A STUDY OF FRESHMEN FINANCIAL AID AWARDS WITH RESPECT TO STUDENT NEED

Thesis for the Degree of Ph. D.
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MARVIN G. RIST
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THESIS

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ABSTRACT

A STUDY OF FRESHMEN FINANCIAL AID AWARDS
WITH RESPECT TO STUDENT NEED

By

Marvin G. Rist

The primary purpose of this study was to analyze the financial aid awards made by one university to an entering freshmen class to determine if all aid recipients were being treated in an equitable manner. Two particular aspects of the awards were studied: first, the amount of aid granted in relation to the student's need was analyzed to determine if the needs of the students in various groups were fulfilled in the same manner; second, the ratio of gift aid to self-help in the awards was reviewed in order to determine if the burden of self-help was equitably distributed.

Investigations peripheral to the purpose of this study were conducted in order to determine pertinent information relative to two exploratory questions. The first question sought to determine the effect that a proposed financial aid policy would have had on the enrollment plans of the students involved in this study. The hypothetical

policy would have required each student to assume a specific amount of self-help prior to being eligible for gift aid. The second question led to an investigation of the possibility of improving the precision of predicting the first semester grade point average by using the student's work status as one of the variables in a regression equation.

The study was initiated by identifying all first semester freshmen students at the University of South Dakota who were awarded financial assistance from unrestricted funds. The population, which involved 170 students, was ordered according to need and then divided into five groups with Group I being identified as the group with the least need and Group V as the group with the greatest need. Means for seven different types of data were computed for each of the five groups and the related means were tested for equality. Significant differences existed among the groups with respect to the following:

1. Amount of award with relation to need
2. Proportion of award which was gift aid
3. High school grade point average
4. ACT composite score
5. High school class rank
6. Expected first semester grade point average
7. Actual first semester grade point average

The investigations related to the two exploratory questions produced the following information:

1. The addition of the student's work status as a variable to the regression equation which included the high school grade point average, high school class rank, and ACT composite score did not significantly increase the precision of the prediction of the first semester grade point average.
2. Approximately 6 per cent of the students, who would have received a less desirable aid package, would not have enrolled.

The analysis of the data clearly indicated that a bias did exist in the award system of the institution involved in this study. The bias was such that the group with the least need received the most favorable financial aid awards with respect to the fulfillment of their need and the proportion of gift aid which was in the award. The source of the bias was the strong relationship which existed between the student's social economic class, and his success in school and on standardized tests.

Further analysis of the data revealed that the institution's participation in the Economic Opportunity Grants Program reflected itself in the proportion of gift aid in awards rather than in the relation of the amount of the award to the student's need. The student whose parents' income was such that he did not quality for an

Economic Opportunity Grant and whose academic profile was such that he did not receive consideration for a scholarship award was apt to receive an award comprised mostly of self-help.

A STUDY OF FRESHMEN FINANCIAL AID AWARDS WITH RESPECT TO STUDENT NEED

By

Marvin G. Rist

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CHAPTER I

THE PROBLEM

Explosive growth has been a significant characteristic of student financial programs in recent years. In 1958, there were approximately $200,000,000 of financial assistance available to undergraduate students in the United States. As the commitment to the equality of educational opportunity by state and federal governments and the educational community became more intense, financial assistance for undergraduates grew substantially.[1] In the academic year of 1966-1967, undergraduates received $1,212,000,000 of assistance. It was estimated that by 1972-1973 the aid granted to students would be $3,206,000,000.[2]

With the commitment toward the equality of educational opportunity came the tendency to award aid to all students with need who have the ability to do college-level work rather than awarding it only to those students

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[1] *Financing a College Education*, A Guide For Counselors (New York: College Entrance Examination Board, 1969), p. 2.

[2] *The Chronicle of Higher Education*, January 15, 1968, p. 3.

who could do work of scholarship caliber. Subsequently, a concomitant concern developed relative to the equity of the distribution of financial assistance.

The concept of packaging financial aid was implemented as a possible means of obtaining an equitable distribution of funds. Packaging refers to the process whereby a student's need is met by providing him access to loans and employment as well as gift assistance in the form of scholarships and economic opportunity grants. Student-incurred loans and employment, which are major resources in the financing of a college education, are known as student self-help. The appraisal of the student's ability, the cost of attending the institution, the amount of aid available, and the philosophy of the school seemed to influence the manner in which gift aid would be combined with self-help aid to fulfill a student's need. Consequently, there is little consistency in the ratio of gift aid to self-help aid for students either within or among institutions.[3]

The Problem

There are two distinct problems that confront the financial aids officer as he considers a student's application for financial assistance. The first problem has been fairly well resolved for him as there seems to be

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[3] Financing a College Education, p. 3.

little doubt any longer that "need" should determine who will receive aid and in what amount. An orderly solution to this problem has been achieved by several need assessment techniques that have been developed in recent years. The second problem, however, presents the real challenge to financial aids officers as they must decide how available resources are to be used either singly or in combination to fulfill the student's need. Before a solution can be achieved to the second problem, the financial aids officer must make two decisions. First, he must decide upon the order in which the various financial aid forms will be used to fulfill the student's need. Concurrently, he must also decide the amount of each particular form that is to be included in each student's aid package.[4]

The financial aid officer's solution to the first two problems, however, is generally complicated by the fact that the total need of all applicants usually exceeds the resources available. The manner in which financial aid officers attempt to solve this problem ranges along a continuum. Some elect to fulfill the total need to the applicants in the order which they applied for aid until all resources are expended. On the other end of the continuum are those financial aid officers who feel that each

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[4]Rexford G. Moon, Jr., "Student Aid in a Decade of Decision," College Student Personnel Work in the Years Ahead, ed. by Gordon J. Klopf (Washington: American College Personnel Association, 1966), pp. 62-63.

student's award should be reduced so that the shortage of funds is shared equally by all aid applicants. Somewhere between these two points are those aid officers who feel that they can best provide fair and equitable treatment by considering each application on its own merits without restrictive guidelines.

Purpose of the Study

The primary purpose of this study is to analyze the financial aid awards made by one university to an entering freshmen class to determine if a bias existed in the manner that financial aid was awarded to various groups of students who were classified according to need. Two particular aspects of the awards will be studied: first, the amount of aid granted in relation to the student's need will be analyzed to determine if the needs of the student in the various groups were fulfilled in the same manner; second, the ratio of gift aid to self-help in the awards will be reviewed in order to determine if the burden for self-help has been equitably distributed. An auxiliary purpose of this study is to determine whether a financial aids policy which would have required each student to assume a specific amount of self-help prior to being eligible for gift aid would have caused a significant number of the students involved in this study to either enroll at another school or not to attend an institution of higher education.

Importance of the Problem

The American democracy has been firmly established on the principle that the fortune of the individual and the society rise and fall together. Consequently, the argument for sending more boys and girls to college is based on the presumed values to be gained by society and by the individual. An increased potential income and personal self-fulfillment are the apparent values to the individual. The social values of sending more able boys and girls to college are more difficult to assess and some may even defy measurement. The gain to society, however, is generally described in economic gain such as gross national product, political gain such as an informed citizenry, and social gain such as stability through mobility.[5]

A major source of wasted talent is the substantial number of young men and women who do not go to college or leave college prior to graduation. Family background, the culture of the community, sex, geography, parental occupation, parental education, money and family income are some of the factors related to a student's desire either to go to or stay in college. The relative degree of influence that each factor has on college attendance is not known. The money factor, however, is the only element

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[5] Robert J. Havighurst, "The Social and Political Arguments for Extending the Reach of Education," Student Financial Aid and National Purpose (New York: College Entrance Examination Board, 1962), pp. 28-34.

which lends itself to manipulation and continues to be one of the most discussed yet unsettled problems of the day.[6] The manner in which this factor is manipulated will not only determine who is awarded aid but also the amount and in what form.

If consistent methods and procedures are not developed for the manner in which a student's need is met, then the orderliness which the need assessment techniques were to provide will be lost in a welter of complex aid awards.[7] Evidence for this fact was provided by a study made of the Oregon State Scholarship Program by R. A. Huff. He found that inconsistencies and inequities existed because no standardized procedure or policy had been used to make awards. He concluded, consequently, that student aid programs should operate on the basis of a well defined philosophy, stated objectives, and written policies. In addition, an ongoing program of research should be maintained in order to determine if the objectives are being fulfilled.[8]

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[6]Elmer D. West, ed., Background for a National Scholarship Policy (Washington, D.C.: American Council on Education, 1956), p. 1.

[7]Moon, "Student Aid in a Decade of Decision," p. 63.

[8]Robert Allen Huff, "An Analysis of Variable Factors Related to Selection of Oregon State Scholarship Recipients and Application of Certain Factor Relationships for Predicting Recipient Selection," Dissertation Abstracts International, XXX, No. 4, 1362A-1363A.

Definition of Terms

Academic Profile: This is a graphic representation of the student's academic potential as determined by a series of standardized test scores and/or previous academic achievements.

Employment: In respect to student financial aid, this term will be used to refer to only those positions which provide preferential consideration to the individual because of his status as a student.

Grants: Awards made to students under the provisions of the Economic Opportunity Grants Program of the 1965 Higher Education Act will be referred to as grants.

Loans: This term is used for those sums of money which are made available to the student with the requirement that they be repaid in whole or in part, in some cases with and in other cases without the payment of interest. Only those loans which are made at a true rate of interest lower than the prevailing rate for consumer credit are to be considered as part of student financial aid.

Packaging: Packaging refers to the process of fulfilling a student's need by awarding him one or more forms of financial assistance such as a loan, employment, scholarship, or Economic Opportunity Grant.

Relative Aid Award: This expression refers to the difference in dollars between the student's need and his financial aid award. The relative aid award will be negative if the student's award is less than his need and it will be positive if it is greater than his need.

Restricted Awards: This term will be used to refer to those awards which are restricted to certain students because of: (1) their preparation and potential for achievement in the institution's general or special academic areas, (2) their preparation and potential for performance in non-academic or co-curricular areas of the institution's program, or (3) the institution's desire to provide a special benefit to the applicant or his parents because of the parents' relationship to the institution, to a particular professional group, or to a donor.[9]

Scholarships: This term will refer to those awards of money, tuition discounts and remissions, or similar considerations that require neither repayment nor some service from the student. The student's eligibility for this award is determined by his academic potential as predicted by test scores and past performance.

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[9]William D. Van Dusen and John J. O'Hearne, _A Design for a Model College Financial Aid Office_ (New York: College Entrance Examination Board, 1968), pp. 6-11.

Theory and Supportive Research

The first major analysis of the characteristics of college scholarship programs and their candidates was undertaken during the 1954-1955 academic year. This project was a cooperative effort by ninety-five schools which were members of the College Board. The purpose of the research effort was to improve financial aid procedures and to study institutional and candidate practices. It was found that the likelihood of a candidate receiving at least one offer was very decidedly related to scholastic ability as measured by the SAT-VERBAL score and to the number of applications made. The average family income of the male applicants was $6,800 and $7,500 for the female applicants. Moon felt that the data available on parental background and its relationship to the likelihood of receiving aid did not provide obviously significant findings but that a more detailed study of the data might reveal information which could be reported at a later date. The mystery at this time was the applicant who, having been denied aid in spite of showing considerable need, still managed to enroll in college. It was found, as might be expected, that the lower the expense level of the institution, the greater the tendency for a student to enroll at that institution even though he had been denied aid.[10]

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[10] Rexford G. Moon, Jr., "Financial Aid--From Application to Award," College Board Review, XXXI (Winter, 1957), 15-16.

Richard G. King further reviewed the data from the study undertaken by College Scholarship Service and conjectured that at no CSS college did as many as one-half of the scholarship winners come from the neediest half of the nation's population.[11] J. L. Holland and L. Kent reviewed the analyses made by King, Moon, and Heist. They concluded that a selection bias existed in the awarding of financial aid because there was a tendency to award scholarships to students from the higher socio-economic groups more frequently than to students from the lower classes, whether financial need was a criterion or not.[12]

In 1962, Wilbur J. Bender expressed the opinion that student aid policies in the United States were in need of drastic revision because of the "stacked deck" in education which favored the child from the upper middle-income and upper-income families. The deck was "stacked" in favor of these children because they had enjoyed certain advantages throughout their life in respect to cultural opportunities, in better schools, with better preparation and guidance, and in family and group expectations about going to college. He expressed the opinion that these

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[11]Richard G. King, "Financial Thresholds to College," College Board Review, XXXII (Spring, 1957), 21.

[12]John L. Holland and Laura Kent, "The Concentration of Scholarship Funds and Its Implications for Education," College and University, XXXV, 474.

children were also receiving an additional advantage because the current financial aid practices in effect seemed to be giving them preferential treatment.[13]

An analysis of the 1963 College Board's Manual of Class Profiles was made by Elmer West and Charlene Gleazer.[14] A review of their work by John F. Morse caused him to make the statement that the figures were astonishing if one believes that the purpose of financial aid programs is to make it possible for students to attend college who might not have been able to do so because of financial need. Morse was surprised to find that only 59 per cent of the students who came from families whose income was less than $3,000 were granted financial assistance while 38 per cent of the students coming from families with incomes of $13,000 or more received aid. He also noted that sixty-five institutions had accepted 788 students but denied them aid in spite of the fact that they came from families whose incomes were less than $5,000. In contrast, the same institutions offered 789 students aid even though they came from families with incomes greater than $13,000.[15]

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[13] Wilbur J. Bender, "Our Student Aid Patchwork Needs Drastic Revision," Student Financial Aid and National Purpose (New York: College Entrance Examination Board, 1962), p. 94.

[14] Elmer D. West and Charlene Gleazer, "Who Gets the Scholarships?" Financial Aid News, IV (1964), 4.

[15] John F. Morse, "Our Groaning Financial Aid Structure," College Board Review, LIII (Spring, 1964), 24.

As it became more evident that a social class bias was affecting the manner in which financial assistance was being distributed, financial aid practices and policies came under some severe criticism. One of the first individuals to recognize that some procedures should be established in order to equalize the burden of self-help was Rexford Moon. As early as 1960 he suggested that each student should be expected to assume some responsibility for the cost of his education. He felt that the order of the aid awards should be loans, then employment, and finally gift aid. In addition, he felt that it should not be unreasonable to ask a student to borrow up to $700 per year for his education and to earn at least $300 during the thirty-six weeks he is in college. Moon recognized that there might be a need to make some exceptions. He felt, however, that a standardized system with some exceptions would be better than the present system which seemed to be nothing but exceptions.[16]

It was recognized in the 1967 edition of Manual for Financial Aid Officers that perhaps no standardized policy could be offered to guide the financial aid officer in his effort to determine the proper proportion of each kind of aid to award a student. It was suggested, however, that a good common policy would be to make self-help

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[16]Rexford G. Moon, Jr., "Who Should Get What Aid from the College?" Search for Talent (New York: College Entrance Examination Board, 1960), p. 150.

roughly one-third of any award package, provided the student's need was not too great. A reasonable maximum self-help burden should be established so that students who have an exceptionally great need are not asked to carry too great an obligation. A possible approach would be go begin with either loans or employment up to a maximum in relation to college costs prior to adding gift aid. This policy would tend to provide loans and jobs to students from the most favored economic backgrounds on the theory that they generally are the best prepared for college and thus well able to work and borrow. Gift aid would then be reserved for those students with the greatest need.[17]

In 1968 a research study that had been undertaken by College Scholarship Service on a large sample of applicants for aid for the 1965-1966 academic year was completed. An analysis of the data was reported by G. A. Schlekat. He found that a lower-class aid applicant was twice as likely to receive an award as an upper-class applicant, however, a social class bias was affecting the kinds of aid that he would receive.[18] Schlekat indicated that the use of test scores in admissions and financial aid decisions were the source of the bias. He concluded

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[17] Manual for Financial Officers (New York: College Entrance Examination Board, 1967), pp. 1-5.

[18] George A. Schlekat, "Do Financial Aid Programs Have a Social Conscience?" College Board Review, LXIX (Fall, 1968), 18-19.

his analysis with the statement that, "It's bluntly clear that lower-class students come through our financial aid system less comfortably than those in higher classes."[19] Gross indicated that the Educational Opportunity Grants provided by the Higher Education Act of 1965 might have the possibility for mitigating the value system that provided scholarships for the middle-income youngster and self-help aid for low-income youngsters. He felt that the fact grants were made available for students of exceptional need supported the conclusion that colleges have not been bringing their resources to bear upon the problem of providing a sufficient number of low-income students access to a college education. Gross speculated that institutions perhaps would not do so if a Federal program was not available which was specifically designed to help low-income students.[20]

A review of the literature did not reveal any research reports relative to the effect that the Economic Opportunity Grants Program has had on the distribution of the burden of self-help. A release of some related data provides doubt as to the total effectiveness of this program toward solving the problem of the inequitable

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[19] Ibid., p. 19.

[20] Stanley J. Gross, "A Critique of Practice in the Administration of Financial Aid," College Student Personnel, ed. by Laurine E. Fitzgerald, Walter F. Johnson, and Wilma Norris (Boston: Houghton Mifflin Company, 1970), p. 266.

distribution of the burden of self-help. For instance, during the 1967-1968 academic year 50 per cent of the grant money went to students whose families had incomes of $6,000 or more. Even though more stringent guidelines were adopted for the 1968-1969 academic year, preliminary figures indicate that 31 per cent of the grant money still went to students whose families had incomes of $6,000 or more.[21] These figures seem to indicate that there is a strong possibility that the problem of the equitable distribution of the burden of self-help still persists in spite of the Economic Opportunity Grants Program.

Hypotheses

This study involves the testing of two primary hypotheses. The first hypothesis states that a bias exists in the procedure for awarding financial assistance to freshmen students at the University of South Dakota. The bias is such that the students with the least need will be awarded financial aid packages which are significantly more desirable with respect to the degree that their need is fulfilled and also by the proportion of the award which is gift-aid. The second hypothesis states that the students with the least need will have the most promising academic profiles with respect to high school class rank, high school grade point average, and ACT composite score.

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[21] The Chronicle of Higher Education, January 12, 1970, p. 7.

Exploratory Questions

Two investigations peripheral to the purpose of this study will be conducted in order to determine pertinent information relative to two exploratory questions. The first question seeks to determine the effect that a proposed financial aid policy, which will be described in Chapter III, would have had on the enrollment plans of the students involved in this study. The proposed financial aid policy will require each student to assume a specific amount of self-help prior to being considered for a gift-aid award.

The design of this study and the nature of the data to be collected will not permit an extensive investigation of the possible relationships between the academic performance of a student and his financial aid package. An investigation, however, will be undertaken to determine if the fact that a student works part-time (ten hours or more per week) relates to his first semester grades to such a degree that it should be considered as a variable in the prediction of grades for freshmen students.

Overview

The problem, the purpose of the study, the importance of the study, the operational definitions, the theory and supportive research, and the general hypotheses for the study have been presented in Chapter I. A review of the literature pertaining to financial aids will comprise

Chapter II. In Chapter III a report of the research design is given through a presentation which defines the sample and describes the methodology, the testable hypotheses, and the analysis procedure. The analysis of the results will be presented in Chapter IV. A summary of the study and the conclusions drawn along with the implications for future research will be discussed in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Frederich Rudolph makes the assertion that very few young men or women have ever paid their way through an American college or university. Regardless of whether a student has attended a public or private institution, he probably paid a very small portion of the actual cost of his education.[1] The veracity of Rudolph's statement is revealed by the educational statistics compiled by Simon and Grant. They found that during the 1963-1964 academic year the tuition and fee income at public institutions comprised only 11 per cent of the total budget and at private institutions it comprised only 31 per cent.[2]

A gift of 100 pounds sent to Harvard to be used for scholarships by Lady Anne Moulson of England initiated the first endowment in American colleges. This gift was the first of many philanthropic endeavors that have made it

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[1]Frederich Rudolph, "Who Paid the Bills?" Harvard Educational Review, XXXI (Spring, 1961), 144.

[2]Kenneth A. Simon and W. Vance Grant, Digest of Educational Statistics (Washington, D.C.: Government Printing Office, 1968), pp. 93-94.

possible to provide an education to students at less than its actual cost. Unfortunately, many college students are not aware of the extent to which a tradition of generosity and service has underwritten a major portion of the cost of attending college.

During the initial era of student aid, the American colleges and universities found themselves in a very difficult position. They had inherited the aristocratic purposes and customs of the English residential college but were expected to serve a developing democratic society. Financial aid during this period was stimulated by several factors. First, the classical course of study was not particularly popular and financial aid was used as a method of inducing students to enroll. Financial assistance was also used to make the institutions appear more democratic so that they might escape their aristocratic image and enter into a closer relationship with the people. One effort to provide financial aid to students resulted in the manual-labor movement of the 1830's. It was not very successful and to most everyone's satisfaction the Panic of 1837 destroyed the movement. Another effort to assist students resulted in the operation of dining halls for the poor by such schools as Yale, Princeton and Brown. The implications of second-class accommodations, however, made the dining halls for the poor as unattractive to students as were the "charity funds" which described the meager endowments available for students who could not pay their way. Consequently, there was a need to establish a more desirable and more effective way of providing assistance to students. A major means of assisting students was to design devices which would keep tuition low. Unfortunately, most of the low cost tuition schemes resulted in either lower or in many times no pay for the professors.[3] Blackmar stated that the choice was a very simple one. The colleges could either pay their professors to teach or they could pay their students to enroll. They chose the latter because it was the only way they could achieve an enrollment which would justify their existence.[4]

The movement for technological and scientific education, which had just begun prior to the Civil War, created many new and more popular institutions after the war. The Morrill Act of 1862 helped to develop the land-grant colleges which were oriented more toward the practical and therefore brought institutions of higher education into a more vital relationship to the life of the people. As colleges became more popular, the tradition of student aid was given the burden of providing equality of access to higher education. By 1900, various approaches to student aid such as scholarships, loans, self-help dormitories,

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[3]Frederich Rudolph, "The Origins of Student Aid in the United States," Student Financial Aid and National Purpose (New York: College Entrance Examination Board, 1962), pp. 2-4.

[4]Frank Blackmar, The History of Federal and State Aid to Higher Education in the United States (Washington, D.C.: Government Printing Office, 1890), p. 25.

and student employment agencies were common aspects of American higher education.[5]

The Growth of Federal Programs of Financial Aid for Undergraduates

The Student Work Program initiated by the Federal Emergency Relief Administration in 1933 was the first major national student financial aid program. The program was eventually taken over by the National Youth Administration. In spite of the fact that many educators feared federal control, the program was successful. During the period from 1933-1943, 620,000 youths were employed by the program and they earned $93,000,000. A system of loans was rejected at this time on the basis that the neediest students would be unable to provide a satisfactory credit rating. A program of grants was also rejected because it was felt that if the funds generally went to the brightest students, many times students with little or no financial need would be assisted.

The student War Loans Program, which was in operation from 1942 through 1944, permitted students to borrow up to $500 per year if they would accept war-related employment. About 11,000 students borrowed $3,000,000 to study in scientific and technical fields. The significance of the program was that it established loans as a feasible means of student aid.

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[5] Rudolph, "The Origins of Student Aid in the United States," pp. 4-8.

The Serviceman's Readjustment Act of 1944 provided aid to about 8,000,000 former servicemen under a number of laws. The program was administered by officials in the Veterans Administration rather than educators. Living allowances were paid directly to students but the tuition and fee payments were made directly to the universities and colleges that the student attended. Because veterans comprised a large proportion of the total enrollment, public institutions were placed in a difficult situation due to the fact that tuition and fee payments did not cover the cost of the student's education. Federal payments to the institutions were eliminated when the G.I. Bill was extended to veterans of the Korean War. The new policy provided for flat monthly payments, which were adjusted to the number of dependents, to be made directly to the veteran. This procedure simplified the administration of the program and induced veterans to choose less expensive institutions.

Current federal aid programs to college students differ considerably from the first two major forms of assistance. The early forms did not provide for money to be given directly to the institution which it was to disburse to students. Under the Student Work Program, the colleges and universities decided who was eligible for jobs. In contrast, the Veterans Administration determined the individual's eligibility for aid under the G.I. Bill before the student was even admitted to an institution.

The students were permitted to use their benefits at a large number of vocational and proprietary schools. The Student Work Program, however, was restricted to the standard list of colleges and universities. Each of these two programs was designed for a limited duration to solve a specific problem. The legislation which established the present programs implies that they are expected to continue indefinitely. In further contrast, the current federal programs allow the individual college or university to determine who shall and shall not receive aid. In addition, most programs have excluded the proprietary institutions.

Commissions appointed by Presidents Truman and Eisenhower undertook studies to determine what the role of the Federal Government should be in the financing of higher education. In 1946, President Truman appointed George F. Zook, president of the American Council of Education, to be the chairman of the first group. The basic recommendations of the Zook Report were that the states should be given grants to be used for current operating expenses of higher education, for capital outlay, and for a large scale scholarship and fellowship program. Because controversies arose among educators as to whether the public or private institutions would benefit the most, the recommendations made by this committee had very little impact. A poll conducted by the National Education Association in 1949 found that only the scholarship program had general support and that less than one-half of the schools favored the guaranteed loan feature. However, the Office of Education's continued pleas for the establishment of a fellowship program led to such a proposal in President Eisenhower's message to Congress in 1952.[6]

The second commission was formed in 1956 by President Eisenhower when he appointed Devereux C. Josephs to chair a committee on Education Beyond the High School. The Josephs Report had better acceptance and many of its suggestions have been acted upon by Congress. This committee saw four major problem areas in education. They saw these problems as being: (1) a lack of teachers, (2) a need to expand educational opportunities to more people, (3) a need for new and expanded facilities, and (4) a need to expand funds from all sources.[7]

The National Defense Education Act in 1958 was a result of the concern for the lack of teachers and was designed to develop the profession. This act was passed as an emergency measure designed to counteract serious deficiencies. The act provided for student loans but no undergraduate scholarships. The loan fund amounted to

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[6]George Nash, "Student Financial Aid, College and University," Encyclopedia of Education Research, ed. by Robert Ebel (New York: The Macmillian Company, 1969), pp. 1339-43.

[7]Richard G. Axt, "The Josephs Report--Toward a Federal Policy in Higher Education," The Educational Record, XXXVIII (October, 1957). 294-95.

$80,000,000 by June of 1960 of which the Federal Government contributed approximately 90 per cent and the balance was contributed by the 1,300 participating institutions. For approximately 50 per cent of the colleges, this was the first loan program which they had available for their students. In subsequent years, the program was significantly extended and the name of the program was changed to the National Defense Student Loan Program (NDSLP) in order to reflect the broadening of the program. It subsequently became the first long-term federal program to provide assistance for undergraduates. Much of the incentive for the federal legislation during this period was provided by the technological threat of Russia's Sputnik in 1959.[8]

The College Work-Study Program was the result of the war which was declared on poverty by President Johnson. The legislation which Congress passed stipulated that the Federal Government would pay 90 per cent of the costs during the first years of the program and eventually 75 per cent in subsequent years.[9] A student is eligible if he is in attendance full-time and has substantial financial need and could not otherwise attend college. Students with less than substantial need are eligible so long as funds

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[8]Nash, "Student Financial Aid, College and University," pp. 1342-43.

[9]*Ibid.*, p. 1343.

and jobs are available. The student can work up to fifteen hours per week during the school year and up to forty hours a week during vacations. The institution arranges for the campus jobs which are to be performed, the rates of pay which must be at least equivalent to current minimum wages, the supervision, and administrative details. Students are also permitted to work for public or private non-profit organizations or agencies if the work is in the public interest. The work may not involve labor on or in a facility intended for religious instruction or worship or be associated with a political activity.[10] Most schools participated in the program and during the 1966-1967 academic year, students earned approximately $160,000,000.[11]

The failure of legislation which was intended to provide scholarships in 1958 and 1961 was attributed to a lack of support from the educational community. A difference of opinion between public and private institutions made the passage of legislation providing grants a long and difficult process. Grants, however, became available to students of "exceptional need" under the Educational Opportunity Grants Program of the Higher Education Act of

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[10] Financial Aid for Higher Education, published by the Cooperative Program for Educational Opportunity under a contract with the Educational Talent Section of the Division of Student Financial Aid of the U.S. Office of Education (Washington, D.C.: Government Printing Office, 1968), pp. 27-28.

[11] Nash, "Student Financial Aid, College and University," pp. 1342-43.

1965.[12] The Federal Government provides the funds for each grant but the participating institutions are responsible for selecting the students who are to receive them and also the amount they are to receive. A student who is awarded a grant must receive an equal amount from the institution's local resources. A student is eligible if he has exceptional need and would be unable to continue his education beyond high school unless he has an Economic Opportunity Grant. A student is considered to have exceptional need if the need analysis system of the institution indicates that his parents cannot contribute at least $625 a year to his education. The student does not need to have a superior record. The only requirements are that he must be a full-time student and is either eligible for admission or eligible to continue his education. A student may receive Economic Opportunity Grants ranging from $200 to $1,000 for each of the four years of undergraduate education. The student can only receive the maximum if his parents can make no contribution to his education and his financial need is at least $2,000.[13] During the 1966-1967 academic year, the Educational Opportunity Grants Program awarded 123,000 students grants totaling $46,000,000.[14]

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[12] Ibid.

[13] Financial Aid for Higher Education, p. 25.

[14] Nash, "Student Financial Aid, College and University," pp. 1342-43.

Benefits to veterans of the "Cold War" were provided for in a bill passed by Congress in 1966. Veterans who had served since 1955 were awarded benefits up to one and one-half months for each month of service. During the 1966-1967 academic year 330,000 veterans enrolled in college-level training of which four-fifths were undergraduates. The effect of the bill on institutions of higher education was less significant because veterans constituted a smaller proportion of the total enrollment.[15]

The Higher Education Act of 1965 also authorized the Guaranteed Loan Program which is designed to aid students from middle-income families. Under this program, the student can obtain an educational loan directly from a bank or other commercial lender. There are two features in this program which are designed to enable the student to obtain the loan. First, state, private agencies, or the Federal Government guarantee the loan to the lender in the event the student defaults or dies. Second, the Federal Government assists eligible students with the interest payments on their loans. Specific regulations pertaining to guaranteed loans vary from one state to another but they do follow federal guidelines. Students are eligible for the guaranteed loans if they are in attendance at least one-half time and if the "adjusted" income of their family is under $15,000. A student may

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[15] Ibid., pp. 1343-44.

borrow as much as $1,500 per year up to a maximum of $7,500.[16] During the 1966-1967 academic year, which was the first year of operation for this program, 330,000 students borrowed approximately $250,000,000. The average amount borrowed was $750 and the modal family income of the borrower was between $9,000 and $12,000. The program is currently the largest federal financial aid program for college students.[17]

State and Local Programs of Financial Aids

In addition to the federal programs that have been designed to assist students with their college expenses, there has been an increasing number of state and local programs developed to provide students of limited means a chance to attend college. The tremendous number and diversity of these programs makes it impossible to estimate the exact amount of funds that are made available by them. The proliferation of these programs in recent years, however, has caused them to be a significant factor in the total amount of financial assistance available to students.

New York initiated the first program of state aid to students in 1913. Since that time California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas,

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[16] Financial Aid for Higher Education, pp. 27-28.

[17] Nash, "Student Financial Aid, College and University," p. 1344.

Maryland, Massachusetts, Michigan, New Jersey, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, West Virginia, and Wisconsin have all established competitive scholarships for state residents with restrictions on the fields of study. The scholarships can be used at public or private institutions. Some states also offer tuition equalization programs designed to assist families who elect to send their children to private institutions.[18]

Financial assistance is often made available to students by communities, states, foundations, corporations, business firms, unions, religious organizations, clubs, civic cultural groups, and by the institutions themselves. The grant and loan programs of companies generally are restricted to the employees or children of employees. Ingraham and King in 1965 found that 93 per cent of the private institutions waived some or all of the tuition for children of their faculty members. Approximately 20 per cent of the public institutions have some form of tuition waiver.[19]

Financial Aid for Disadvantaged Students

In recent years there have been a number of programs and projects, public and private; federal, state, and local; individual colleges and groups of colleges; school

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[18] Financing a College Education, p. 9.

[19] Mark H. Ingraham and Frances P. King, The Outer: Faculty Benefits Other Than Annuities and Income (Madison: University of Wisconsin, 1965), p. 36.

systems and independent schools; foundations and agencies which have been initiated to specifically help disadvantaged students. The largest and most extensive programs were those which were the result of federal legislation. The Elementary and Secondary Education Act and Higher Education Act of 1965 are examples of extensive federal legislation. The Office of Education used funds provided by the Higher Education Act of 1965 to award contracts to groups such as Project College Bound in Philadelphia so that disadvantaged high school students with college potential could be sought out and motivated on a person-to-person basis. Many of the programs are designed to offer disadvantaged students extensive counseling and tutoring long before they will be graduating from high school since it appears that the decision to enter college is based on more than just financial means. An example of this approach is Project Opportunity which starts with seventh graders who have the potential for college and offers them counseling and special help throughout their high school career.[20]

The National Scholarship Service Fund for Negro Students (NSSFNS) was started in 1948 to increase and broaden opportunities for Negro students in interracial colleges. Two privately financed short-term programs have supplemented the work of the NSSFNS. In 1946, the National

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[20]Nash, "Student Financial Aid, College and University," p. 1349.

Merit Scholarship Corporation used a $7,000,000 grant from the Ford Foundation to establish the National Achievement Program. This program awards at least 200 scholarships a year to winners in a national competition project based on academic ability. The size of the awards are related to the student's financial need. The Independent Schools Talent Search Program involves seventy-five schools which identify, recruit, and refer prospects to member schools. Many of the students are offered admission and financial assistance. The College Assistance Program (CAP), which is supported by a grant from the Old Dominion Foundation, involves large numbers of college admissions and financial aid officers. Teams of financial aid and admissions men are formed from the members of this group. The teams visit high schools which are either predominantly comprised of Negro or other disadvantaged students. The visits are not made on the behalf of any particular institution but rather to encourage students to make plans for college. The NSSFNS program is thoroughly explained to the students and they are encouraged to enter the competition. The GAP (referring to the gap between high school and college) is supported by a grant from the Carnegie Corporation which beams the NSSFNS college advisory service and supplementary scholarship fund information at the students who have attended institutes or special programs on college campuses designed to prepare them for college.[21] One of the largest foundation programs is the one established by the Rockefeller Foundation. This program provides for a concerted effort to discover talented Negro students and encourage them to enroll in a college or university.[22]

Research in Financial Aids

According to J. B. Henry there is an appalling lack of research in the field of financial aids.[23] It has been suggested that the lack of research may be an interrelation between the fact that many financial aid officers do not have the time to do research and the feeling by some that they do not have the competency to conduct research. The College Board encourages financial aid officers to undertake research regardless of its scope because of its value to establishing policy. The research may be as narrow as a study of one facet of one institution's program or as broad as a study of the nation's talent loss from the fact that many young people of college ability fail to attend college because of limited financial resources. The publication of the results from research efforts is

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[21]Richard L. Plaut, "Plans for Assisting Negro Students to Enter and to Remain in College," Journal of Negro Education, XXXV (Fall, 1966), 394-95.

[22]L. Richard Meeth, "Breaking Racial Barriers," The Journal of Higher Education, XXXVII (May, 1966), 249.

[23]Joe B. Henry, "Current Issues in Student Financial Aid," The Journal of College Student Personnel Administrators, V (December, 1963), 92.

encouraged because of the contribution that it provides to the body of generalized knowledge which is beginning to be accummulated.

It is suggested that studies be focused on the institutions as well as on the student. Many financial aid research projects, however, can satisfy both of these ends. Institutional research is essential if some consistent practices are to be developed. Further, this type of research can provide some guidance and direction for the administrative efforts of local programs. Consequently, the results of some research can have immediate application to the policy decisions of institutions.[24]

Research on Various Types of Awards

Scholarships.--The nature of the investigations pertaining to scholarships has changed as the concerns of higher education shifted. Early research was centered on the academic performance of those students who won scholarship awards. Williamson and Feder matched scholarship winners with students of equal ability and found that they had a significantly higher achievement. They also found that the attrition rate of scholarship winners followed the same general pattern as that of the matched group. They also found that scholarship students rated higher

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[24] *Manual for Financial Aid Officers* (New York: College Entrance Examination Board, 1965), pp. III-7-10.

both quantitatively and qualitatively in student leadership than did non-scholarship students.[25] Colver[26] and Clark and others[27] found that extrinsic motivation can be produced if scholarship students are required to meet certain academic standards in order to have their scholarships renewed. Even though this requirement can produce efforts which will result in significantly higher grades, there is an inherent danger in the practice since it may discourage scholarship students from developing social leadership because of the demand for high grades.[28]

The second major research project revealed a concern relative to the effective use of scholarship funds in respect to student grades and persistence in college. An extensive research project conducted at 147 colleges and universities, studied data pertaining to awards made between 1950 and 1954. Robert E. Iffert, who was associated with the project, concluded that a considerable portion of

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[25] Lois B. Williamson and Daniel D. Feder, "Scholarship Winners--How They Rate on Campus and in Class," Personnel and Guidance Journal, XXXI (January, 1953), 236-40.

[26] Robert M. Colver, "Scholastic Selection and Administration--An Objective Appraisal of One Program," College and University, XXX (October, 1954), 20-27.

[27] Shelby C. Clark, E. Wayne Wright, and Clyde A. Parker, "Do Renewable Scholarships Promote Higher Grades?" Personnel and Guidance Journal, XXXV (January, 1957), 302-05.

[28] Ibid. (comments by Daniel Feder).

the scholarship money was used by students of marginal ability and that students who demonstrated their ability were dropping out of college because of financial difficulties. Since it was found that 25 per cent of the scholarship winners did not graduate in four years, Iffert suggested that a reduction should be made in the number and the amount of scholarship awards to entering students. The savings created from this policy should be used to support those students who have a need but who have also performed satisfactorily on the campus.[29]

The research and analysis of available data during the 1960's has reflected the growing concern about providing all students equal access to higher education. Work done by King,[30] Moon,[31] West and Gleazer,[32] and Morse[33] are examples of reports which indicated that current financial aid practices were not providing equitable treatment to all social classes. This fact was further dramatized by

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[29]Robert E. Iffert, "College Scholarship Funds--Investment or Speculation," Higher Education, XIII (April, 1957), 146.

[30]King, "Financial Thresholds to College," pp. 21-22.

[31]Moon, "Financial Aid--From Application to Award," p. 15.

[32]West and Gleazer, "Who Gets the Scholarship?" p. 4.

[33]Morse, "Our Groaning Financial Aid Structure," pp. 22-26.

the presentations that were given at a panel discussion at the annual conference of the National Association of Admissions Counselors in Chicago on October 10, 1969.[34]

Student loans.--There are many variations both in the amount of money available for student loans and also in the extent to which they have been used. At one time loans were a very unpopular source of aid. In 1944-1946, only $3,700,000 of the $23,600,000 available for loans was borrowed.[35] Axt expressed the opinion that students were reluctant to utilize funds because most college loan funds were very short-term. Short-term loans were all that most institutions could provide because they did not have the financial resources to establish a long-term program. In order to make long-term loans available, Earl J. McGrath, U.S. Commissioner of Education, proposed a plan in 1949 which would permit individual loans up to $2,400 with the feature that they could be repaid within ten years after completion of the educational program. The loans were to be granted by local lending institutions with the Federal government guaranteeing them. Less than one-half of the educators polled relative to their opinion

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[34]A report of a panel discussion at the Annual Conference of the National Association of College Admissions Counselors, Chicago, October 10, 1969, National ACAC Journal, XIV, Nos. 3 & 4, 20-24.

[35]Richard G. Axt, The Federal Government and Financing Higher Education (New York: Columbia University Press, 1952), pp. 216-17.

on this plan actually were in favor of it. Axt questioned the desirability of encouraging students to obligate themselves to a large financial responsibility. He felt that a student loan program was neither necessary nor desirable because loans could only be considered as auxiliary means of assisting students and not as a primary method of equalizing educational opportunities. He further felt that the enactment of a federal loan program might eliminate the possibility of obtaining a scholarship and loan program.[36]

The editors of Changing Times reported the results of a comprehensive survey that was made relative to college loan programs in 1956. They said the results of the survey caused them to advocate the use of loans to finance a college education. They felt that college attendance should be possible for those students who cannot win scholarships and who do not happen to have wealthy parents. Of the college administrators that took part in the survey, 96 per cent agreed that a student should be willing to borrow. They felt, however, that students going into a low income field should borrow only as a last resort. It was felt that students would be wiser to obtain loans rather than postpone or interrupt college plans.[37]

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[36] *Ibid.*, pp. 217-18.

[37] Kiplinger Washington Editors, "Student Loans--Their Place in Student Aid," *Changing Times*, X (February, 1956), 39-41.

A number of studies such as those undertaken by F. R. Ormes[38] and L. J. Ruegsegger[39] have revealed that students are good credit risks. A study financed by the Harmon Foundation in 1924 found that some schools were very unsuccessful with their loan funds. It appeared, however, that the administration of the funds rather than the nature of the transaction was the source of the trouble. If the method of administration was taken into consideration, the proportion of funds overdue was far from alarming. The report suggested that the principles of commercial lending should be applied to determine the amount of money which the student could safely borrow. It was further suggested that if money is to be loaned to a student, then the amount should be sufficient to relieve him of his financial burdens to such an extent that he may do justice to his academic work without impairing his health. It was felt that $2,000 was not too much credit to extend to a student who has good health, is reliable, and ambitious and shows signs of a promising future.[40]

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[38]F. R. Ormes, "Repayment of Student Loans," College and University Business, XXI (July, 1956), 32-33.

[39]L. J. Ruegsegger, "Pay-As-You-Go Plan Really Works," College and University Business, XXI (July, 1956), 33.

[40]L. J. Chassee, A Study of Student Loans and Their Relation to Higher Educational Finance, A report prepared under the authority of the Association of University and College Business Officers of the Eastern State (New York: Harmon Foundation, Inc., 1925), p. 99.

A report submitted by Robert C. Hall and Stanton Craigie relative to the students who borrowed money during the period from July 1, 1960 to November 1, 1960 from the National Defense Student Loan Funds revealed that the program had some significant impacts. In 92 per cent of the cases a student loan apparently determined whether the borrower would be able to enter or stay in college. The loans permitted 55 per cent of all borrowers to reduce their hours of part-time work. The loan program also enabled 16 per cent of the borrowers to change their student status from part-time to full-time. For 77 per cent of the borrowers, the NDSLP was the only source of loan funds.[41]

A report issued by the Subcommittee on Education of the House of Representatives indicated that 16 per cent of the amount due on the National Defense Student Loan Program was delinquent. In some respects the figure was even worse than it appeared because 47 per cent of the amount due was either deferred because the students were in school or in service or cancelled because the students had gone into teaching. Only $6,500,000 of the $9,500,000 due was collected. An analysis of the delinquencies indicated that the administrative machinery of the college was

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[41] Robert C. Hall and Stanton Craigie, Student Borrowers--Their Needs and Resources, U.S., Department of Health, Education, and Welfare (Washington, D.C.: Government Printing Office, 1962), pp. 12-13.

more often at fault than the students.[42] This was consistent with the experience of the Harmon Foundation.[43]

Surveys conducted by Abate[44] and Hill[45] in 1963 and 1965, respectively, found that the source of the trouble in the colleges and universities was that they did not have experienced individuals handling the loan programs. It was found that colleges often employed inexperienced personnel to handle loan programs who did not advise students of their responsibility to repay and did not keep accurate records with which to trace students. The survey which Abate directed for the American National Bank of Chicago for the Associated Colleges of the Midwest revealed that colleges with an enrollment of approximately 1,000 students generally had an average of $300,000 in outstanding loans.[46] This figure was larger than the average consumer loan portfolio of 12,947 or 92.8 per cent of the commercial banks in the country. In addition, Hill warned that the

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[42]Nash, "Student Financial Aid, College and University," p. 1353.

[43]Chassee, A Study of Student Loans, p. 99.

[44]Robert Abate, "How to Collect NDEA Loan Repayments," College and University Business, XXXV (December, 1963), 34.

[45]W. W. Hill, Jr., "An Analysis of College Student Loan Programs," United Student Aid Funds, Inc., 1965.

[46]Abate, "How to Collect NDEA Loan Repayments," p. 34.

collection problem would be extremely expensive because of poor administrative procedures.[47]

Student Employment.--Founta Green Pollard and Russell T. Sharpe[48] in the 1950 edition of the Encyclopedia of Educational Research summed up the results of research done by J. K. Archer,[49] A. B. Crawford,[50] Abraham Krugman,[51] R. T. Sharpe,[52] and J. J. Umstattd.[53] They concluded that a majority of the studies showed that students who engaged in part-time work attained higher scholastic standings and

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[47]Hill, "An Analysis of College Student Loan Programs."

[48]Founta Greene Pollard and Russell T. Sharpe, "Student Personnel Work--Student Financial Aid," Encyclopedia of Educational Research, ed. by Walter S. Monroe (New York: The Macmillan Company, 1950), pp. 1347-53.

[49]J. K. Archer, "A Study of New York State Scholarship Students at Cornell University" (unpublished Master's thesis, Cornell University, 1934), p. 195.

[50]A. B. Crawford, Incentives to Study (New Haven: Yale University Press, 1929), p. 194.

[51]Abraham Krugman, "A Comparison of Grades of Scholarship Students and All Students in Washington" (unpublished Master's thesis, Square College of New York University, 1932).

[52]R. T. Sharpe, Financial Assistance for College Students, Series VI, Student Personnel Work No. 7 (American Council on Education, 1946), p. 113.

[53]J. G. Umstattd, "Student Self-Support at the University of Minnesota (Minneapolis: University of Minnesota Press, 1932).

received a smaller proportion of the failures. They were also convinced that a reasonable number of hours devoted to part-time work produced little effect upon grades and health but did tend to curtail social activities especially for freshmen and sophomores. Subsequent research conducted by C. W. Reeder and S. C. Newman,[54] D. L. Trueblood,[55] R. E. Silver,[56] Dickinson and Newbegin,[57] M. Schaffner,[58] D. M. Burke,[59] and H. B. Baker[60] also seemed to indicate that employment had no discernible effect on achievement. Williamson conducted research relative to the

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[54] C. W. Reeder and S. C. Newman, "The Relation of Employment to Scholarship," Educational Research Bulletin, XVIII (November, 1939), 203-04.

[55] D. L. Trueblood, "Academic Achievement of Employed and Non-Employed Students in the Indiana School of Business," Dissertation Abstracts, XIV, 643-44.

[56] Robert E. Silver, "The Effect of Self-Support Upon Student Success in Walla Walla College," Dissertation Abstracts, XVI, Part 2 (1956), 1819-20.

[57] C. Dickinson and Betty Newbegin, "Can Work and College Mix?" Personnel and Guidance Journal, XXXVIII (December, 1959), 314-17.

[58] Martha Schaffner, "A Comparison of Scholastic Success of Employed and Non-Employed College Students" (unpublished Master's thesis, Kansas State Teachers Colleges, 1936).

[59] Dustin M. Burke, "Student Employment--An Underdeveloped Resource," Financial Aid News, III (1963), 4.

[60] Harold B. Baker, "The Working Student and His Grades," Journal of Educational Research, XXXV (September, 1941), 35.

grades received by students who were awarded NYA assistance. He concluded that the higher grades of the students receiving NYA assistance was more related to their scholastic aptitude rather than motivating effect of the work-scholarships. The NYA subsidized only those students who had proven themselves to be good academic risks.[61]

Axt felt that most educators would agree to the following points relative to work:

1. Part-time employment may have some educational value even for students who do not need the money.
2. Working more than fifteen hours per week could interfere with a well rounded educational program.
3. There seldom are as many jobs available as there are deserving applicants.
4. An expanded work-aid program such as the NYA, even at its best effectiveness, can not provide equalization of educational opportunity.[62]

In addition to the financial remuneration that employment can provide, Williamson[63] and Armsby[64] felt that there are other benefits which the student may derive. Some of these may include personal and group responsibility, the development of desirable character traits, and

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[61]Edmund G. Williamson, "College Graduates and NYA Scholarships," School and Society, XLVI (October, 1937), 510-12.

[62]Axt, The Federal Government and Financing Higher Education, p. 217.

[63]Williamson, "College Graduates and NYA Scholarships," 510-12.

[64]Henry H. Armsby, "Cooperative Education in the United States," U.S. Department of Health, Education, and Welfare Bulletin No. 11 (Washington, D.C.: Government Printing Office, 1954), p. 15.

the provision of valuable try-out experiences. A survey at Ohio State University revealed that almost 90 per cent of the students participating in the NYA program felt that their experience was educationally valuable to them.[65]

Research on the Relationship of Financial Aid to College Attendance

The relationship which exists between a student's attendance at college and the financial aid available to him is very complex. The results of a large national sample taken by the Project Talent Study concluded that between 80,000 and 100,000 students in the upper one-third of the 1960 high school graduating class failed to enter college at least partially for financial reasons. Approximately 40 per cent of the National Merit Scholarship examinees failed to go on to college for financial reasons.[66] Sanders and Palmer indicate that economic barriers may impede prospective college-bound students by: (1) preventing enrollment, (2) increasing the number who drop out, (3) delaying the completion of the program by limiting attendance to part-time, or (4) forcing the student to

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[65] Betty and Ernest K. Lindley, A New Deal for Youth (New York: The Viking Press, 1938), p. 167.

[66] Nash, "Student Financial Aid, College and University," p. 1347.

choose a program of studies or an institution which may not be appropriate for his abilities or interests.[67]

Berdie,[68] Wolfle,[69] Cole,[70] McClelland,[71] and Little[72] reached conclusions that indicate that the practice of offering additional scholarship aid to students of high ability and low aspiration may not by itself have the desired impact upon their educational plans. While family income may be an excellent index of the probability that a student will attend college, it does not always constitute the determining factor. Herriot found that economic performance was the second lowest of nine variables that were significantly related to the level of educational aspiration. This was consistent with Brazer's findings as he

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[67]J. Edward Sanders and Hans Palmer, The Financial Barrier to Higher Education in California (California State Scholarship Commission, 1965).

[68]R. F. Berdie, After High School--What? (Minneapolis: University of Minnesota Press, 1954).

[69]Dale Wolfle, America's Resources of Specialized Talent (New York: Harper, 1954).

[70]Charles C. Cole, Jr., "Current Loss of Talent from High School to College: Summary of a Report," Higher Education, XII (September, 1955), 35-38.

[71]David C. McClelland, and others, Talent and Society (Princeton, N.J.: VanNostrand, 1958), p. 95.

[72]James K. Little, Explorations into the College Plans and Experiences of High School Graduates (Madison: University of Wisconsin Press, 1959), p. 95.

found that the economic factor should not rate any higher than sixth in a scale of twelve factors affecting college attendance.[73] Cole found that 90 per cent of 1,600 students who had requested scholarships still went to college even though they were denied aid.[74] Research results of a project undertaken at the University of New Mexico indicated that only 1 per cent of the state's high school graduates who had both the competence and the motivation to attend college actually lacked the money to do so.[75]

Nash concluded that a scholarship program without a need factor which is announced only to high school seniors will have little impact on the college going plans of talented students. In order to reach students from low income families who can benefit from higher education but are not endowed with superior talent, a program of counseling and careful liaison between high schools and colleges in addition to financial aids will be required.[76]

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[73] Harvey E. Brazer and others, Income and Welfare in the United States (New York: McGraw-Hill Book Company, 1963).

[74] Charles C. Cole, Jr., "Scholarship Applicants Today," College Board Review, XXXII (Spring, 1957), 17.

[75] Sherman E. Smith, Howard V. Mathany, and Merle M. Miles, "Are Scholarships the Answer?" A report on a scholarship program for students of limited means (Albuquerque: University of New Mexico, 1960), p. 87.

[76] Nash, "Student Financial Aid, College and University," p. 1349.

The Relationship of Financial Aid to Persistence in College

Research conducted by J. H. McNeely,[77] Robert C. Nichols,[78] G. R. Moon,[79] Fred T. Mitchell,[80] Paul L. Dressel,[81] F. D. Greene,[82] James D. Cowhig,[83] Benjamin Quales,[84] J. C. Esty,[85] Ruth Weintraub and Ruth E. Salley,[86]

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[77] J. H. McNeely, College Student Mortality, Office of Education Bulletin No. 11 (Washington, D.C.: Government Printing Office, 1937).

[78] Robert C. Nichols, "A Study of Student Mortality for the Freshman Class of 1947-1948 at State College of Washington" (unpublished Master's thesis, State College of Washington, 1949).

[79] G. R. Moon, "The Student Who Drops Out of College," School and Society, XXVII (May, 1928), 576-78.

[80] Fred T. Mitchell, "Why Freshmen Leave College," Journal of Higher Education, XIII (January, 1942), 95-100.

[81] Paul L. Dressel, "Liberal Arts Students Advised to Withdraw," Journal of Higher Education, XIV (January, 1943), 43-45.

[82] F. D. Greene, "Follow-up Study of Non-Graduating Women from the College of Education of the Ohio State University," Educational Administration and Supervision, XXIX (October, 1943), 427-33.

[83] James D. Cowhig, "Why Do They Leave College?" School Review, LXXI (Autumn, 1963), 333-34.

[84] Benjamin Quales, "Student Separations from College-Overview," Association of American College Bulletin, XXXV (October, 1949), 404-09.

[85] John C. Esty, Jr., "College Dropouts 'Real Problem' What to Drop Into?" College Board Review, LXII (Winter, 1966-1967), 20-21.

[86] Ruth G. Weintraub and Ruth E. Salley, "Graduation Prospects of an Entering Freshman," Journal of Educational Research, XXXIX (October, 1945), 116-126.

D. W. Irvine,[87] Iffert and Clarke,[88] C. L. Koelsch,[89] and Alexander Astin[90] indicates that economic pressures have a considerable amount of influence on the decision of a student to withdraw from college. Goetz and Leach, however, concluded from a survey conducted at the University of New Mexico in 1962 that the real causes for withdrawal of students from college may not have yet been discovered. They found many students continuing on in college with attitudes and financial difficulties very similar to those of some of the students that had left college. It was found that such problems as marriage, family finance, and general unhappiness are generally more important to the drop out than to the student who continues on in college.[91] John C. Esty

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[87]Donald W. Irvine, "University Drop Outs in Good Standing," National Association of Collegiate Admissions Counselors Journal, XII, No. 1 (1966-1967), 14-19.

[88]Robert E. Iffert and Betty S. Clarke, College Applicants, Entrants, Dropouts (Washington, D.C.: Government Printing Office, 1965), p. 27.

[89]Charles L. Koelsche, "A Study of the Student Drop-Out Problem," Journal of Educational Research, XLIX (January, 1956), 357-64.

[90]Alexander Astin, "Personal and Environmental Factors Associated with College Dropouts Among High Aptitude Students," Journal of Educational Psychology, LV (August, 1964), 219-27.

[91]Walter Goetz and Donald Leach, "The Disappearing Student," Personnel Guidance Journal, XLV (May, 1966), 883-87.

expressed the opinion that financial reasons are given more frequently because they seem to be more socially acceptable.[92]

The Administration of Student Financial Aid

Until recent years, the number of man-hours spent on the administration of student financial aid programs was very few in number. In some cases it was conducted by a single person such as a dean who assumed responsibility for the program as a part-time duty. Occasionally, a staff functioning as an ad hoc committee assembled to conduct the program in an intuitive and benevolent manner. However, as the resources for student financial aid increased in importance both to the institution and to the students and as the number of students seeking aid increased, the operations of the student financial aid programs have been reconsidered. Specific individuals have been assigned the responsibility for the administration of the program and they occupy well defined positions in the administrative organization of the institution. Because the program of financial aid has generally come to be considered as one of the student services in institutions of higher learning, it has become common practice to have

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[92] Esty, "College Dropouts 'Real Problem' What to Drop Into?" pp. 20-21.

the financial aid administrator report to the chief administrator for student services.[93]

At the present time the financial aid practices of American colleges and universities are going through a period of unusual change in concept, change in methods and organization, and change in source and control of funds. Further, the administration of financial aid has become a large and diffuse enterprise due to the public concern about the increasing costs of college, the loss of talent due to high aptitude students not going on to college, and the problems of the disadvantaged.[94] Moon,[95] Clough,[96] West,[97] and Russell[98] call attention to the confusion that exists in the financial aid programs of institutions of

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[93]Van Dusen and O'Hearne, A Design for a Model College Financial Aid Office, pp. 23-24.

[94]Gross, "A Critique of Practice in the Administration of Financial Aid," p. 263.

[95]R. G. Moon, Jr., "Who Should Get What Aid from the College?" In Search for Talent: College Admissions No. 7 (New York: College Entrance Examination Board, 1960), pp. 100-06.

[96]J. E. Clough, Jr., "Colleges Must Close Ranks on Financial Aid," College Board Review, XLVII (Spring, 1962), 27.

[97]West, Background for a National Scholarship Policy, p. 77.

[98]John D. Russell, The Finance of Higher Education (Chicago: University of Chicago Press, 1954), p. 233.

higher education. Every college has scholarships, jobs, and loans to offer needy students but this is the extent of the consistency. The manner in which these forms of assistance are used to meet the needs of the students are very diverse and indicate a lack of common goals between and within institutions. Even though there have been questions raised relative to the adequacy of the financial aid administrative effort, the field still continues to grow without visible direction.

Administration to Meet Institutional Needs

There appears to be two underlying views that characterize the administration of financial aid programs. The first view has been identified as the administrative view. Schools that adhere to this view believe that the purpose of financial aid is to meet institutional objectives. Schools practicing this belief might use financial aid to fill a specific curriculum or dormitories, to change the character of a student body geographically, socioeconomically, or intellectually. Some educators would argue that the diverse uses of financial aid have been good because it has permitted institutions of higher education to be diverse which in turn has been the real strength of American higher education. Still other educators would argue that the use of financial aid to meet institutional objectives is justified in that it preserves an opportunity of choice for prospective college students. This represents, however, a distortion of the facts as the public has generally been led to believe that the ultimate purpose of financial aid is to help poor boys and girls to go to college.[99]

Administration Which Has a Personnel Point of View

Mueller[100] and Lifton[101] express the opinion that student personnel work reflects the value placed on the inherent worth and capacities of the individual so that the society in which he lives can progress. From this view of personnel work, the second philosophy which guides the administration of financial aids developed. Programs being administered by the personnel point of view believe that the best interests of the students should be the criteria by which aid is awarded. This view makes provision for individual differences and recognizes the individual as a functioning whole. It also takes the view that work with students must begin where they are rather than where they are expected to be. Since this point of view has the possibility of increasing the student's

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[99]Gross, "A Critique of Practice in the Administration of Financial Aid," p. 270.

[100]Kate H. Mueller, Student Personnel Work in Higher Education (Boston: Houghton Mifflin, 1961), p. 49.

[101]Walter M. Lifton, "Colleges and Universities--Student Services," Encyclopedia of Education Research, ed. by Chester W. Harris (New York: The Macmillian Company, 1960), pp. 300-06.

effectiveness, self awareness, and sense of responsibility, the institution as well as society can benefit. The personnel approach, however, is still unevaluated and cannot be justified by concrete evidence of performance. An adequate basis for the development of a rationale to guide financial aid practices cannot be developed from a personnel point of view that is vague and of little substance.[102]

Current Status of Financial Aids Administration

In 1966, Gross saw some developments that he thought could provide the beginning steps toward a realignment of financial aid purposes and practices in terms of basic function. He felt that the creation of the Commission on Financial Aid by the American College Personnel Association was an indication of the growing concern about the responsibility of personnel workers for financial aid practices. The development of a profession outside of the personnel field, however, might be the result of the regional associations that were created for Financial Aid Administrators. The support which a training program during the summer of 1964 received was an indication that the problems of training financial aid administrators were being recognized. The training program was a joint effort by the American College Personnel Association, the College

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[102]Gross, "A Critique of Practice in the Administration of Financial Aid," pp. 268-70.

Scholarship Service, and the Western Interstate Commission for Higher Education. Gross felt that some of the research being done at that time was an indication that the practitioners were beginning to get ready to face the problems of administering financial aid.[103]

Research conducted by Paul F. Lazarsfeld and George Nash provided the basis for Nash to make some observations relative to the current status of financial aid administration. He expressed the opinion that there are some very positive characteristics about the current status of financial aid administration. Foremost was the fact that the average administrator was well-qualified, experienced, and was being reasonably well compensated for his work. The size and complexity of financial aid programs provided the impetus to establish the director rather firmly in the administrative hierarchy of colleges and universities and also provided a source of power and prestige. The autonomy which most financial aid offices have also made it possible for most aid administrators to see their job as a guidance function rather than just an administrative or bookkeeping function. Nash saw this as perhaps being one of the most important reasons for the maturation of student financial aids.

An examination of the weak points of financial aid administration caused Nash to conclude that it still

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[103] Ibid., pp. 270-71.

had a long way to go in terms of occupational maturity. Lack of research in the field has been the result of either no expertise or time. Since there is no single journal devoted exclusively to financial aid research, the research which has been done is scattered throughout a large number of publications and books. Even though state and regional associations have been formed, there still is no national association of financial aid administrators. Another major sign of occupational immaturity is that aid administrators have not had much voice in influencing legislation at either the national or state level. Lack of maturity of the profession is further indicated by the high degree of turnover among aid administrators. In a random sample of fifty colleges, it was found that there was a 38 per cent turnover between the academic years of 1965-1966 and 1966-1967. Occupational immaturity is also indicated by the lack of movement between colleges by aid administrators. The placement and recruitment functions which a professional association would provide would make it possible to spend one's entire career in the field.[104]

Recent Developments in Financial Aid Administration

Financial assistance to undergraduates is the result of a variety of programs as diverse as the

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[104]George Nash, "The Current Status of Financial Aid Administration," National Association of Collegiate Admissions Counselors Journal, XIII, No. 2 (1969-1970), 5-8.

institutions that the students attend. The lack of consensus relative to what constitutes a good financial aid program perhaps is due to the sensitivity that colleges and universities have about sharing with the public that information which pertains to the manner in which they award financial aid. Moon suggests several reasons why institutions are extremely reluctant to commit themselves in print. First, the standards for awarding aid and the resources available seem to be constantly changing and also the nature of some of the information is such that it must remain confidential.[105] Another reason was suggested by Dyer after he reviewed the results of a study which he undertook. He stated that, "most colleges and universities are not quite sure of what is going on in their own shops and are sometimes hard put to find out."[106] It was indicated that this situation perhaps was the failure of schools to establish a clearly defined institutional research program relative to their financial aid program.[107]

Howe recognized two recent developments that he felt would reduce the areas of disagreement among

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[105] Rexford G. Moon, Jr., Student Financial Aid in the United States: Administration and Resources (New York: College Entrance Examination Board, 1963), p. 2.

[106] Henry S. Dyer, "Understanding Financial Aid Problems Through Institutional Research," Student Financial Aid and Institutional Purpose (Princeton: College Entrance Examination Board, 1963), p. 56.

[107] Ibid., pp. 56-58.

institutions and could also refine the financial aid award procedures. He urged all schools to consider the possible advantages of the packaging concept which calls for a combination of gift aid and self-help aid. For instance, he feels that schools which offer straight gift scholarships to meet a student's need are adhering to a wasteful and indiscreet policy. Even though colleges may want to continue to determine need with the same assessment techniques that they have, they should fulfill no more than two-thirds of a student's need with gift aid. This policy has the possible advantage of reducing by approximately one-third the total amount spent by institutions for gift assistance. This could be very significant saving for those private schools that support their scholarship programs from current operating funds. This practice also encourages students to assume the initiative in taking advantage of a large number of outside loan programs provided by the Federal Government, the states, private agencies, and commercial enterprises. Further, if gift aid is supplemented by a relatively open-ended offer of self-help the student and his parents will help select their own need by deciding the amount and the form of self-help that will complete the package. The ultimate need, therefore, will not be established by the institution but by the student in cooperation with his parents. Another advantage of the packaging concept arises when students have been awarded gift aid assistance by agencies outside the academic community. For example, if a college should meet a student's total need by gift aid, they would be in a difficult position to make an adjustment in the student's aid package should he subsequently receive gift aid from a source not related to the institution. However, if self-help comprised part of the student's aid package, he probably would elect to use his gift aid award to reduce his self-help obligation. This in turn would make more self-help available to other students.

The second development which Howe wished to support was the concept of centralization in the administration of financial aid. Centralization permits each financial aid request to be thoroughly analyzed and considered and also provides for greater flexibility in determining how a particular student's need can best be met. In addition, duplication of record keeping is reduced or eliminated and the students cannot put departments into a competitive bidding situation as they seek various forms of help within the college. Howe also urged the extension of the centralization concept through voluntary agreements between schools which have comparable policies on admission and aid, and a sizeable group of common candidates. In fact, he felt that if his case for the packaging of awards was to win acceptance, there would have to be some definite inter-institutional packaging policies relative to gift aid since it seems to be the basis of competitive bidding between schools. Financial aid officers should assume the responsibility of ensuring that educational, rather than financial considerations dictate a student's college choice.[108]

Summary

Recent changes in basic philosophy, specific problems, and techniques are indications that student financial aid in the United States is a dynamic activity which is still in a formative state. The changing patterns in financial aid tend to reflect current long-range national and international concerns. Since the ultimate goal of student financial aid programs is to remove the economic barriers to higher education, their primary purpose has been to provide assistance to students who, without such aid, would be unable to attend college. Consequently, there is little doubt any longer that need should determine who will receive aid from an institution and in what amount. Further, the national interest in expanding the equality of educational opportunity has caused financial assistance to be extended to all needy able students rather than just the intellectually elite.

An increasing amount of money from an increasing variety of sources has provided a significant increase in the amount of money available for financial assistance to

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[108]Arthur Howe, Jr., "Centralizing Student Aid Activities," Student Financial Aid and Institutional Purpose (Princeton: College Entrance Examination Board, 1963), pp. 46-55.

college students. The total amount available is comprised of grants and scholarship which are forms of gift aid and loans and employment which are forms of self-help. So that gift aid might be distributed in an equitable manner, the concept of packaging was developed. Unfortunately, extensive research has revealed that a class bias existed in respect to the manner that gift aid was distributed. The higher a student's socio-economic class, the more likely it was that his award would be comprised of a disproportionate amount of gift aid. The Economic Opportunity Grants Program was designed to equalize the distribution of gift aid. No research projects, however, have been reported which would indicate whether or not this has happened.

CHAPTER III

DESIGN OF THE STUDY

The design of this study is described under four main headings: (1) Sample Selection, (2) Sources and Nature of the Data, (3) Testable Hypotheses, and (4) Analysis Procedures.

Sample Selection

The sample was comprised of all first semester freshmen students at the University of South Dakota who were awarded financial assistance from unrestricted sources for the 1969-1970 academic year. A total of 170 students was included in the study.

Sources and Nature of the Data

Records maintained at the Office of Financial Aids at the University of South Dakota provided the data required to conduct the study. Grand point averages for the students were computed to the nearest one thousandth. The total number of grade points for a student was computed by assigning the following values to letter grades: (1) four points for A, (2) three points for B, (3) two points for C, and (4) one point for D. The grade point average (G.P.A.) was computed by dividing the total number of grade points by the number of credit hours for which the student was registered during the first semester. The high school grade point average was determined by dividing the student's total number of grade points by the number of units for which he received credit on his high school transcript. The student's high school class rank was computed to the nearest one-tenth percentile rank.

The student's financial need was secured from the analysis of the Parents' Confidential Statement by College Scholarship Service. The suggested practice of rounding the student's need to the nearest fifty dollars was not done initially by the Office of Financial Aids. Consequently, this was not done in the application of the proposed financial aids policy.

Testable Hypotheses

The 170 students included in this study were ordered according to need and then divided into five groups. The testable hypotheses, which pertain to the five groups, were stated in the null form since it was hypothesized that no significant difference existed among the groups with respect to various characteristics. Therefore, a rejection of the null hypothesis would lead to the conclusion that the groups would differ significantly with respect to the characteristic under consideration.

The primary hypothesis that a bias existed in the manner which financial aid awards were made at the University of South Dakota was tested by the following sub-hypotheses.

H1(a): There is no significant difference in the mean relative aid awards among the five groups.

H1(b): There is no significant difference in the mean proportion of the gift aid in the awards among the five groups.

The following sub-hypotheses were tested with respect to the primary hypothesis that the students with the least need would have the most promising academic profiles with respect to high school class rank, high school grade point average, and ACT composite score

H2(a): There is no significant difference in the mean high school grade point averages among the five groups.

H2(b): There is no significant difference in the mean high school class ranks among the five groups.

H2(c): There is no significant difference in the mean ACT composite scores among the five groups.

H2(d): There is no significant difference in the mean expected first semester grade point averages among the five groups.

H2(e): There is no significant difference in the mean first semester grade point averages among the five groups.

The following hypothesis will be tested with regard to the exploratory question concerning the possible association of a student's work status with his predicted first semester grade point average. This hypothesis is not stated in the null form.

> H3: The student's work status, when combined with his high school grade point average, high school class rank, and ACT composite score, will increase the precision of the prediction of first semester grade point average.

Analysis Procedures

Analysis of variance, multiple regression analysis, the Tukey(a) procedure, and the test of significance between two multiple correlation coefficients comprised the procedures employed in the statistical treatment of the data. The IBM 1130 Statistical System analysis of variance and stepwise linear regression programs were used to perform the computational work.[1]

The first step in the analysis procedure was to order, according to need, the 170 students included in the study. The ordered population was then divided into quintiles. For identification purposes, the quintiles were labeled I through V with Group I being composed of the thirty-four students with the least need and Group V

[1] International Business Machines, 1130 Statistical System (1130-CA-o6XO) Users Manual (White Plains, N.Y.: IBM Technical Publications Department, 1967), pp. 7-21, 72-86.

being composed of the thirty-four students with the greatest need.

The next step was to select a level of statistical significance for the testing of the hypotheses. The .05 and the .01 levels have been widely advocated.[2] Prior to selecting a level, consideration was given to the two types of errors related to the level at which an hypothesis is tested. Type I errors are referred to as the significance level of the test and can be set at the desired level which the experimenter desires to risk the possibility of rejecting a true hypothesis.[3] For example, the .05 level means that an obtained result which is significant could occur by chance only five times in 100 trials.[4] Type II errors involve the failure to reject assumptions when they are actually false. Therefore, for any given test, the probabilities of Type I and Type II errors are inversely related. Thus, it is impossible to minimize the risks of both types of errors simultaneously since the chances for a Type II error are increased as the chances for a Type I error are reduced. Therefore, the decision as to which

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[2]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart, and Winston, Inc., 1964), pp. 153-55.

[3]Hubert M. Blalock, Jr., Social Statistics (New York: McGraw-Hill Book Company, 1960), pp. 123-28.

[4]Kerlinger, Foundations of Behavioral Research, pp. 154-55.

significance level to select should reflect the researcher's evaluation of the possible consequences for each type of error.[5] A Type II error in this study would have involved the failure to reject those assumptions which state that no bias exists when they actually are false. Since a Type II error would permit the inequitable treatment of students to go undetected, it would represent the most serious error from a student personnel aspect. Consequently, it was decided to use the .05 level because it provided the least chance of commiting a Type II error.

In accordance with procedures outlined by Hays, a simple one-way analysis of variance was used to test those hypotheses which pertained to the equality of means among the five groups.[6] The Tukey(a), which is called the honestly significant difference, was used as a posteriori test to determine which pairs of means were significantly different whenever the analysis of variance test indicated that a significance did exist. The studentized range statistic was used to compute the critical value for identifying significant differences. In symbols, the following formula was used to compute the critical value:

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[5] Blalock, Social Statistics, p. 125.

[6] William L. Hays, Statistics for Psychologists (New York: McGraw-Hill Book Company, 1960), pp. 123-28.

$$q_{1-\alpha}(k,f)\sqrt{\frac{\text{MS error}}{n}}$$

where

k = the number of groups

f = the degrees of freedom for Mean Square error

$1-\alpha$ = the level of the test

q = the range statistic

n = the number of observations in each group.

Whenever the difference between any two means was greater than the critical value, they were considered significantly different.[7]

In order to determine if there was an association between the student's grade point average and his work status, a test of significance was conducted relative to the difference between two multiple correlation coefficients. The three variables of ACT composite score, high school grade point average, and high school class rank were used in a multiple regression equation to predict first semester grade point average. The dichotomous variable of "work" or "no work" was added to these three variables and a new multiple correlation coefficient was computed. To determine if the addition of this variable significantly improved the prediction of the first semester grade point average, a test of significance was conducted

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[7]W. J. Winer, Statistical Principles in Experimental Design (New York: McGraw-Hill, 1962), pp. 77-89.

for the difference between two multiple correlation coefficients in accordance with the procedure used by Wert, Neidt, and Ahmann.[8]

Development of the Proposed Packaging Policy

The proposed packaging policy was developed from the consideration given a considerable number of ideas and theories. A review of pertinent literature, current policies in effect at several institutions, and the opinions of the individuals concerned with financial aid awards at the University of South Dakota were incorporated into the proposed plan.

The structure of the financial aid packaging policy was restricted in several ways. First, the prescribed regulations for the awarding of Economic Opportunity Grants for the 1969-1970 academic year as outlined in the Economic Opportunity Grants Program Manual of the United States Department of Health, Education, and Welfare were incorporated in the proposed policy. The prescribed regulations were as follows:

1. In order for a student to be eligible for a grant, the institution's need analysis system must indicate that his parents' contribution to his educational expenses cannot exceed $625.00
2. A grant may not be made for less than $200.00 or for more than $1,000.00.

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[8] James E. Wert, Charles O. Neidt, and J. Stanley Ahmann, *Statistical Methods in Educational and Psychological Research* (New York: Appleton, Century, Crofts, Inc., 1954), pp. 237-49.

3. A grant must be matched by an equal amount from other institutional resources.
4. The amount of the grant should be rounded to the nearest fifty dollars.[9]

Second, the packaging policy award formulas were developed so that neither the amounts of certain types of aid nor the total amount initially awarded to the students would be exceeded.

The total need of the 170 students in this study as determined by the need assessment of the Parents' Confidential Statement was $176,946.00. The resources available were $142,125.00. Consequently, the need exceeded the available resources by $34,821.00. By mathematical computation, it was found that if each student would assume the responsibility of meeting the first $230.00 of his need, the remainder of his need could be fulfilled by the resources available. Therefore, $230.00 was subtracted from a student's need in order to determine the amount of aid he would be awarded. After the size of the student's award was established, his financial aid package was determined by Table 3.1.

The exploratory question relative to the impact of the proposed financial aid packaging policy was studied with respect to the number of students who might not have enrolled at the University of South Dakota had their

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[9] Economic Opportunity Grants Program Manual, U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Higher Education (Washington, D.C.: Government Printing Office, 1969), p. 89.

TABLE 3.1.--Proposed packaging policy.

Amount of Award	Eligibility Requirements		Package
	Parents Contribution	Grade Point Average	
\$ 00.00-\$ 290.00	None	None	Employment for the amount of the award
\$290.00-\$ 715.00	None	None	\$290.00 by employment Loan for the balance
\$716.00-\$ 915.00	None	None	\$290.00 by employment \$425.00 by NDSL Scholarship for balance
\$916.00-\$2200.00	\$625.00 or less	None	\$290.00 by employment \$425.00 by NDSL Maximum EOG Scholarship for balance
\$916.00-\$2200.00	More than \$625.00 or	3.750 or better	\$290.00 by employment \$425.00 by NDSL Scholarship for balance

awards been determined by it. The pertinent data relevant to this exploratory question was collected by conducting an interview with a probability sample of the students who would have received a less desirable aid package. The interview technique was used so that a depth of response was possible. In addition, it provided an opportunity to check the truthfulness of the responses by seeking related information at various points in the interview.[10] A disproportionate sample was used to insure that two particular categories of students were adequately represented in the sample. One category was comprised of those students who would have received no financial aid because their need was not great enough. The other category was comprised of those students who would have had their award substantially reduced because their original award exceeded their need. These groups were of particular interest since they obviously would have been the individuals most likely not to enroll if the proposed packaging policy had been in effect. In addition, the initial awards made to these students reflected the opinion that they would enhance the student body because of their academic records.

The interview was informally structured but conducted in such a manner that the answer to the following question could be elicited:

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[10] John W. Best, Research in Education (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959), pp. 167-69.

> Would the student have attended the University of South Dakota had his financial aid award been determined by the proposed packaging policy?

The answer to this question was sought by a series of related questions. These were as follows:

1. At what other colleges or universities did the student complete all the requirements for admission? How many schools accepted him for admission?

2. At what other colleges or universities did the student apply for and subsequently receive a financial aid award?

3. Did the student receive any financial aid awards in recognition of his high school activities or academic performance?

4. How would the student's post high school plans been changed if the University of South Dakota had not awarded him financial assistance?

If the student indicated that he would have attended the University of South Dakota even though he would have received no financial assistance, the interview was terminated. If the student indicated, however, that he would have attended another college or university or was uncertain as to how his plans would have changed, he was asked to react to the hypothetical award which the proposed packaging policy would have provided for him. The interview was concluded as soon as the student indicated how his plans might have been changed.

A weighted factor related to the sampling fraction for the disproportionate stratified sample was used to determine the percentage of students receiving less desirable aid packages who would not have enrolled at the

University of South Dakota. In symbols, the following formula was used to determine the mean for the sample.[11]

$$\bar{y}_{st} = \frac{\sum_{n=1}^{L} N_h \bar{y}_h}{N}$$

Since decisions made relative to this finding are administrative rather than statistical, no test of significance was conducted.

Summary

The 170 freshmen students at the University of South Dakota who were awarded financial assistance from unrestricted funds for the 1969-1970 academic year comprised the sample. The students in the sample were ordered according to need and then divided into five groups. An analysis of variance was conducted to determine if equality existed among the means of the five groups with respect to the following: (1) high school grade point average, (2) high school class rank, (3) ACT composite score, (4) predicted first semester grade point average, (5) actual first semester grade point average, (6) relative aid award, and (7) percentage of gift aid in the financial aid award. If a significance was found, the Tukey(a) procedure was used to determine between which pairs of means the significance existed. A proposed financial aid packaging policy was

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[11] William G. Cochran, Sampling Techniques (New York: John Wiley and Sons, Inc., 1963), pp. 87-89.

developed and its affect on the post-high school plans of those students who would have received less desirable aid packages was determined by means of an informal interview.

CHAPTER IV

ANALYSIS OF RESULTS

The hypotheses relative to the equality of means were tested by use of simple one-way analysis of variance procedures. The .05 level of significance was preselected as the criterion for rejecting the hypotheses. Whenever a significant difference was found, the Tukey(a) procedure was used to determine the means between which a significance existed. The difference between two multiple correlation coefficients was also tested at the .05 level.

Hypotheses

Hypothesis 1(a)

Hypothesis 1(a) states that no significant difference exists among the relative aid awards of the five groups. Table 4.1 presents the summary relative to the testing of this hypothesis. Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a

TABLE 4.1.--Analysis of variance summary for testing difference among means of the groups with respect to relative aid.

Source	SS	df	MS	F
Between Groups	7622502.01	4	1905625.50	17.55
Within Groups	17913194.03	165	108564.83	
Totals	25535696.04	169		

significant difference did exist. The critical value was found to be $218.13. Table 4.2 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.2.--Difference between mean relative aid awards of the five groups.

Group	Mean Relative Aid Award	Difference Between Groups			
		II	III	IV	V
I	+$115.00	$226.00*	$278.00*	$485.00*	$609.00*
II	-$111.00		$52.00	$259.00*	$383.00*
III	-$163.00			$207.00	$331.00*
IV	-$370.00				$124.00
V	-$494.00				

*Significant at the .05 level.

Hypothesis 1(b)

Hypothesis 1(b) states that no significant difference exists among the mean proportion of gift aid in the awards of the five groups. Table 4.3 presents the summary relative to the testing of this hypothesis.

TABLE 4.3.--Analysis of variance summary for testing difference among means of the groups with respect to the proportion of award which was gift aid.

Source	SS	df	MS	F
Between Groups	41368.30	4	10342.08	5.85
Within Groups	161326.20	165	977.74	
Totals	202694.50	169		

Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a significant difference did exist. The critical value was found to be 20.7. Table 4.4 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.4.--Difference between mean proportion of gift aid in the awards of the five groups.

Group	Mean Proportion of Gift Aid in Award Package	Difference Between Groups			
		II	III	IV	V
I	59.7	41.4*	32.6*	30.2*	22.3*
II	18.3		8.8	11.2	19.1
III	27.1			2.4	10.3
IV	29.5				7.9
V	37.4				

*Significant at the .05 level.

Hypothesis 1(c)

Hypothesis 1(c) states that no significant difference exists among the mean high school grade point averages of the five groups. Table 4.5 presents the summary relative to the testing of this hypothesis.

TABLE 4.5.--Analysis of variance summary for testing difference among means of groups with respect to the high school grade point averages.

Source	SS	df	MS	F
Between Groups	4.09277	4	1.02319	3.869
Within Groups	43.63558	165	.26445	
Totals	47.72835	169		

Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a significant difference did exist. The critical value was found to be .340. Table 4.6 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.6.--Difference between mean high school grade point averages of the five groups.

Group	Mean G.P.A.	Difference Between Groups			
		II	III	IV	V
I	3.491	.177	.323	.348*	.445*
II	3.314		.146	.171	.268
III	3.168			.025	.122
IV	3.143				.097
V	3.046				

*Significant at the .05 level.

Hypothesis 2(b)

Hypothesis 2(b) states that no significant difference exists among the high school class ranks of the five groups. Table 4.7 presents the summary relative to the testing of this hypothesis.

TABLE 4.7.--Analysis of variance summary for testing difference among means of groups with respect to the high school class rank.

Source	SS	df	MS	F
Between Groups	5034.81348	4	1258.70337	3.66
Within Groups	56754.44442	165	343.966	
Totals	61789.25790	169		

Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a significant difference did exist. The critical value was found to be 13.2 Table 4.8 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.8.--Difference between mean high school class rank of the five groups.

Group	Mean Class Rank	Difference Between Groups			
		II	III	IV	V
I	88.5	3.4	9.0	11.8	14.8*
II	85.1		5.6	8.4	11.4
III	79.1			2.4	5.8
IV	76.7				3.0
V	73.7				

*Significant at the .05 level.

Hypothesis 2(c)

Hypothesis 2(c) states that no significant difference exists among the mean ACT composite scores of the five groups. Table 4.9 presents the summary relative to the testing of this hypothesis.

TABLE 4.9.--Analysis of variance summary for testing difference among means of groups with respect to the ACT composite scores.

Source	SS	df	MS	F
Between Groups	218.53	4	54.63	3.98
Within Groups	2266.69	165		
Totals	2485.22	169		

Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a significant difference did exist. The critical value was found to be 2.45. Table 4.10 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.10.--Difference between mean ACT composite scores of the five groups.

Group	Mean Composite Score	Difference Between Groups			
		II	III	IV	V
I	27.26	1.94	2.61*	2.85*	3.17*
II	25.32		.67	.91	1.23
III	24.65			.24	.56
IV	24.41				.32
V	24.09				

*Significant at the .05 level.

Hypothesis 2(d)

Hypothesis 2(d) states that no significant difference exists among the means of the expected first semester grade point averages of the five groups. Table 4.11 presents the summary relative to the testing of this hypothesis.

TABLE 4.11.--Analysis of variance summary for testing difference among means of groups with respect to the expected first semester grade point averages.

Source	SS	df	MS	F
Between Groups	3.15798	4	0.78949	4.88
Within Groups	26.98927	165	0.1636	
Totals	30.14725	169		

Any F greater than 2.39 would indicate that a significant difference did exist among the means. Thus, the null hypothesis was rejected. The Tukey(a) procedure was applied to calculate the critical value for determining between which pairs of means a significant difference did exist. The critical value was found to be .267. Table 4.12 illustrates the difference between each pair of means and denotes which are greater than the critical value.

TABLE 4.12.--Difference between expected first semester grade point averages of the five groups.

Group	Mean Expected G.P.A.	Difference Between Groups			
		II	III	IV	V
I	3.051	.172	.287*	.320*	.388*
II	2.879		.115	.148	.216
III	2.764			.033	.101
IV	2.731				.068
V	2.663				

*Significant at the .05 level.

Hypothesis 2(e)

Hypothesis 2(e) states that no significant difference exists among the means of the actual first semester grade point averages of the five groups. Table 4.13 presents the summary relative to the testing of this hypothesis.

TABLE 4.13.--Analysis of variance summary for testing difference among means of groups with respect to the actual first semester grade point averages.

Source	SS	df	MS	F
Between Groups	3.68143	4	0.92035	2.074
Within Groups	73.21790	165	0.44375	
Totals	76.89933	169		

Table 4.14 illustrates the difference between each pair of means. An analysis of this table revealed a rather sizeable difference between Groups V and I. Therefore, the Tukey(a) procedure was applied and a critical value of .441 was computed. Since the difference between Groups I and V exceeded this value, a significant difference was found. Consequently, the F statistic and the q statistic led to conflicting decisions. A similar situation was demonstrated by Winer in which he indicated that the conflict was caused by the equality of several means.[1] Since the means of Groups II, III, and IV fall at nearly the same point, it appears that these means could be the reason for the conflict between the two statistics.

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[1]Winer, Statistical Principles in Experimental Design, pp. 78-79.

TABLE 4.14.--Difference between actual first semester grade point averages of the five groups.

Group	Mean Actual G.P.A.	Differences Between Groups II	III	IV	V
I	3.068	0.250	0.313	0.233	0.454*
II	2.818		0.063	0.017	0.214
III	2.755			0.080	0.141
IV	2.835				0.221
V	2.614				

*Significant at .05 level.

Exploratory Questions

Use of Student's Work Status to Predict First Semester Grades

The difference between two multiple correlation coefficients was tested at the .01 level to determine whether there was significant difference between them.

Hypothesis 3.--Hypothesis 3 states that the variable of work status when added to the three variables of high school grade point average, high school class rank, and ACT composite score would significantly increase the precision of the prediction of first semester grade point averages. The multiple correlation coefficient for the prediction of first semester grade point averages was 0.6244 when the three variables of ACT composite score, high school grade point average, and high school class rank were used. When the student's work status was added to make a fourth variable in the prediction equation, the multiple correlation became 0.6326. This represented an increase of only 0.0082. Table 4.15 presents the summary relative to the testing of this hypothesis.

TABLE 4.15.--Analysis of variance summary for testing difference between two multiple correlation coefficients.

Source	df	SS	MS	F
4 variable regression	4	30.933		2.75*
3 variable regression	3	30.154		
Gain due to addition of work status	1	.799	.799	
4 variable residuals	165	46.752	.283	

Since an F of 6.63 or greater is required in order to have a significant difference between the two multiple correlation coefficients, the positive hypothesis was rejected.

Impact of Proposed Financial Aid Policy

Table 4.16 illustrates the amount of financial assistance which some students would have lost had the hypothetical packaging policy been in effect for the 1969-1970 academic year.

Two groups of students were of particular interest because it seemed they would be the most likely not to

TABLE 4.16.--Number of students losing specific amounts of aid as related to their need if proposed financial aid policy had been in effect for 1969-1970 academic year.

Need	Amount Lost											Total
	$000 to $099	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 to $899	$900 to $999	$1000 to $1199	
$2000 and over	1		1									2
$1800-$1999	1											1
$1600-$1799	1	1										2
$1400-$1599	3	3	8									14
$1200-$1399	1	1	4		1							7
$1000-$1199	3	1	18	1	1	1						25
$ 800-$ 999		1	9	1	1							12
$ 600-$ 799	2	3	10									15
$ 400-$ 599	1		6				1	2				10
$ 200-$ 399			6									6
$ 000-$ 199		6	8								1	15
Total	13	16	70	2	3	1	1	2	0	0	1	109

have enrolled at the University of South Dakota had the proposed packaging policy been used to determine their award. One group was composed of those students who would not have received an award because they could demonstrate no need. The second group was composed of those students who would still have received an award but the amount would have been reduced by $300.00 or more. In order to insure that these students were adequately represented in the sample, a disproportionate stratified sample was drawn. The strata, the number of students in each strata, and the sampling fraction is illustrated by Table 4.17.

TABLE 4.17.--Selected strata for the students losing financial assistance by application of hypothetical packaging policy.

Strata	No.	No. in Sample	Sampling Fraction
1. Students who would receive no award	15	10	2/3
2. Students losing $300.00 or more	9	6	2/3
3. Students losing less than $300.00	85	17	1/5
Total	109	33	3/10

The reaction of the students to the question pertaining to how their plans might have changed had the University of South Dakota provided them no financial assistance was as follows:

23 indicated that they still would have enrolled at the University of South Dakota.

5 indicated that they were uncertain as to what they would have done.

4 indicated that they would have attended another institution.

The nine students who comprised the total number of students who were either uncertain or would have attended another institution were then asked to react to the hypothetical award. All five of the students who were uncertain and two of the four that would have attended another school indicated that they would have accepted the hypothetical award. Consequently, thirty-one of the thirty-three students comprising the sample would have attended the University of South Dakota even though they would have received an award which at best would have been comparable to that which the proposed packaging policy would have provided for them. Of the two students that would not have enrolled, one came from the stratum which would have received no award and one came from the stratum that would have lost less than $300.00 in financial assistance.

Since a disproportionate sampling fraction had been used, this factor had to be considered prior to the drawing of an inference relative to the percentage of the 109 students that would not have attended the University of South Dakota had they received an award as determined by the proposed packaging policy. Taking this factor into consideration, it was inferred that approximately 6 per cent of the 109 students losing some financial assistance would not have attended the University of South Dakota.

Tables 4.18 and 4.19 provide some subordinate information relative to the contemplated college plans of the students in the sample. The data contained in these tables indicate that nearly 70 per cent of the students in the sample had applied for admission at the University of South Dakota only.

Summary

The 170 students involved in this study were ordered according to their financial need as determined by the analysis of their Parents' Confidential Statement by College Scholarship Service. The ordered list was then divided into five groups with Group I being composed of the thirty-four students with the least need and Group V being composed of the thirty-four students with the most need. Means for each group were computed with respect to the following:

1. Relative aid
2. Proportion of gift aid in the award
3. High school class rank
4. High school grade point average
5. ACT composite score
6. Predicted first semester grade point average
7. Actual first semester grade point average

TABLE 4.18.--Number of students completing requirements for admission at other colleges and universities in addition to the University of South Dakota.

Institution	Number of Students
Only at University of South Dakota	23
At University of South Dakota and:	
Buena Vista College	1
Concordia College	1
Dakota Wesleyan University	1
Morningside College	1
Northern State College	2
University of Iowa	1
University of Michigan	1*
At University of South Dakota and two other schools:	
Augustana College and South Dakota State University	1
St. Olaf College and Concordia College	1
Total	33

*Only student to be rejected by some other institution.

TABLE 4.19.--Comparison of awards in respect to the amount of educational expenses which the student was expected to assume.

	How Award Compared to USD Award			Total
	Not As Good	Same	Better	
Augustana College		1	1	2
Concordia College		1		1
Dakota Wesleyan University			1	1
Huron College		1		1
Morningside College	1			1
Northern State College	2			2
South Dakota State University		1		1
Totals	3	4	2	9

Upon testing related means for equality, it was found that the five groups of students involved in this study were treated significantly differently with respect to the manner in which their financial need was fulfilled and with regard to the proportion of their award which was gift aid. It was also found that a significant difference existed among the groups with respect to their mean high school grade point average, mean high school class rank, mean ACT composite score, mean expected first semester grade point average, and the mean first semester grade average.

Exploratory questions included in this study developed two further investigations. It was found that if the student's work status was added as a variable to the regression equation using the high school grade point average, high school class rank, and ACT composite score, that no significant increase in the precision of predicting first semester grades would result. Information obtained by interviewing a disproportionate stratified sample of students led to the inference that approximately 6 per cent of the 109 students who would have received less desirable packages would have enrolled at some other institution.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The technological threat which Sputnik created and the desire to expand the equality of educational opportunity stimulated explosive growth in student financial aid programs in recent years. Funds were solicited from a great variety of local, state, and national sources for the proclaimed purpose of making it possible for students who, without such financial assistance, would not be able to attend college. The analysis of several extensive research projects, however, seemed to indicate that the funds were not always being used for the purpose for which they were solicited. It was apparent that a social class bias had influenced the manner in which financial assistance was being awarded. Students from the higher social economic levels were being favored with respect to the manner that their need was fulfilled in both the amount of aid and the proportion of their award which was gift aid. The most current analysis of financial aid programs reported in a review of pertinent literature indicated that a value system, which provided a disproportionate amount of gift-aid for middle- and upper-income students and self-help aid for low-income youngsters, was still functioning in the financial aid programs of many colleges and universities. It has been suggested that the Higher Education Act of 1965, which created the Economic Opportunity Grants Program, was a result of the recognition that colleges and universities would not independently change their value system. Some observers felt that the Economic Opportunity Grants Program had the possibility of mitigating the bias in the financial aid systems since it was designed for students of exceptional need. A review of the literature, however, did not reveal any analysis of financial aid programs since the Economic Opportunity Grants Program has been in effect. Therefore, it was the purpose of this study to analyze the awards of one university to determine if a bias still existed in their award system even though they participated in the Economic Opportunity Grants Program.

Findings

The study was initiated by identifying all first semester freshmen students at the University of South Dakota who were awarded financial assistance from unrestricted funds. The population, which involved 170 students, was ordered according to need and then divided into five groups with Group I being identified as the group with the least need and Group V as the group with the greatest need. Means for seven different types of data were computed for each of the five groups and the related means were tested for equality. Significant differences existed among the groups with respect to the following:

1. Relative aid awards
2. Proportion of award which was gift aid
3. High school grade point average
4. ACT composite score
5. High school class rank
6. Expected first semester grade point average
7. Actual first semester grade point average

Two exploratory questions produced the following information:

1. The addition of the student's work status as a variable to the regression equation which included the high school grade point average, high school class rank, and ACT composite score did not significantly increase the precision of the prediction of the first semester grade point average.
2. Approximately 6 per cent of the students, who would have received a less desirable aid package, would not have enrolled.

Conclusions

Analysis of Current Packaging Policy

The analysis of the data clearly indicated that a bias did exist with respect to the manner which a student's need was fulfilled. The bias was of such a nature that the mean relative aid award and the mean proportion of gift aid in the awards of Group I were significantly different from their related means of Groups II, III, IV, and V. Table 5.1 illustrates the perfect correlation that the mean need and the mean relative aid award have with the mean high school grade point average, the mean high school class rank, and the mean ACT composite score of the five groups. This supports the theory that there is a strong relationship between the student's social economic class and his success in school and on standardized tests. Thus, if a student's academic profile is a significant factor in determining how much of his need is to be fulfilled, the students with the least need will tend to have their need fulfilled to a greater degree.

Further analysis of the data revealed that the institution's participation in the Economic Opportunity Grants Program reflected itself in the gift aid awards rather than in the relative aid awards. For example, Group II received the lowest proportion of gift aid in their award for several apparent reasons. First, the need analysis of their Parents Confidential Statement was such

TABLE 5.1.--A summary of mean values for various classes of data for the five groups.

Mean	Groups				
	I	II	III	IV	V
Student need	258.94	792.56	1,093.56	1,366.59	1,692.65
Parental contribution	1,343.72	773.88	486.32	192.41	103.47
High school G.P.A.	3.491	3.314	3.168	3.143	3.046
High school class rank	88.5	85.1	79.5	76.7	73.7
ACT composite score	27.3	25.3	24.7	24.4	24.1
Predicted first semester G.P.A.	3.051	2.879	2.764	2.731	2.663
Actual first semester G.P.A.	3.068	2.818	2.755	2.835	2.614
Relative aid award	+115.00	-111.00	-163.00	-370.00	-494.00
Percent of award fulfilled by:					
Scholarship	59.7	11.4	9.4	4.3	5.1
E.O.G.	. .	6.9	17.7	25.2	32.3
Employment	15.0	34.3	35.5	33.1	26.6
Loan	25.1	47.3	37.2	37.3	35.8
Gift Aid	59.7	18.3	27.1	29.5	37.4

that very few individuals in this group were qualified to be considered for Economic Opportunity Grants. The second reason appeared to be that their academic credentials were such that very few qualified for scholarship assistance under current policy. Therefore, the major proportion of the awards which this group received was in the form of self-help.

Impact of the Proposed Packaging Policy

One readily apparent feature of the proposed packaging plan was a reduction in the maximum amount of self-help which some students had to assume. For example, under the actual system, some students assumed job and loan obligations for as much as $1,300.00. Under the proposed plan no student would have to assume a burden of self-help greater than $715.00. Therefore, burden for self-help was distributed over the entire group rather than concentrated in the groups with the less pretentious academic credentials.

Results from the investigation conducted relative to the impact that the proposed packaging policy would have had on the total freshmen enrollment seemed to indicate that it would have been negligible. In fact, it is possible that the enrollment could have been increased due to a more effective utilization of the available self-help aid. During the interview sessions, many students indicated that their parents probably would have provided them additional resources rather than have them accept employment or a loan. Consequently, the aid awards which were not accepted could then be extended to those applicants who failed to receive awards because of insufficient funds.

The requirement that each student must accept a specific amount of self-help prior to being eligible for gift aid can relieve some of the concern for those financial aid officers who question the validity of the current financial need assessment techniques. If a student is willing to assume the obligations that a self-help award requires, it perhaps is some indication that his need is fairly realistic. Therefore, the self-help requirement can function as one more screening device in the need assessment process.

The changes which the packaging process might incur in the academic profile of the group being awarded assistance is much more difficult to assess. The number of students who would not have enrolled, however, is such that it is highly unlikely that the overall mean profile of the group being assisted would be significantly changed even if the most promising individuals were lost. Institutions, that have used financial assistance to recruit students with special talents or exceptional academic records with the conviction that they enhance the student body, may question the value of the proposed packaging policy. The proposed packaging policy, however, was not created for the purpose of using financial assistance to recruit students without consideration for their ability to pay for their education. Instead, the proposed packaging policy was designed to expend available resources in a fair and equitable manner.

Impact of Part-Time Employment

The fact that part-time employment during the term had no apparent association with the student's first semester grade point average was not surprising since it was consistent with the findings reported by related research projects. The findings should be reassuring to those individuals who have some concern about the possible effect of employment on the student's academic performance.

Recommendations and Implications for Further Research

One dimension of the award system which needs further investigation is the amount of money which a student should be expected to contribute to his own education. A fundamental investigation should be directed toward discovering if there is a relationship between the student's social economic level and the resources which he can be expected to provide. If students are to be encouraged to work and save money for their education, they should not forfeit financial assistance to the student who has lacked the ambition or the economic foresight to save for his own education. At the same time, however, students who must contribute to the support of their family should not be penalized for not being able to contribute to their educational expenses. Therefore, this particular aspect of the award system should be studied so that the financial aid officer has some rationale for the part he expects student resources to have in the packaging process.

As the cost of attending college continues to spiral, there is a growing recognition that a lack of resources is a serious deterrent to college attendance. The public's recognition of this fact, and also the recognition of the importance to the society of having as many able young people in college as possible, is reflected in the growing support which colleges have been receiving in the form of new funds for scholarships, loans, and jobs. Financial assistance for college students has come from individual donors, corporations, foundations, State and Federal Governments. If this support is to be maintained and new sources developed, it is essential that institutions can present verifiable evidence of the accomplishments of their financial aid programs. In order to do this, the financial aid program must have some identifiable criteria against which it can be compared. Therefore, it is essential that objectives are established for the financial aid program which relate to the various goals and practices of the institution. Since all members of the academic community have a vested interest in the results of the financial aid program, the objectives should be the result of a joint effort by representatives from the student body, the faculty, and the administration.

Once the financial aid program has been given a sense of direction by the objectives which have been established for it, parameters should be established which will provide consistency among the awards made to students with respect to the amount and the burden for self-help which each person is expected to assume. The results of this study clearly indicated the need for specific criteria to guide the packaging process. The criteria need not be so inflexible that the financial aid officer cannot make exceptions. The criteria, however, should be such that students with similar circumstances would receive awards which are essentially the same.

The minimum research plan which an institution should consider ought to include several investigations. It should definitely undertake the necessary procedures needed to appraise the past, present, and the potential contributions which the financial aid program has or can make to the various goals and practices of the institution. Further, if a school subscribes to the philosophy that the primary purpose of a college's financial aid program is to provide financial assistance to students who, without such assistance, would be unable to attend the institution, then one aspect of the basic research plan should certainly be to determine how effectively the available resources are being used to fulfill this purpose. Since the equitable treatment of all students should also be a major concern, another essential feature of the basic research plan should be to determine the consistency with which financial aid is packaged. Once answers are obtained to the major pertinent questions relative to effectiveness and equality, more comprehensive research can be initiated. Research plans, however, can be executed only when the financial aid officer has the essential resources. Therefore, the central administration of the institution must assume the responsibility for providing the means with which to conduct research. If this responsibility is not met, it is very probable that the institution's financial aid program will be administered by intuitive decisions rather than documented information.

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