Important	45	15.20	20	9.48	3.13	
Not Necessary	64	21.62	30	14.22	3.55	
					10.649	3

The results reveal some differences between failures and high achievers. Whereas 76 per cent of the high achievers felt their education was of "great importance" or just "important" for their future vocation, only 63 per cent of the failures indicated they had this same feeling. Conversely, a higher percentage of the failures (37 per cent) felt that their education was "helpful but not important" or "not necessary," as against only 24 per cent of the high achievers. These differences are not statistically significant at the .01 level ($\chi^2 = 10.649$) and it

cannot be concluded that a relationship exists between students' feelings about college education in relation to future vocation and academic achievement.

Students' Feelings About College Education and Academic Achievement

Question 20 in the questionnaire was an attempt to discover whether or not the failures and the high achievers differ in their satisfaction regarding their freshman experience. The students were asked, "On the whole, how do you feel about your education?" Table 20 reveals their responses.

Table 20. Students' feelings about college education and academic achievement.

Students' Feelings About College Education	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Exciting	46	15.59	60	28.43	9.67	
Interesting	84	28.47	75	35.54	1.95	
Not Interesting	89	30.16	55	26.06	0.72	
Boring	76	25.76	21	9.95	16.03	
					28.410	3

With a χ^2 of 28.410 and 3 degrees of freedom, the difference between the two groups is statistically significant. A greater percentage of the high achievers felt their education was "exciting" or "interesting" (64 per cent). This is against only 44 per cent of the failures. The failures appear more dissatisfied with their freshman experience. Of the failures, 56 per cent said that their college experience was either "not interesting" or "boring." This is against only 36 per cent of the high achievers. Therefore, it can be said that failure is significantly correlated with students' feeling about their college education. It is apparent that the higher the satisfaction the student has with his college education, the better his chance of high achievement is. On the other hand, the lower the satisfaction the student has with his college education, the more likely he is to fail.

Students' Intentions to Continue in College and Academic Achievement

In an attempt to determine the degree of motivation to continue in college until graduation among the failures and the high achievers and to discover whether a relationship existed between this motivation and subsequent failure or high achievement in the freshman year, two questions were developed. Question 21 in the questionnaire asked the participants if they intended to continue in

college until they graduated. The table below shows their answers.

Table 21. **Students' intentions to continue in college until graduation and academic achievement.**

Students' Intentions to Continue in College	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Certainly	105	35.47	75	35.54	0.00	
Probably	64	21.62	69	32.70	5.75	
Do Not Know	107	36.14	38	18.00	14.16	
No	20	6.75	29	13.74	6.21	
					26.160	3

Very interesting findings are revealed in Table 21.

First, while the proportion of the failures (35 per cent) who indicated that they were certain of their intention to continue in college is the same as that of the high achievers, a greater percentage of the latter (33 per cent) said that they would "probably" continue in college until they graduated.

Second, a larger percentage of the failures were undecided (36 per cent of the failures and 18 per cent of the high achievers).

Third, a greater percentage of the high achievers (14 per cent) said they do not intend to continue in

college until graduation. This is only against 7 per cent of the failures. As can be seen from the table, the χ^2 of 26.160 with 3 degrees of freedom indicates that the failures and the high achievers do not significantly differ in terms of their intention to continue in college.

Thus, we can conclude that indecisiveness of students' intention to continue in college until graduation is a contributing cause for students' failure or high achievement.

A further attempt to determine the degree of the students' motivation to continue in college until graduation and its relationship to subsequent academic achievement was question 22 which asked the participants whether they would be willing to repeat the academic year in case of failure. Table 22 reflects their responses.

Table 22. Students' willingness to repeat the academic year in case of failure and academic achievement.

Students Willingness to Repeat the Year in Case of Failure	Failure		High Achievers		χ^2	d.f.
	No.	%	No.	%		
Certainly	137	46.12	156	73.93	16.52	
Probably	83	27.94	33	15.63	8.17	
Do Not Know	69	23.23	15	7.10	19.38	
No	8	2.69	7	3.31	0.15	
					44.275	3

While 74 per cent of the high achievers indicated that "certainly" they would repeat the academic year in case of failure, only 46 per cent of the failures gave the same answer. Conversely, a higher percentage of the failures (51 per cent) were uncommitted--they gave the answers "probably" and "do not know" as against only 24 per cent of the high achievers.

With a χ^2 of 44.275 and 3 degrees of freedom, the difference is statistically significant.

We can hereby say that freshman students' willingness to repeat the academic year in spite of failure is significantly correlated with academic achievement. Thus, students who are certain that they would repeat the academic year if they fail are likely to be high achievers. On the other hand, students who are uncertain of their willingness to do so are more likely to fail.

Primary Source of Influence on Students' Decision to Select an Academic Major and Academic Achievement

Question 23 was developed in an attempt to determine (1) whether the failures and the high achievers differed with regard to the source of influence upon their selection of their academic majors and (2) the relationship between the source of influence and subsequent academic achievement. Both the failures and the high achievers were asked who

influenced their decision most. The table below shows their replies:

Table 23. Primary source of influence on students' selection of majors and academic achievement.

Primary Source of Influence	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Relatives	37	12.80	27	13.04	0.00	
University Administration	30	10.38	23	11.11	3.19	
Fellow Students	116	40.12	39	18.84	18.55	
Sheer Interest	106	36.67	118	57.00	11.02	
					32.811	3

The findings reflect a statistically significant difference between the failures and the high achievers.

First, while only 37 per cent of the failures indicated that they had selected their academic major because of sheer interest, 57 per cent of the high achievers indicated that their choice of major was the result of sheer interest.

Second, a high percentage of the failures (40 per cent) were influenced by their fellow students when they selected their majors, whereas only 19 per cent of the high achievers said that their selection of majors was influenced by their fellow students.

Therefore, we can conclude that source of influence on the students' selection of academic major is significantly correlated with academic achievement. It is evident that students who choose an academic major out of sheer interest are more likely to be high achievers while students who are influenced by college students in their choice are more likely to be failures.

Students' Feelings About Their Academic Majors and Academic Achievement

Question 24 is closely related to question 23. Both the failures and the high achievers were asked the following, "Now that the academic year is almost over, do you think your selection of your academic major was sound?" Table 24 presents the students' replies.

Table 24. Students' feelings about their academic major and academic achievement.

Students' Feelings About Their Majors	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Yes	173	58.82	152	73.43	4.14	
Not Sure	85	29.41	39	18.84	5.60	
No	34	11.76	16	7.73	2.15	
					11.89	2

It is clear that while the majority of the high achievers (73 per cent) felt that their selection of academic majors was sound, only 59 per cent of the failures felt this way. On the other hand, a higher percentage of the failures (41 per cent) said they were either not sure or positive that their selection was unsound. This is against 26 per cent of the high achievers who gave similar responses.

With a χ^2 of 11.89 and two degrees of freedom, the differences between the failures and the high achievers are statistically significant and we can say that academic achievement is correlated to students' certainty of the soundness of their choice of academic majors. It is evident that uncertainty and negativism are two factors which are probably conducive to failure.

A further validation of the relationship of students' feelings towards their academic majors and academic achievement was desired. Consequently, both the failures and the high achievers were asked whether they would be willing to change their academic major if given the chance to do so with no loss of time. Table 25 gives their replies.

Table 25 reveals that the failures and the high achievers differ in their responses. Nevertheless, the differences are smaller than on the two previous questions. Seventy-five per cent of the high achievers answered negatively as against 72 per cent of the failures. Again, a

Table 25. Students' willingness to change majors and academic achievement.

Students' Willingness to Change Majors	Failures No.	%	High Achievers No.	%	χ^2	d.f.
No	213	71.72	159	75.00	3.77	
Not Sure	75	25.25	40	18.87	2.29	
Yes	9	3.03	13	6.13	3.21	
					9.275	2

higher percentage of the failures (28 per cent) answered in the affirmitive or said they were not sure; this is against only 25 per cent of the high achievers.

With a χ^2 of 9.275 and 2 degrees of freedom the difference is not statistically significant and we cannot, therefore, conclude that students' willingness to change their major is correlated to academic achievement.

Students' Evaluation of Their Progress in College and Academic Achievement

At Riyadh University students are rarely informed of their progress during the academic year. Question 26 was formulated in an attempt to find out whether the failures and the high achievers differed with regard to their realization of the level of their academic progress. The failures and the high achievers were asked to evaluate

their progress in college. Table 26 reveals that the two groups differ in this respect.

Table 26. Students' evaluation of their progress in college and academic achievement.

Students' Evaluation Of Their Progress	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Excellent	103	34.79	96	45.28	3.46	
Good	63	21.28	61	28.77	2.83	
Slow	71	23.98	35	16.50	3.30	
No Progress	59	19.93	20	9.42	9.50	
					19.127	4

It is apparent that a higher percentage of the failures (44 per cent) noted either slow or no progress. This is against only 26 per cent of the high achievers. Conversely, the rest of the high achievers (74 per cent) described their progress as being excellent or good as opposed to only 56 per cent of the failures. As the χ^2 of 19.127 with 4 degrees of freedom, the differences are statistically significant. Therefore, students' realization of their academic progress is correlated with academic achievement.

Students' Associations and Academic Achievement

The peer group is often cited as a determining influence affecting college students' academic achievement. Table 27 deals with the relationship between the time spent with various types of peer groups and subsequent academic achievement. Both the failures and the high achievers were asked with whom they usually spent their time out of class. They answered in the following manner:

Table 27. Students' associations and academic achievement.

Students' Associations	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Fellow students	51	17.34	54	25.71	4.11	
Class mates	99	33.67	106	50.47	8.56	
Outside friends	83	28.23	29	13.80	11.45	
Outside relatives	61	20.74	21	10.00	8.69	
					32.783	3

Apparently the failures and the high achievers do differ with regard to the type of peer groups with whom they have close association. The majority of the high achievers (76 per cent) indicated a clear association with fellow students, while the majority of the failures (49 per cent) indicated that they associated more with outside university friends and outside university relatives.

As the calculated χ^2 of 32.783 with 3 degrees of freedom indicates, these differences are statistically significant. Thus, the natural conclusion is that a significant correlation exists between students' type of association and academic achievement. Students who associate more with fellow students are likely to be high achievers. On the other hand, close and frequent association with outside university friends or relatives leads probably to failure.

Students' Adjustment and Academic Achievement

Four questions in the questionnaire dealt with the problem of students' adjustment and its relation to subsequent academic achievement.

Question 28 asked the participants whether during their first period on campus they were given the type of orientation that would facilitate their adjustment to the university atmosphere. Table 28 depicts the students' replies.

As can be seen from Table 28, the majority of both the failures and the high achievers (82 per cent of the failures and 66 per cent of the high achievers) said that they were not given the necessary orientation. The difference between the two groups (χ^2 = 16.003) is, however, statistically significant. Thus, it can be concluded that

academic achievement is significantly related to the availability of adequate orientation.

Table 28. Orientation and academic achievement.

Orientation	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Yes	54	18.24	71	33.80	12.04	
No	242	81.75	139	66.19	3.95	
					16.003	1

Question 29 asked the students who answered the previous question in the affirmative (i.e., who said that they were given the necessary orientation) to describe that orientation. Table 29 gives their description.

Table 29. Nature of orientation and academic achievement.

Nature of Orientation	Failure No.	%	High Achiever No.	%	χ^2	d.f.
Completely Adequate	19	32.75	34	41.46	0.67	
Academically Inadequate	20	34.48	30	36.58	0.03	
Socially Inadequate	9	15.51	4	4.87	4.13	
Totally Inadequate for a Proper Understanding of the University Life	10	17.24	14	17.07	0.00	
					4.864	3

As we can see from Table 29, 41 per cent of the high achievers said that the orientation was completely adequate and only 33 per cent of the failures gave the same description. The high achievers tended to describe the orientation more as socially inadequate while the failures tended to complain more that it was academically inadequate. The χ^2 of 4.964 with 3 degrees of freedom indicates that the differences are statistically insignificant.

A closely related question to the two previous questions is question 30 which asked the students to describe their adjustment to the university atmosphere. Table 30 gives their description:

Table 30. Nature of adjustment and academic achievement.

Nature of Adjustment	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Easy	76	26.03	75	35.72	3.93	
Not Difficult	90	30.82	74	35.24	3.34	
Difficult	90	30.82	46	21.90	2.92	
Very Difficult	36	12.33	15	7.14	2.92	
					10.810	3

Among the high achievers 36 per cent felt that their adjustment to the university atmosphere was easy, 35 per cent felt that it was not difficult, 22 per cent felt that it was difficult. Among the failures,

26 per cent felt that their adjustment was easy, 31 per cent felt that it was not difficult, 31 per cent felt that it was difficult, and 12 per cent felt that it was very difficult.

With a χ^2 of 10.810 and 3 degrees of freedom, the difference is not statistically significant and consequently we cannot conclude that there is a relationship between the nature of the students' adjustment and their subsequent academic achievement.

Students' Perceptions of the Difference Between the University Atmosphere and the Secondary School Atmosphere and Academic Achievement

How students perceive the university is an important factor in predicting academic success. One would assume that if a student has a clear perception of the role of the university and of the difference between that role and the role of the high school his academic efforts would be rewarded.

Question 31 in the questionnaire asked if the students saw much difference between the university atmosphere and the secondary school atmosphere. Table 31 depicts their replies.

What is the picture that emerges from these findings? Seventy-one per cent of the high achievers said that they see much difference between the university atmosphere and the secondary school atmosphere, 26 per cent said

Table 31. Students' perceptions of the difference between the university atmosphere and the secondary school atmosphere and academic performance.

Students' Perceptions of Differences	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Yes	184	61.95	150	71.09	.56	
Not Much	68	22.89	55	26.06	0.50	
No Differences	45	15.15	6	2.84	18.61	
					20.693	2

they did not see much difference, and only 3 per cent said that they do not see any difference between the two. Conversely, 62 per cent of the failures recognized a difference, 23 per cent saw some difference but not much, and 15 per cent saw no difference at all.

As can be seen from Table 31 the difference between the two groups is statistically significant. Thus, the null hypothesis, i.e., that there is no difference between the failures and the high achievers with regard to their perception of the university atmosphere as compared to the secondary atmosphere is rejected. It is obvious that high achievers recognize more differences in the atmosphere and the failures recognize less or no differences in the atmosphere. (It is worth noting here that it is the last category, i.e., those who recognize no difference, that counts almost for the whole $\chi^2 = 18.61$.)

Students' Relationships With Their Fellow Students and Academic Achievement

Tables 32 and 33 deal with the association between the nature of students' relationship with students from their own college and subsequent academic achievement.

Table 32 reveals the participants' responses to the following question, "How would you describe your relationship with students from your college (your classmates excluded):

Table 32. Students' relationships with fellow students from the same college and academic achievement.

Students' Relationships	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Excellent	44	14.86	32	13.16	0.00	
Good	116	39.18	109	51.65	4.30	
Fair	103	34.79	59	27.96	1.79	
No Relation	33	11.14	11	5.21	4.99	
					11.125	3

The data apparently reflect that 65 per cent of the high achievers rated their relationship "excellent" or "good." This is against 54 per cent of the failures who gave the same evaluation. Conversely, 33 per cent of the high achievers said that this relationship was "fair" or

"poor" and 46 per cent of the failures said that the relationship was "fair" or "poor."

With a χ^2 of 11.125 and 3 degrees of freedom the difference is not statistically significant and we cannot conclude that there is an association between the nature of students' relationship with students from their college and subsequent academic achievement.

Question 33 focuses on interpersonal relationship of freshman students with other students from the university at large, and its association with subsequent academic achievement. The students were asked, "How would you describe your relationship with students from the university (your college-mates excluded?)" These were their replies:

Table 33. Interpersonal relationships of freshman students with other students and academic achievement.

Interpersonal Relationship	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Excellent	20	6.75	25	11.79	3.53	
Good	68	22.97	63	29.71	2.16	
Fair	104	35.13	58	27.35	2.33	
Poor	104	35.13	66	31.13	0.58	
					8.640	3

Again, a higher percentage of the high achievers than of the failures rated their relationship "excellent" or "good" (41 per cent of the high achievers and 30 per cent of the failures). With 3 degrees of freedom the χ^2 of 8.640 is not statistically significant, and we cannot say that there is an association between interpersonal relationship and academic achievement.

Activities and Academic Achievement

Table 34 deals with the relationship of students' activities to academic achievement. Does students' participation in university activities contribute to high achievement, and are there certain students' activities which may be linked to students' failure? To find the answer to the questions, the participants were asked to indicate whether or not they participated in students' activities and to indicate the type of activities in which they participated.

As can be seen from Table 34, a higher percentage of the high achievers participated in cultural and scientific activities (25 per cent) while only 16 per cent of the failures participated in the same type of activities. Second, the differences between the failures and the high achievers are minimal with regard to participation in sports and social activities. Third, a higher percentage of the failures (47 per cent) did not participate in any

type of students' activities as opposed to only 38 per cent of the high achievers.

Table 34. **Activities and academic achievement.**

Activities	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Sports	62	21.30	49	23.55	0.27	
Cultural and Scientific Activities	48	16.49	51	24.51	3.93	
Social Activities	44	15.12	29	13.94	0.10	
Nothing	137	47.07	79	37.98	2.31	
					6.648	3

With a χ^2 of 6.648 and 3 degrees of freedom the differences are not statistically significant. Consequently, it cannot be concluded that a relationship exists between students' participation in students' activities or the type of activities in which students participate and subsequent academic high achievement or failure.

Student-Faculty Relationship and Academic Achievement

Questions 35, 36, and 37 focus upon the association between the nature of the students' relationship with their instructors and subsequent academic achievement.

In question 35, the failures and the high achievers were asked to describe the nature of their relationship with their instructors inside the class. These were their replies:

Table 35. Students' relationships with their instructors inside the class and academic achievement.

Students' Relationship With Their Instructors Inside the Class	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Excellent	38	13.00	20	9.52	1.14	
Good	98	33.56	72	34.28	0.02	
Fair	106	36.31	80	38.10	0.09	
Poor	50	17.13	38	18.10	0.05	
					1.302	3

What are we to make of these findings? First, the largest percentage of both groups described their relationship with their instructors inside the class as "fair" (36 per cent of the failures and 38 per cent of the high achievers). Second, the second largest percentage rated their relationship as "good" (34 per cent of both groups respectively). Third, 18 per cent of the high achievers and 17 per cent of the failures described their relationship with their instructors inside the class as "poor."

With a χ^2 of 1.302 and 3 degrees of freedom, the difference between the two groups is not statistically significant. Therefore, the null hypothesis of no relationship between academic achievement and student-instructor relationship inside the class remains tentative.

The same conclusions were reached with regard to the participants' responses to questions 36 and 37.

When students were asked to describe their relationship with their instructors outside the class, the responses in Table 36 were obtained.

Table 36. Student-faculty relationships outside the class and academic achievement.

Student-Faculty Relationship Outside the Class	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Excellent	20	6.76	10	4.71	1.20	
Good	75	25.42	57	26.88	.12	
Fair	130	44.10	93	43.86	.00	
Poor	70	23.72	52	24.52	.03	
					1.35	3

The χ^2 of 1.35 with 3 degrees of freedom indicates no statistically significant difference between the failures and the high achievers. One interesting difference between the responses of students to question 35 and their responses

to question 36 is the fact that a much larger percentage of the respondents indicated that their relationship with their instructors outside the class was poor. While 47 per cent of the failures and 44 per cent of the high achievers said that their relationship with their instructors inside the class was either "excellent" or "good" (Table 35), thirty-two per cent of both groups respectively indicated either an excellent or a good relationship with their instructors outside the class. Conversely, whereas 54 per cent of the failures and 56 per cent of the high achievers rated their relationship with their instructors inside the class as "fair" or "poor" (Table 35), 68 per cent of the two groups said that their relationship with their instructors outside the classroom was either "fair" or "poor."

This weakness in student-faculty relationship is further revealed in Table 37. Students were asked to indicate how many of their instructors they knew fairly well, and their answers are recorded below.

It is clear from the table that while only 35 per cent of the failures and 29 per cent of the high achievers noted that they knew all their instructors or most of their instructors fairly well, 31 per cent of the failures and 36 per cent of the high achievers said that they knew none of their instructors; 34 per cent of the failures and 35 per cent of the high achievers said that they knew some of their instructors fairly well.

Table 37. Instructors that students knew fairly well and academic achievement.

Instructors That Students Knew	Failures No.	%	High Achievers No.	%	χ^2	d.f.
All of them	30	10.27	15	7.15	0.62	
Most of them	71	24.32	46	21.90	0.10	
Some of them	98	33.56	74	35.24	0.35	
None of them	93	31.35	75	35.71	1.46	
					2.53	3

Thus the data in Tables 35, 36, and 37 reveal that there is no association between student-faculty relationship and academic achievement. The null hypothesis of no relationship cannot, therefore, be rejected.

Type of Communication Between Students and Faculty Members and Academic Achievement

Table 38 deals with the type of communication freshman students have with their instructors and its relationship to subsequent academic achievement. The respondents were asked, "When talking with your instructors, what kind of discussion do you find yourself getting into?" Their responses are found in Table 38.

The data in the table reveal that the largest per cent of both groups (64 per cent of the failures and 55 per cent of the high achievers) talk with their instructors

Table 38. Type of communication between students and faculty members and academic achievement.

Type of Communication	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Mainly about Academic Matters	147	64.19	113	55.12	1.48	
Mainly about Personal Matters	31	13.53	24	11.70	0.28	
Both Academic and Personal Matters	51	22.27	68	33.17	4.68	
					6.458	2

primarily about academic matters. The second largest percentage (22 per cent of the failures and 33 per cent of the high achievers) talk with their instructors about both personal and academic matters. Although the data show some differences between the failures and the high achievers, the χ^2 of 6.458 with 2 degrees of freedom indicates that these differences are not statistically significant. Consequently, it cannot be concluded that a relationship exists between the type of communication that students have with faculty members and subsequent academic achievement.

Source of Academic Advice and Academic Achievement

In an attempt to determine whether the failures and the high achievers differed with regard to the source from which they receive academic advice, and to discover whether

a relationship existed between academic achievement and these sources of advice, the participants were asked the following question. "When faced with an academic problem, and unable to solve it yourself, from whom do you seek help?" Table 39 shows the students' replies:

Table 39. Source of academic advice and academic achievement.

Source of Advice	Failure No.	Failure %	High Achiever No.	High Achiever %	χ^2	d.f.
Administrator	19	6.41	5	2.38	4.22	
Instructors	47	15.87	66	31.42	13.30	
Fellow Students	84	28.37	61	29.04	0.01	
Graduate Assistants	84	28.37	46	21.90	2.00	
Forget it	62	20.94	32	15.23	2.00	
					21.702	4

As we can see from Table 39 the percentage of the high achievers who seek advice from faculty members is almost double the percentage of the failures who do so (31 per cent of the high achievers and 16 per cent of the failures). While the differences between the failures and the high achievers who seek academic advice from fellow students are minimal, a higher percentage of the failures turn to administrators, graduate assistants or fellow

students for academic advice or they just forget their problems and seek no assistance.

An examination of the fourth column of Table 39 (i.e., the χ^2 column) reveals two important findings. First, the χ^2 of 21.702 and 4 degrees of freedom indicates that the difference is statistically significant. The high achievers do differ from the failures with respect to the sources of academic advice. The difference, however, is most significant with regard to students receiving advice from instructors. The χ^2 of 13.30 counts for most of the difference between the two groups. Thus, it can be concluded that high academic achievement is significantly correlated with the source of academic advice and that it is more linked with counseling received from faculty members than with any other source of advice. In fact, if we turn to the χ^2 column and combine the first, fourth, and fifth categories we will have a χ^2 of 8.22 with 2 degrees of freedom which will reflect a statistically significant difference. Thus, we can conclude that academic achievement is significantly correlated with the source of academic advice.

Chance of Finding a Sympathetic Ear to Students' Problems and Academic Achievement

Question 40 in the questionnaire sought to determine whether a relationship existed between the students' chance

of finding some persons willing to, and interested in listening to their problems and their subsequent academic achievement. The question that the students were asked was, "What is the chance of finding a sympathetic ear to your problem?" The responses were:

Table 40. Chance of finding a sympathetic ear to students' problems and academic achievement.

Chance of Finding a Sympathetic Ear	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Great	10	3.81	20	9.52	5.96	
Good	118	45.03	23	44.28	0.00	
Little Chance	134	51.14	97	46.19	0.58	
					6.573	2

Apparently, while 10 per cent of the high achievers rated their chance of finding a sympathetic ear to their problems as "great," only 4 per cent of the failures did so. Apart from this difference between the two groups, the high achievers and the failures are almost evenly divided with regard to the other categories. Thus, 44 per cent of the high achievers said that their chance of finding a sympathetic ear was "good" as opposed to 45 per cent of the failures, and 46 per cent of the high achievers rated their chance as "poor" as against 51 per cent of the "failures."

The χ^2 of 6.573 reflects no significant difference between the two groups, especially when we consider the fact that the large difference is accounted for by the first category (those who rated their chance of finding a sympathetic ear as "great") which is based on a small number. If the first and second categories (those who rated their chance as "great" or "good") are combined, this large difference will disappear. Thus, it can be concluded that the ratings of the participants with regard to their chance of finding a sympathetic ear to their problems are not significantly correlated with subsequent academic achievement.

Class Attendance and Academic Achievement

Class attendance and the students' awareness of the importance of that attendance were considered as two important factors which might be related to freshman students' academic achievement.

Question 41 inquired about the regularity of the students' class attendance. Table 41 reveals the results of this inquiry.

It is clear from the table that a large percentage of the high achievers indicated that they attended all classes (43 per cent) as opposed to 30 per cent of the failures. On the other hand, a high percentage of the failures (21 per cent) said that they miss many classes as

Table 41. Students' class attendance and academic achievement.

Class Attendance	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Attend All Classes	89	30.06	91	42.66	6.63	
Miss Very Few Classes	86	29.05	62	29.82	0.00	
Miss Some Classes	60	20.27	36	17.07	0.45	
Miss Many Classes	61	20.61	22	10.44	8.35	
					15.430	3

compared to only 10 per cent of the high achievers. With a χ^2 of 15.430 and 3 degrees of freedom the difference is statistically significant. We can, therefore, conclude that the failures and the high achievers differ significantly with regard to class attendance and that academic achievement is significantly correlated with class attendance. Freshman students who regularly attend classes are more likely to achieve high academically while failure is more likely occur among the students who do often miss classes.

Question 42 focuses on the students' feeling about the importance of class attendance. Table 42 reveals their feelings.

It is clear that the greatest percentage of both groups thought that class attendance was very important

Table 42. Students' feeling about class attendance and academic achievement.

Students Feeling About Class Attendance	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Very Important	213	71.72	159	75.00	.17	
Important	75	25.25	40	18.87	2.29	
Unimportant	9	3.03	13	6.13	3.21	
					5.675	2

(75 per cent of the high achievers and 72 per cent of the failures). A very small percentage considered class attendance unimportant (6 per cent of the high achievers and 3 per cent of the failures). As the χ^2 of 5.675 with 2 degrees of freedom indicates, the difference between the failures and the high achievers is not statistically significant. Accordingly, the null hypothesis of no association between freshman students' feeling about the importance of class attendance and subsequent academic failure or success remains tentative.

Place of Study and Academic Achievement

Table 43 deals with the participants' replies to the question, "Where do you usually study?"

Table 43. Place of study and academic achievement.

Place of Study	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
In the Library	35	11.82	38	18.00	3.27	
Privately at Home	153	51.68	94	44.54	1.28	
At Friends' Homes	62	20.94	55	26.06	1.39	
In Public Places	46	15.54	24	11.37	1.54	
					7.510	3

What do the findings reveal? Apparently, while 18 per cent of the high achievers usually study in the library, only 12 per cent of the failures do so. Again, a higher percentage of the high achievers (26 per cent) usually study at friends' homes, whereas only 21 per cent of the failures do so. A higher percentage of the failures study at home or in public places (such as parks and side streets).

The χ^2 of 7.510 with 3 degrees of freedom indicates that the difference is insignificant. Consequently, it cannot be concluded that a relationship exists between the place where the students usually study and subsequent academic achievement.

Previously Experienced Failure and Academic Achievement

Does failure previously experienced in elementary, intermediate or high school, and repetitions of one or more academic years as a result of that failure, affect the students performance in their freshman year at college? Tables 44, 45, and 46 deal with this question.

Table 44 provides a comparison between the failures and the high achievers with regard to experiences of success and failure while the students were in elementary school:

Table 44. Years spent in elementary schools and academic achievement.

Years In Elementary School	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Less than 6	1	0.34	3	1.41	1.77	
6	293	81.84	186	87.73	0.50	
More than 6	52	17.80	23	10.84	3.99	
					6.283	2

The students were asked to indicate how many years they spent in elementary schools. The table shows that while the largest percentage of both groups (88 per cent of the high achievers and 82 per cent of the failures)

experienced no failure in their elementary schools,[2] a greater percentage of the failures than the high achievers experienced failure in that stage (18 per cent of the failures as against 11 per cent of the high achievers).

The χ^2 of 6.283 and 3 degrees of freedom indicates no statistically significant difference. It cannot, therefore, be concluded that students' failure in elementary schools is correlated with academic achievement in their freshman year in college.

Table 45 shows the results of a comparison made between the group of failures and the group of high achievers with regard to failure experienced in intermediate schools.

Table 45. Years spent in intermediate schools and academic achievement.

Years In Intermediate School	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Less than 3	2	0.68	0	0.00	1.43	
3	238	81.22	192	90.56	1.25	
More than 3	53	18.08	20	9.43	6.36	
					9.080	2

[2]The school years in Saudi Arabia are twelve in number. These years are divided into three stages; six in elementary schools, three in intermediate schools, and three in high schools.

What does the table reveal? While 18 per cent of the failures experienced failure in intermediate schools, only 9 per cent of the high achievers did.

The χ^2 of 9.080 with 3 degrees of freedom does not, however, indicate a statistically significant difference. Consequently, it cannot be concluded that a relationship exists between failure experienced in intermediate schools and academic achievement in the first year of college.

Table 46 is a comparison between the group of failures and the group of high achievers with regard to the years they spent in high schools.

Table 46. Years spent in high schools and academic achievement.

Years in High School	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Less than 3	4	1.36	2	.94	0.17	
3	216	73.46	187	88.20	3.35	
More than 3	74	25.17	23	10.84	13.17	
					16.718	2

What does the comparison show? Apparently, 88 per cent of the high achievers experienced no failure in high schools, as against 73 per cent of the failures. Conversely, 25 per cent of the failures and only 11 per cent of the high achievers experienced failure in high school.

The χ^2 of 16.718 with 2 degrees of freedom indicates a statistically significant difference. Accordingly, it can be concluded that failure experienced in high school is related to academic achievement in the first year of college. Students who do not experience failure in high schools have better chances of being high achievers in their college freshman year, while students who experience failure in high schools are likely to experience failure in their first year in college.

Time of Study and Academic Achievement

Riyadh University, as was previously mentioned, operates on a year system and the students' promotion from one academic year to another is heavily dependent upon the annual examinations held at the end of the academic year. Consequently, a large number of students do not start seriously studying until a large part of the year elapses.

Question 47 in the questionnaire asked the students, "What time of the year do you start seriously studying?" Table 47 indicates their responses.

The students' answers show that great differences exist between the high achievers and the failures. First, while 27 per cent of the high achievers reported that they started studying from the beginning of the year, only 11 per cent of the failures indicated that that was their

Table 47. Time of study and academic achievement.

Time of Study	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
From the Beginning	32	10.77	57	26.88	8.35	
After a Month Had Elapsed	116	39.05	93	43.86	.69	
After Two or Three Months	105	35.35	52	24.52	4.69	
Two Months Prior to the Exams	44	14.81	10	4.71	11.88	
					35.652	3

situation. Second, while only 5 per cent of the high achievers said that they started seriously studying two months prior to the examinations, 15 per cent of the high achievers reported that that was their case. Third, whereas 68 per cent of the high achievers indicated that they began seriously studying a month or two after the academic year had started, 74 per cent of the failures said that that was their case.

The χ^2 of 35.652 with 3 degrees of difference indicates that the difference is statistically significant. Accordingly, it can be concluded that a relationship does exist between the time of the year when students begin seriously studying and subsequent academic achievement. It is apparent that the earlier the students apply themselves to their studies, the better chances they have of achieving

highly. Conversely, the later in the academic year they start really studying, the smaller are these chances.

Reading Habits and Academic Achievement

Question 48 was an attempt to determine whether a relationship existed between students' reading habits and their academic achievement. The results are shown in Table 48.

Table 48. Reading habits and academic achievement.

Reading Habits	Failures No.	Failures %	High Achievers No.	High Achievers %	χ^2	d.f.
Reading in My Field of Specialization	266	89.86	200	95.69	0.44	
Reading Widely in Other Disciplines	30	10.13	9	4.30	5.38	
					5.841	1

Apparently, the majority of both the failures and the high achievers read mainly in their field of specialization. A higher percentage of the failures, however, said that they read widely in other disciplines (10 per cent of the failures against only 4 per cent of the high achievers).

The χ^2 of 5.841 with 1 degree of freedom does not indicate a statistically significant difference. Thus it

cannot be concluded that a correlation exists between reading habits and academic achievement.

The Five Most Critical Problems Facing Freshman Students

The last question in the questionnaire asked the students to mention what they felt to be the five most critical problems facing them. Table 49 shows their replies in terms of the number of times the problems were mentioned by both groups:

Table 49. The five most critical problems according to the number of times these problems were mentioned.

The Five Problems	Failures	High Achievers
1. Too long syllabi	40	42
2. Lack of textbooks and references	38	41
3. Housing conditions	24	26
4. Lack of counseling and guidance	22	20
5. Lack of a motivating university atmosphere	22	20

Senior High School Total Scores and Academic Achievement

Table 50 shows the relationship between the senior high school total scores of the participants and their subsequent college academic status as indicated by the

results of the final annual examination given at the end of the freshman year.

Table 50. Senior high school total scores and academic achievement.

Senior High School Total Scores	Failures No.	%	High Achievers No.	%	χ^2	d.f.
Very Good	91	28.41	100	47.62	12.60	
Good	82	25.62	64	30.47	1.03	
Pass	147	45.93	46	21.90	19.53	
					33.164	2

Apparently, a higher percentage of the high achievers (48 per cent) had total scores above the "good" level (i.e., "very good"). This is against only 28 per cent of the failures. Conversely, a higher percentage of the failures (46 per cent) had a total score below the good level (i.e., "pass") as opposed to only 22 per cent of the high achievers.

The χ^2 of 33.164 with 2 degrees of freedom indicates that the difference is statistically significant. Thus, the null hypothesis of no relationship between total senior high school scores and subsequent college academic achievement can be rejected. Obviously, the higher the students' senior high school total scores are, the higher

are they likely to achieve in their college freshman year. On the other hand, **the lower the students'** senior high school **total scores are, the more likely they are** to fail in **their college freshman year.**

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In the first chapter attention was drawn to the critically high rate of attrition at Riyadh University. This attrition was, furthermore, linked to the increasingly high rate of failure, particularly at the freshman level.

Statement of the Problem

Because no research was ever conducted to discover the causes for the increasingly high rate of failure at Riyadh University, this study undertook to determine whether a relationship existed between certain scholastic and non-scholastic factors and freshman students' failure at the university.

Methodology

The Questionnaire

After a rather extensive review of the literature in the field of college students' academic achievement in general, and a study of the available information concerning students' academic achievement at Riyadh University in particular, certain factors which the investigator hypothesized

might be related to the problem of students' failure at Riyadh University were delineated and included in the questionnaire. The questionnaire was further revised according to the suggestions of the investigator's doctoral chairman and the pre-testing of the questionnaire on 46 freshman students.

The Sample

The questionnaire was distributed in its final form to all freshman students at Riyadh University at the end of the 1972-1973 academic year. The students who answered the questionnaire were 1,032 in number and represented 91.2 per cent of all freshman students enrolled for the first time in 1972-1973. The investigator waited until the results of the annual examination was published and secured from the office of student personnel and then she sat to re-group the students' replies. All students failing more than two subjects and achieving total score averages below the pass level were isolated and grouped as failures. The number of failures was 320, and represented 82 per cent of all freshman students failing more than two subjects and achieving total scores averaging below the pass level. All freshman students replying to the questionnaire and achieving the level of "good", "very good", or "excellent" were selected as a control group. The control group was

220 in number and represented approximately 86 per cent of the students achieving "good," "very good," or "excellent."

Statistical Treatment

Two statistical methods were utilized in the analysis of this study. First, a distribution of percentages was conducted for the drawing of a comparison between the experimental group (the failures) and the control group (the high achievers) in relation to the factors delineated in the first chapter. Second, the χ^2 was used as a test of independence. The level of significance for this study was set at the .01 level.

The null hypothesis of no association between failure and factors contained in the questionnaire was assumed.

The computer center at M.S.U. was utilized to derive the necessary computation of the data.

The Conclusions

The following are the conclusions to which the present research directs its' attention. For purposes of clarity and precision, the conclusions are stated in the form of generalization and are delineated according to the factors set forth in the study:

1. An analysis of the data indicates no significant correlation between age and subsequent failure or high

academic achievement at the freshman level at Riyadh University.

2. A statistically significant correlation ($\chi^2 = 11.509$) is found between marital status and academic achievement. Married students tend to achieve higher than non-married students and more failure occurs among the latter group.

3. Academic achievement is significantly correlated with some types of occupations that the students' fathers have. While sons of professionals such as engineers, doctors, and teachers are more likely to be high achievers, failure occurs more among sons of farmers than among sons of fathers with other occupations.

4. Fathers' education is significantly correlated with the students' academic achievement. Sons of college-educated fathers seem to have significantly better chances of achieving high academically, while sons of illiterate fathers are more likely to be among the failures.

5. Mothers' level of education is not significantly related to their sons' academic achievement.

6. Fathers' annual income is not significantly related to students' academic achievement.

7. Freshman students who attended high schools in large size communities are more likely to achieve higher than students who attended high schools in small

communities. Failure tends to be more common among students who attended high school in small communities.

8. A relationship exists between the type of dwelling that students have and subsequent academic achievement. Living with non-university friends tends to decrease the students' chance of achieving highly, while living with own family tends to increase their chance of achieving highly.

9. Housing conditions, food conditions, recreational situation, physical and psychological conditions, and daily travel to college are not significantly related to academic achievement.

10. A relationship exists between students' initial contemplation of going to college and subsequent academic achievement. Students who consider going to college while in intermediate school are more likely to be high achievers, while students who first consider going to college while in high school are more likely to be failures.

11. There is no relationship between the source of influence upon student's decision to go to college and his subsequent academic achievement.

12. No relationship exists between the family's feelings about going to college and students' academic achievement.

13. There is no relationship between the reasons for which students go to college and their subsequent

academic achievement. There is also no relationship between the students' feelings about college education in relation to their future vocation and academic achievement.

14. There is a significant relationship between students satisfaction with their college education and high academic achievement. Students who find their college education exciting or interesting are more likely to be high achievers, while students who find their college education not interesting or boring are more likely to be failures.

15. Students who are motivated to continue in college until they graduate and who are willing to repeat the academic year in case of failure have a better chance of being high achievers, while students who lack this motivation and who are reluctant to repeat the academic year if they fail are more likely to be failures.

16. Students who select an academic major as a consequence of a personal choice are more likely to be high achievers, while students who are influenced by other persons in their choice of academic majors are more likely to be failures.

17. Students who are convinced of the soundness of their choice of academic majors, and who are unwilling to change these majors if given the chance to do so without loss of time are likely to achieve highly academically.

Students who are uncertain about the soundness of their choice of academic majors are likely to be failures.

18. Students' perception of their academic progress in college is significantly correlated with academic achievement.

19. A significant correlation exists between the type of persons students associate with and subsequent academic achievement. Students who associate with fellow students are likely to be high achievers, while frequent and close association with outside university friends or relatives tends to cause failure.

20. Academic achievement is significantly related to the availability of adequate orientation. It is not, however, correlated with the nature of the students' adjustment to the university atmosphere.

21. The nature of students' relationships with other fellow students from the same college is significantly related to academic achievement, while the nature of their relationships with students from the university in large is not related to academic achievement.

22. There is no relationship between the students' participation in students' activities or the type of activities in which they participate and subsequent academic achievement.

23. There is no association between student-faculty relationship and academic achievement.

24. The type of communication that students have with the faculty members are not significantly related to academic achievement.

25. Academic achievement is significantly related to the source from which students receive academic advice. Students who receive advice from faculty members have a better chance of being high achievers than students who receive advice from other sources.

26. Academic achievement is not significantly related to the students' chance of finding a sympathetic ear to their problems.

27. Regularity of class attendance is significantly related to academic achievement. Students who attend class regularly are likely to be high achievers while students who miss many classes are likely to be failures.

28. The null hypothesis of no association between students' feelings about the importance of class attendance and academic achievement remains tentative.

29. The place where students usually study is not significantly associated with subsequent academic achievement.

30. Failure experienced in elementary or intermediate schools does not influence the students achievement in their freshman year in college. Failure experienced in secondary school does, on the other hand, appear to influence students' academic achievement in their freshman

year at college. Thus, failure is likely to occur more among students who experienced failure in their secondary school year.

Recommendations

On the basis of the conclusions reported in this study, the following recommendations are made:

1. Riyadh University should adopt a better admission policy. Students' admission should not be based solely upon their high school total score average. A valid, objective entrance examination should be developed and introduced. The high school total score averages and scores on entrance examinations should then be combined and used as a fair basis for admission.

2. Riyadh University should seriously consider the establishment of a counseling and guidance office. Efforts should be made to establish informative, accurate, and well organized records on the personal and academic status of students.

3. Students' guidance should be personal, friendly, and available at all times. Close contact between instructors and students should be maintained. In addition to faculty members, trained and sympathetic counselors whose entire time is devoted to students should be available to students in general, and to freshman students in particular.

4. Every freshman student should be interviewed within the first four weeks after he enters college and a scholarship check should be regularly made thereafter.

5. An effective orientation program should be developed and implemented.

6. Freshman students should be trained in better study habits and skills.

7. Class hours should be shorter. The students should be given enough time between classes to rest, to participate in co-curricular activities, to do their home assignment, and to build friendships with their university colleagues.

8. The policy of requiring the student to select a specific major at entrance should be revised. Freshman students should be introduced to different academic fields by allowing them to sample courses in various areas. Major selection should be made in the sophomore year.

9. A university campus appropriately designed to meet the physical needs of the students and to serve the purpose of the university should be built.

10. More library books and references should be made available to the students.

11. Further research on the problem of failure and dropout among freshman students at Riyadh University should be encouraged. Researchers should examine the problem of attrition in each faculty of the university.

12. The problem of articulation between Riyadh University and secondary schools should be studied.

13. When courses and curricula are developed, students' needs and abilities should be considered.

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APPENDIX

ENGLISH TRANSLATION OF A COVER LETTER WRITTEN IN ARABIC

Dear Students,

I realize that your time is invaluable, at the same time I am aware of the extent of your understanding and appreciation of research studies conducted to find solutions to our problems.

You are here given a questionnaire whose sole purpose is the collection of information about factors which are believed to influence academic achievement of freshman students. The questionnaire is part of my study for Ph.D. dissertation. Consequently, all the information you will give will serve no other purpose than the study, will be highly confidential, and will not at all concern the university.

I will indeed appreciate your cooperation in answering the questions in the questionnaire. I will also be grateful if you kindly write your names in full as they will be needed after the results of the annual examinations will have been published, obtained, and studied in the light of the factors delineated in the questionnaire.

Ibtissam Al-Bassam

P.S. Put the sign (x) in front of the reply which best represents your answer.

QUESTIONNAIRE FOR THE FRESHMAN STUDENTS

AT RIYADH UNIVERSITY

Name: _____

1. Age:

(1) Below 18 _____
(2) 18-21 _____
(3) 22-24 _____
(4) Over 24 _____
(0) No answer _____

2. Marital Status:

(1) Non-married _____
(2) Married _____
(0) No answer _____

3. Father's Occupation:

(1) Businessman _____
(2) Clerk _____
(3) Farmer _____
(4) Professional _____
(5) Technician _____
(6) Unemployed _____
(0) No answer _____

4. Father's level of Education:

(1) Post graduate _____
(2) College graduate _____
(3) High school graduate _____
(4) Junior high school _____
(5) Elementary school _____
(6) Literate, but no formal education _____
(7) Illiterate _____
(0) No answer _____

5. Mother's level of Education:

(1) Elementary school and above _____
(2) Literate but no formal education _____
(3) Illiterate _____
(0) No answer _____

6. Father's annual income:

(1) Over 30 thousand _____
(2) 20-30 thousand _____
(3) 10-19 thousand _____
(4) 5-9 thousand _____
(5) Less than 5 thousand _____
(0) No answer _____

7. Population of the town you lived in during high school:

(1) Over 50 thousand _____
(2) 20-49 thousand _____
(3) 10-19 thousand _____
(4) Less than 10 thousand _____
(0) No answer _____

8. Present type of dwelling:

(1) Living with own family _____
(2) Living with college students _____
(3) Living with non-university students _____
(4) Living with relatives _____
(5) Living alone _____
(0) No answer _____

9. Living conditions:

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

10. Food situation:

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

11. Recreation conditions:

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

12. Psychological condition:

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

13. Health condition:

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

14. Daily travel to college:

(1) Over an hour _____
(2) 3/4 hour _____
(3) 1/2 hour _____
(4) 1/4 hour _____
(5) Less than 1/4 hour _____
(0) No answer _____

15. When did you begin to think about going to college?

(1) In elementary school _____
(2) In intermediate school _____
(3) In high school _____
(4) After completing high school _____
(0) No answer _____

16. Who influenced your decision most to go to college?

(1) Parents _____
(2) Brothers _____
(3) Teachers _____
(4) Friends _____
(5) Sheer interest _____
(0) No answer _____

17. How does your family feel about your going to college?

(1) Greatly encouraging _____
(2) Fairly encouraging _____
(3) Partly encouraging _____
(4) No encouragement _____
(0) No answer _____

18. What is your primary reason for going to college?

(1) Prepare for a certain profession _____
(2) For the sake of learning _____
(3) To get a job _____
(4) To be like other sutdents and friends _____
(0) No answer _____

19. On the whole, how do you feel about your education in relation to your future vocation?

(1) Of great importance _____
(2) Important _____
(3) Helpful--but not important _____
(4) Not necessary _____
(0) No answer _____

20. On the whole how do you feel about your education?

(1) Exciting _____
(2) Interesting _____
(3) Not interesting _____
(4) Boring _____
(0) No answer _____

21. Do you intend to continue in college until graduation?

(1) Certainly _____
(2) Probably _____
(3) Do not know _____
(4) No _____
(0) No answer _____

22. If it happens that you failed this year, would you be willing to repeat the year over?

(1) Certainly _____
(2) Probably _____
(3) Do not know _____
(4) No _____
(0) No answer _____

23. Who influenced your decision most to select your major?

(1) Relatives _____
(2) University administration _____
(3) Fellow students _____
(4) Sheer interest _____
(0) No answer _____

24. Now that the academic year is almost over, do you think your selection of your academic major was sound?

(1) Yes _____
(2) Not sure _____
(3) No _____
(0) No answer _____

25. If given the chance to change major, with no loss of time, would you be willing to do so?

(1) No _____
(2) Not sure _____
(3) Yes _____
(0) No answer _____

26. How do you feel about your progress in college?

(1) Excellent _____
(2) Good _____
(3) Slow _____
(4) No Progress _____
(0) No answer _____

27. With whom do you usually spend your time out of class?

(1) Fellow students _____
(2) Classmates _____
(3) Outside friends _____
(4) Outside relatives _____
(0) No answer _____

28. During your first period on campus, were you given the orientation that would facilitate your adjustment to the university atmosphere?

(1) Yes _____
(2) No _____
(0) No answer _____

29. If your answer to the previous question is "yes," how would you describe that orientation?

(1) Completely adequate _____
(2) Academically inadequate _____
(3) Socially inadequate _____
(4) Totally inadequate for a proper understanding of the university atmosphere _____
(0) No answer _____

30. How would you describe your adjustment to the university atmosphere?

(1) Easy _____
(2) Not difficult _____
(3) Difficult _____
(4) Very difficult _____
(0) No answer _____

31. Do you see much difference between the university atmosphere and the secondary school atmosphere?

(1) Yes _____
(2) Not much _____
(3) No difference _____
(0) No answer _____

32. How would you describe your relationship with students from your college (your classmates excluded)?

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) No relation _____
(0) No answer _____

33. How would you describe your relationship with students from the university (your college mates excluded)?

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

34. In which of the following activities do you participate?

(1) Sports _____
(2) Cultural and scientific activities _____
(3) Social activities _____
(4) Nothing _____
(0) No answer _____

35. How would you describe your relationship with your instructors inside the class?

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

36. How would you describe your relationship with your instructors outside the class?

(1) Excellent _____
(2) Good _____
(3) Fair _____
(4) Poor _____
(0) No answer _____

37. How many of your instructors did you get to know fairly well?

(1) All of them _____
(2) Most of them _____
(3) Some of them _____
(4) None of them _____
(0) No answer _____

38. When talking with your instructors, what kind of discussion do you find yourself getting into?

(1) Mainly about academic matters _____
(2) Mainly about personal matters _____
(3) Both academic and personal matters _____
(0) No answer _____

39. When faced with an academic problem and unable to solve it yourself, from whom do you seek help?

(1) Administrators _____
(2) Instructors _____
(3) Fellow students _____
(4) Graduate assistants _____
(5) Forget it _____
(0) No answer _____

40. What is the chance of finding a sympathetic ear to your problem?

(1) Great _____
(2) Good _____
(3) Little chance _____
(0) No answer _____

41. What would you say about your class attendance?

(1) Attend all classes _____
(2) Miss very few classes _____
(3) Miss some classes _____
(4) Miss many classes _____
(0) No answer _____

42. How do you feel about class attendance?

(1) Very important _____
(2) Important _____
(3) Unimportant _____
(0) No answer _____

43. Where do you usually study?

(1) In the library _____
(2) Privately at home _____
(3) At friends' homes _____
(4) In public places _____
(0) No answer _____

44. How many years did you spend in elementary school?

(1) Less than 6 _____
(2) 6 _____
(3) More than 6 _____
(0) No answer _____

45. How many years did you spend in intermediate school?

(1) Less than 3 _____
(2) 3 _____
(3) More than 3 _____
(0) No answer _____

46. How many years did you spend in high school?

(1) Less than 3 _____
(2) 3 _____
(3) More than 3 _____
(0) No answer _____

47. What time of the year do you start seriously studying?

(1) From the beginning _____
(2) After a month had elapsed _____
(3) After two or three months _____
(4) Two months prior to exams _____
(0) No answer _____

48. How would you describe your reading habits?

(1) Reading in field of specialization _____
(2) Reading widely in other disciplines _____
(0) No answer _____

49. Would you please identify the five most critical problems which you have faced during their academic year?

50. Student's senior high school total score:

(1) Excellent _____
(2) Very good _____
(3) Good _____
(4) Pass _____

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