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BEKKERING, James Robert, 1942-
A STUDY OF EDUCATION RELATED EXPENSES INCURRED BY FULL-TIME UNDERGRADUATE STUDENTS ATTENDING REPRESENTATIVE COLLEGES AND UNIVERSITIES IN MICHIGAN.

Michigan State University, Ph.D., 1972
Education, higher

University Microfilms, A XEROX Company, Ann Arbor, Michigan

A STUDY OF EDUCATION RELATED EXPENSES INCURRED BY FULL-TIME UNDERGRADUATE STUDENTS ATTENDING REPRESENTATIVE COLLEGES AND UNIVERSITIES IN MICHIGAN

By

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and
Higher Education

1972

ABSTRACT

A STUDY OF EDUCATION RELATED EXPENSES
INCURRED BY FULL-TIME UNDERGRADUATE
STUDENTS ATTENDING REPRESENTATIVE
COLLEGES AND UNIVERSITIES
IN MICHIGAN

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One of the most important facets of financial aid administration is the determination of student financial need. Basically, this process normally involves a comparison of financial resources available to the student from his parents and through his own efforts with the total cost of attending the college of his choice for one year. This total cost figure is often referred to as the student budget.

The purpose of this study was to examine the education related expenses incurred by various classifications of full-time undergraduate students attending three types of colleges and universities in Michigan. Actually, two independent, but related, analyses were performed on data collected from students who were (1) financially dependent upon, or (2) financially independent from, their parents.

Analyses of the data supplied by financially dependent students revealed several major findings. Type of higher education institution attended did not substantially affect the mean reported variable expense level, while residency arrangement of the students did affect the expense level. An interaction effect was also found to exist between the institution and residency variables. Three of the four mean expense levels reported by students in various residency arrangements significantly varied from the counterpart levels used by the Michigan Department of Education. Only dormitory residents reported expenses in line with Department figures.

Analyses of data supplied by independent students also provided major findings. Institution attended did not affect the mean reported variable expense level, but family size did have an effect. However, the two variables, when taken together, did not appear to influence the level of expenditures. Only two of the five mean expense levels reported by independent students with various sized family units (married-no children and married-one child) varied significantly from the expense levels recommended as reasonable for them by the U.S. Office of Education.

It is hoped that the results of this study provide a base from which more sophisticated research can be accomplished in the future, with the goal of developing fair, objective, and consistent student budget figures.

Financially dependent students were classified by institution attended (public junior/community college, two and four year private colleges and universities, or four year public institutions) and residency arrangement (dormitory, with parents, or other off-campus housing). Financially independent students were classified by institution attended (same as above) and size of family unit (single-no children, married-no children, married-one child, married-two children, married-three or more children).

For financially dependent students, analysis of variance was used to determine the effect of institution attended, residency arrangement, and their interaction, upon the mean level of education related expenses incurred during the 1971-72 academic year. Several applications of the t-test were employed to provide comparisons between actual student expenses and expense levels for the same cost items used by the Michigan Department of Education in determining financial need for financially dependent students.

For financially independent students, analysis of variance was utilized to determine the effect of institution attended, family size of respondent, and their interaction, upon the mean level of education related expenses incurred during the twelve month period, September, 1971-August, 1972. Several applications of the t-test were also applied to this data to provide comparisons between actual student expenses and expense levels for the same cost items considered reasonable by the U.S. Office of Education.

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CHAPTER I

THE PROBLEM

Need

An important aspect of college student financial aid administration is the determination of financial need, for it is usually financial need, rather than any other single criterion, that determines the amount of money a student is eligible to receive in financial assistance for a given academic year.

Determination of financial need, in turn, consists of three procedures: (1) determining an amount of money which the student and his family can reasonably be expected to contribute toward educational expenses for a particular school year; (2) ascertaining the amount of money which is normally required to meet education related expenses during the same school year; and (3) subtracting the expected family contribution from the cost of attending the college. If the difference is a positive figure, it represents the amount of money which the student in question is eligible to receive in the form of financial aid. If the difference is zero or a negative figure, the resources available to the student from his family meet or exceed the annual total cost of attending his college or university.

The determination and analysis of the family contribution, or ability to pay, has undergone a great deal of study and is now a very scientific, sophisticated procedure. Unfortunately, the same cannot be said for the determination of costs associated with college attendance, commonly referred to as the student budget. There is no commonly accepted procedure by which institutions of higher education can ascertain how much money is required (even on the average) over the course of an academic year to afford their students not only physical necessities but some degree of psychological comfort as well. As this side of financial need analysis is as critical as the determination of family contribution, the need for systematic, scientific research in the area becomes clearly evident. That considerable attention is now being directed to the topic is pointed out by the fact that this study was carried out with the cooperation of and substantial financial support from the Michigan Student Financial Aid Association and the State of Michigan Department of Education.

Purpose of the Study

The purpose of this study is to analyze the spending patterns of various classifications of full-time undergraduate students attending three types of institutions of higher education in Michigan. Actually, two independent, but related, analyses are performed on data collected from various classifications of financially dependent and independent students, respectively. Financially independent students are defined as those whose parents or legal guardians did not claim them as federal income tax exemptions in either 1970 or 1971, and whose parents or legal guardians did not provide more than $200 in support, including value of room and board, during either 1970 or 1971. Financially dependent students are those who either were claimed as dependents or received more than $200 in support during either 1970 or 1971.

For financially dependent students, living arrangements and type of school attended (4 year public, 2 or 4 year private, 2 year junior or community) are analyzed for the purpose of determining if either of those variables affects the amount of money spent for variable expense items. (Variable expense items are those over which the student has some discretion in determining the amount of money to be spent for them.) The average variable expenses reported by students in each residency arrangement are compared with dollar estimates for the same expense items used by the Michigan Department of Education in order to see if a discrepancy exists between them.

For financially independent students, number of students' dependents and type of school attended are analyzed for the purpose of determining if either of those variables affects the amount of money spent for variable expense items. The variable expenses reported by students with the various numbers of dependents are compared with dollar estimates for the same expense items used by the U.S. Office of Education in order to see if a discrepancy exists between them.

Hopefully, this study also provides the groundwork from which more sophisticated research will be generated in the future, something which at this time is totally lacking in the area of student expenses and student budget determination.

Several questions arise in regard to the investigation at hand to which the following hypotheses address themselves. The hypotheses are stated in broad, research form here, and are transposed to the null form in Chapter IV, for testing purposes.

Hypotheses

Hypothesis 1: For full-time undergraduate students financially dependent upon parents or guardians, there will be a significant difference in reported mean variable expenses among institutional types.

Hypothesis 2: For full-time undergraduate students financially dependent upon parents or guardians, there will be a significant difference in reported mean variable expenses among the three types of residency arrangements.

Hypothesis 3: For full-time undergraduate students financially dependent upon parents or guardians, there will be an interaction effect between the various types of institutions and residency arrangements.

Hypothesis 4: The reported mean variable expenses incurred by dependent students in each of the three types of residency arrangements will significantly differ from the variable expense figures utilized by the Michigan Department of Education.

Hypothesis 5: For financially independent, full-time undergraduate students there will be a significant difference in reported mean variable expenses among institutional types.

Hypothesis 6: For financially independent, full-time undergraduate students there will be a significant difference among reported mean variable expenses, as the number of individuals dependent upon the respondents, increases.

Hypothesis 7: For financially independent, full-time undergraduate students there will be an interaction effect between the various institution types and number of students' dependents.

Hypothesis 8: The reported mean variable expenses incurred by independent students in each of the number of dependents categories, will significantly differ from the variable expense figures used by the U.S. Office of Education.

Overview

As very little research has been done on the subject of college student expenses, and little has been published as well, much of the literature reviewed in Chapter II is tangentially related to the research topic. The general historical development of financial aid administration at the campus level is presented to provide a basic understanding of this rapidly developing area and how the research topic relates to it. Also, concluding

Chapter II is a discussion of the literature which pertains more specifically to the topic of college student expenses.

In Chapter III the sample for this study is described, as are the methods used for testing for reliability of the instrument, and the design and analysis utilized.

Included in Chapter IV is the analysis of results for this study, with a summary of the findings, conclusions, discussion, and implications for future research presented in the concluding Chapter V.

Definition of Terms

Financial Need

The amount of money by which total cost of college attendance for a particular academic year exceeds the contribution which the student and his parents can be expected to make from family income and assets.

Student Budget

Total out-of-pocket cost for college attendance per academic year.

Financially Dependent Student

One whose parents or legal guardians claimed him as a federal income tax exemption in either 1970 or 1971 <u>or</u> whose parents or legal guardians provided more than $200 in support, including value of room and board, during either 1970 or 1971.

Finandially Independent Student

One whose parents or legal guardians did not claim him as a federal income tax exemption in either 1970 or 1971, and whose parents or legal guardians did not provide more than $200 in support, including value of room and board, during either 1970 or 1971.

Variable Expense Items

Items over which the student has some discretion in determining the amount of money to be spent for them (examples--cloting, entertainment, books and supplies, transportation).

Residency Arrangement

For the purpose of this study, pertaining only to financially dependent students: (1) living in dormitory, (2) residing with parents, or (3) maintaining other off-campus housing.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The administration of student financial aid programs on college and university campuses during the past several years has become a complex task, requiring a high degree of coordination, and involving issues other than those of a strictly financial nature. The current emphasis upon equal educational opportunity and involvement in the student aid field by federal and state governments have provided institutional aid officers with an opportunity to demonstrate more than proficiency for a particular type of accounting function. The huge sums of money they control and the increasingly egalitarian posture being assumed by higher education, combine to force the college financial aid community to become active in the phenomenon called Social Responsibility.

Perhaps the most important facet of financial aid administration is the determination of financial need, for it is the process that reveals how much, if any, money student applicants are eligible to receive in various forms of assistance. This study deals specifically with one phase of financial need determination: the various costs associated with college attendance over the course of a year.

In order to facilitate a better understanding of the research topic and how it relates to the larger financial aid arena, the general historical development of student aid in America is presented in this chapter. The scope of the literature gradually narrows to include issues closely related to this study so that the following chapters lead quite naturally from it.

The Review

Early Beginnings

The earliest programs of financial aid were begun with funds provided to colleges by private individuals during the colonial period of our country's history. This money was specifically intended to help needy and worthy students, and in many instances was supplemented by allocations from the general funds of the institutions themselves. The first recorded scholarship fund was established in 1643, when Lady Ann Mowlson gave Harvard College "the full and entire somme of hundred pownds current English mony."[1] Rudolph concurs that this was a precedent setting act in American higher education and labels it "an act of Christian

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[1]William D. VanDusen, "Toward a Philosophy of Student Financial Aid Programs," NASPA Journal, IV, No. 1 (July, 1966), 3-7.

benevolence."[2] From this beginning, financial assistance for college students had as its base the notion of assistance to those who would have been unable to attend college without it. VanDusen puts it this way: "As the term scholarship was used initially in connection with student financial aid, it meant a gift of money granted to a student who could not otherwise afford to attend college."[3]

This original emphasis upon need continued through the years until the 1940's, although during much of that time alterations and variations of aid programs were instituted by the growing numbers of collegiate institutions. These alterations were intended to serve both institutional and national purpose, while at the same time enabling needy students to attend college. In addition to private individuals, state governments also entered the field. Rudolph reports that on over one hundred occasions before 1789 the General Court of Massachusetts appropriated funds for Harvard College and that Harvard, Yale and Columbia could not have survived the colonial period without the help of the state.[4] Whether directly or indirectly, state financial support for colleges during

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[2]Frederick Rudolph, The American College and University (New York: Alfred A. Knopf, 1962), p. 178.

[3]William D. VanDusen, A Design for a Model College Financial Aid Office (New York: College Entrance Examination Board, 1968), p. 2.

[4]Rudolph, The American College and University, p. 185.

this precarious time in their history constituted state support to students as well. However, continues Rudolph:

> In the years after 1820 the sectarian spawning of colleges and the tendency of many institutions to draw students from beyond state boundaries had the effect of diminishing the partnership of state and college, thus emphasizing the private rather than the public nature of the colleges.[5]

Civil War Period

Upon completion of the Civil War an apparently unending number of small colleges was formed, most undernourished and all soliciting limited funds. In an effort to collect funds to erect buildings or to augment endowments, many colleges authorized their agents to sell perpetual scholarships for the college, entitling the owner to free tuition for one person in perpituity. Rudolph describes this project as "harebrained" and records the following:

> The perpetual scholarship scheme was a particularly attractive idea to the colleges because it promised to solve their basic problems: it would give the colleges the funds that they badly needed in order to stay open, and it would provide them with an immediate supply of students who would justify their being open at all.
>
> Of course, like so many other get-rich-quick schemes to which Americans turned in the nineteenth century, the perpetual scholarship did not work. . . . Not only were the collected funds frittered away, but great numbers of tuition-free students now knocked at college doors and became one more drain on limited resources. The situation at DePauw became so unwieldly that in 1873, in order to invalidate the perpetual scholarships

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[5] *Ibid.*, p. 187.

> sold in earlier days, the college simply adopted a universal policy of free tuition and substituted a schedule of miscellaneous fees.[6]

It requires a high degree of imagination to conceptualize the perpetual scholarship plan as being based upon student need, but it illustrates one extreme example of deviation from the generally accepted concept of need oriented financial aid. The plan, very obviously, was established to serve the self-interests of the institution, and any benefits accruing to the students were of a secondary nature.

However, more examples of adherence to the need concept are found in the literature pertaining to this period than deviations from it. Although not always successful, their intentions were good. Such was the case with the manual-labor movement of the 1830's, which theoretically made going to college self-financing, gave students experience in practical skills, and even paid some attention to their physical condition. Rudolph, in another publication, describes some attempts to help needy students pay their way through college:

> The farms operated by the colleges usually lost money; the students malingered; the mechanical shops were underequipped; at Marietta College and Ohio University the students made so many wooden barrels that they glutted the market.[7]

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[6] Ibid., pp. 191-192.

[7] Frederick Rudolph, "The Origins of Student Aid in the United States," Student Financial Aid and National Purpose (New York: College Entrance Examination Board, 1962), pp. 1-11.

Another unsuccessful attempt at meeting the rising tide of democracy involved the old eastern colleges burdened by high board costs. In 1827 Yale put into operation a dining hall especially for poor students, followed by Princeton in 1831 and Brown in 1832. The implications of inferiority contained in these second-class operations made it difficult to attract prospective students.[8]

Through all of these attempts to help students financially during the decades preceding the Civil War shone the true, enduring and fundamental source of assistance. This way was found in the whole pattern of underpayment and nonpayment of professors who recognized their own sacrifices, in the accumulating unpaid student fees, in the custom of tuition remission, and in countless similar other devices, the means of keeping low the cost of a college education.[9] As a result, the burden of student financial aid rested squarely on the shoulders of the professors.

The conclusion of the Civil War brought with it the spawning of the Industrial Revolution in America, a corresponding movement for technological and scientific education, and the creation of a whole new network of higher education institutions: the land-grant colleges. Financial need still appears to have been the underlying

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[8] Ibid.

[9] Ibid.

principle in awarding aid to students, as evidenced in the statement made by Harvard President Eliot in his inaugeral address of 1869: "No good student need ever stay away from Cambridge or leave college simply because he is poor."[10] Referring to the same time period and beyond, VanDusen writes:

> The continued emphasis on the need of the student as a criterion for selection for assistance during those years was evidenced by the establishment of funds by fraternities for indigent members, the arrangement of textbook loans for needy students, the operation of special dining halls for the poor, and the introduction of manual labor programs for students. An early example of the poor being given first preference in locating term-time jobs was the establishment at Yale in 1900 of the "Bureau of Self Help" to assist needy but ambitious students.[11]

The development of student financial aid from the post-Civil War period until the end of World War II is sketchy and unclear, but three distinct types of aid seem to have emerged: the scholarship or grant, the loan, and part-time on-campus or off-campus employment. Mueller describes some of the activities during this sparsely recorded period in the history of student aid as follows:

> During World War I the public became educated to the use of subsidies to solve the economic problems of both individuals and the nation. The depression of the thirties accelerated many kinds of social planning: statewide scholarship projects; federal

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[10]Richard Hofstadter and Wilson Smith, American Higher Education: A Documentary History (Chicago: University of Chicago Press, 1961), I, p. 613.

[11]VanDusen, Model Office, p. 3.

> underwriting of student employment (NYA); appeals to benefactors of all kinds, including industry, alumni, religious and club groups and large-scale co-operative housing projects and work study programs.[12]

Through all of this seems to be running the consistent theme of financial need, however determined. Additional support for that theme is found in Eliot's statement in his book, University Administration, written in 1908:

> In Harvard College . . . there are both honorary and stipend scholarships, an honorary scholarship being conferred on every student, having no need of pecuniary aid, who stands as high as, or higher than, the lowest scholar in his class who receives a stipend scholarship.[13]

This original emphasis on financial need continued essentially unchanged until the post World War II period. Exceptions to this general pattern were instituted usually to serve national or institutional purposes such as recruiting students for specific purposes such as medicine or education and other vocational areas critically short on manpower at the national level, or to achieve socio-economic, geographical, or other desired balance at the institutional level.[14]

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[12]Kate H. Mueller, Student Personnel Work in Higher Education (Boston: Houghton Mifflin Co., 1961), p. 468.

[13]Charles W. Eliot, University Administration (Boston: Houghton Mifflin Co., 1908), p. 215.

[14]VanDusen, Model Office, p. 2.

Impact of Federal Government

With the closing of World War II, and the enactment of the Servicemen's Readjustment Act of 1944, known familiarly as the G.I. Bill, financial assistance to college students took a new direction. This program was established to help students whose education had been interrupted by the service to accelerate their adjustment to civilian life. Undoubtedly, many veterans who, before their military service, had had no intention of going to college became interested and were able to attend as a result of the money provided. For, as Mueller writes: "The G.I. Bill subsidized so many veterans and involved such a large proportion of the citizenry in educational grants that public suspicion changed to public demand almost overnight."[15] In 1946, 52 percent of all college degree seeking students were veterans, receiving assistance through the G.I. Bill; in 1947 they were 53 percent; 44 percent in 1948; 37 percent in 1949; and 27 percent in 1950.[16]

The percentages revealed above give some indication of the impact that the G.I. Bill had on higher education in this country. Funds were generally available to veterans for the customary cost of tuition, laboratory,

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[15] Mueller, p. 468.

[16] Elmer D. West, Financial Aid to the Undergraduate (Washington, D.C.: American Council on Education, 1963), p. 79.

library, health, infirmary, and like fees, as well as for books, supplies, equipment and other necessary expenses. Expenses not covered by the Bill were those for board, lodging, other living expenses, and travel. A thorough discussion of the Servicemen's Readjustment Act of 1944 can be found in the following source: Veteran's Rights and Benefits, by M. A. Erana and Arthur Symons.

Through this Bill, for the first time there was an enormous supply of funds, the purpose for which was not to aid the talented or the needy, or to enhance or reward scholarship. The primary criterion was status as a veteran.

A direct result of this program was that institutional funds for which there had been previously a heavy demand, were directed toward new purposes. Many institutions found that the amounts of scholarship funds that previously had been used to support needy students were no longer required for that purpose, and those colleges began to use their funds to attract and award students possessing academic or other special talents with little or no regard to the financial conditions of such individuals. In this regard, VanDusen has written:

> The term schloarship thus gained the additional meaning of a gift of money used to reward talented students, and the public at large became familiar with such phrases as academic scholarship, athletic scholarship, and music scholarship.[17]

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[17] VanDusen, Model Office, p. 3.

West concurs with VanDusen, for he has written the following in reference to the 1946-1956 decade:

> There is a substantial opinion to the effect . . . that the neediest segment of the population is not getting the financial aid; in fact, there is considerable evidence to prove that children receiving financial aid come from families with above-average income . . . .
>
> It should be noted that many scholarships were actually prizes for high scholarship. Thus an award may be made to a high school valedictorian whether or not he needs the money, or a prize may be given to a very successful student in college simply by virtue of his high academic standing.[18]

Rudolph is particularly caustic about this turn of events in the development of student aid:

> Under the aegis of intercollegiate athletics student aid became a form of employment. And if, as is unquestionably true, athletic scholarships eventually enabled a whole generation of young men in the coal fields of Pennsylvania to turn their backs on the mines that had employed their fathers, it is also true that athletic scholarships intruded a new dimension of confusion and dishonesty into the life of the American college and university.[19]

These developments in student aid administration during the post World War II period illustrate clearly that institutional funds were being utilized to serve institutional purposes, and any benefits which accrued to the students were only incidental in nature. As late as 1956 it was assumed that students would not borrow for an education, and, although the College Scholarship Service had come into existence by that time, it was assumed that

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[18] West, pp. 77-78.

[19] Rudolph, "The Origins of Student Aid," p. 9.

there was no way of measuring with any degree of accuracy an applicant's financial need. Morse reflects upon the 1956 scene this way:

> I came to the conclusion then that often the answer to how and why scholarships are awarded was really just this: to serve institutional purpose . . . .
> It is a fact that colleges devote their scholarship funds in direct proportion to those talents they most highly prize, and that in general they use their funds to strengthen those parts of their programs they feel to be weakest.[20]

Orwig writes:

> Indeed, financial aid to students has served a wide variety of purposes over the years, from rewarding intelligence, academic performance, service to the country, physical appearance and beauty, and athletic prowess to attracting students to critical skill areas, from different geographic areas, and to military service.[21]

However, during the same period referred to above by VanDusen and West, several eastern colleges and universities recognized that intense bidding for talented students was developing, and wished to bring this unfortunate turn of events to a halt. Through the consolidated efforts of these instituitons the concept of financial need again emerged on the student aid scene and is described by Orwig:

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[20] John F. Morse, "The Impact of Government Programs on Student Aid Administration," Student Financial Aid and Institutional Purpose (Princeton: Entrance Examination Board, 1963), 6-16.

[21] M. D. Orwig, Toward More Equitable Distribution of Student Financial Aid Funds: Problems in Assessing Student Financial Need (Iowa City: American College Testing Program, 1971), p. 2.

> The development [of the concept of financial need] began in the Northeast through a loose consortium of private colleges that desired, through cooperative agreement, to voluntarily limit the amount of financial aid that would be used to recruit academically talented students to the campus. To do this they developed a procedure, later called need analysis, that would enable them to determine a reasonable contribution from the student and his family and limiting the scholarship offered to the student to the amount of his financial need, i.e., the difference between the family contribution and the cost of attending an institution. By voluntarily using the same need analysis procedure, colleges were able to minimize financial competition as a means to attract students to their campus.[22]

This concern and cooperative effort led in 1954 to the creation of the College Scholarship Service (CSS), a branch of the College Entrance Examination Board. CSS was charged with the responsibility for developing an instrument that would fairly, objectively, and equitably measure the financial strength of families whose children were applying for financial assistance to attend college, and which could be used consistently by all institutions. The product of their efforts was the Parent's Confidential Statement (PCS), which throughout the years, has been refined tremendously, and is still the most widely used financial need analysis instrument.

The chief competitor of CSS in the financial need analysis field is the American College Testing Program, which developed an instrument in 1967 as a result of actions described by Orwig:

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[22] Ibid., p.2.

> . . . in 1967 ACT (The American College Testing Program) introduced a centralized student need analysis service which institutions could use to analyze the financial need of their aid applicants. Although somewhat different in approach than CSS, the ACT system was similar in that it processed and computed the financial need of individual students who were applying for aid and sent a need analysis report to the institutions designated by the student.[23]

In 1958 the federal government re-entered the financial aid arena through the establishment of the National Defense Student Loan Program, authorized by the National Defense Education Act, passed in the same year. In contrast to the G.I. Bill, this program required that student borrowers with high promise entering critical fields (science, engineering, education) be given preference when dispersing these loans. At first, financial need was not a primary factor in determining borrower eligibility, but as time passed and new federal programs were implemented, need became the most important eligibility criterion.

The National Defense Student Loan (NDSL) Program was a major student financial aid effort by the federal government. VanDusen reports that the results of the NDSL Program were dramatic, particularly when compared to the success of other established, private loan programs. It was estimated that prior to the NDSL Program, $26 million was available in loan programs, but only 50 percent of

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[23]*Ibid.*, p. 4.

such funds was being used. While those data might have seemed to reveal a reluctance on the part of college students to borrow, the NDSL Program in its first full year of operation advanced more than $60 million to students.[24] Cole has labeled the enactment of the National Defense Education Act as one of the two most significant developments in the financial aid field, the other being the creation of the College Scholarship Service in 1954.[25]

1960 and Beyond

The decade of the sixties brought with it a social consciousness and a sense of social responsibility affecting much of American society. A very large part of this movement affected higher education; specifically, equal access to higher education and education opportunities. Not to be denied a critical role in this massive movement, the federal government soon created and funded two more major, comprehensive financial aid programs to be administered by the colleges.

The first of these programs was the College Work-Study Program (CWSP), authorized by the passage of the Economic Opportunity Act of 1964. VanDusen has provided an excellent synopsis of the College Work-Study Program:

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[24] VanDusen, Model Office, p. 4.

[25] Charles C. Cole, Jr., "Future Directions for the College Scholarship Service," Student Financial Aid and Institutional Purpose (Princeton: College Entrance Examination Board, 1963), 17-28.

> This program combines federal and college funds to encourage and to extend the employment of students, both on the campus and in non-profit off-campus agencies. Collegiate institutions that participate in the College Work-Study Program are required to maintain, from their own funds, their previous level of student employment . . . . Initially the CWSP was restricted to students from extremely low-income families; these severe limitations have since been revised, and now it is required only that preference in employment be given to students from low-income families.[26]

The other major federal aid program administered by the colleges is the Educational Opportunity Grant Program (EOG), authorized by the Higher Education Act of 1965, the law which also centralized the administration of sponsored student aid activities in the U.S. Office of Education. Again, a synopsis by VanDusen:

> This program authorizes direct grants, which are not to be repaid, to students who demonstrate that they and their families are unable to pay for higher education. The grants may not exceed $800 or one-half the amount the student needs to go to college, whichever is less, and a matching amount must be made available to the student from other approved sources of student financial aid.[27]

Since VanDusen wrote the above descriptions several changes have occurred in all three of the federal programs administered by the colleges, including raising the maximum EOG to $1,000. However, the spirit of these programs has remained basically unchanged, and it is significant to note that regarding disbursement of funds,

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[26]VanDusen, Model Office, p. 4.

[27]Ibid.

all three programs have placed the emphasis upon financial need as opposed to superior academic achievement or promise.

In June, 1972, a new, massive Higher Education Bill was signed into law by President Nixon. This Bill continues and expands existing federal student aid programs, as well as providing direct grants to institutions of higher education.

In 1964, and again in 1966, the Michigan Legislature created and funded two state-sponsored, comprehensive student aid programs, the Michigan Competitive Scholarship Program and the Michigan Tuition Grant Program, respectively. As with the federal programs, the amount of money that students may receive through the state funded programs is based upon financial need.

Although the Michigan Competitive Scholarship and Tuition Grant Programs were only established recently, Giddens reports that state financial assistance in one form or another has been available to college students since 1647.[28] He writes that in addition to lotteries, granting land, and revenues from certain taxes, grants of money were given directly to the colleges by the

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[28]Thomas R. Giddens, "The Origins of State Scholarship Programs: 1647-1913," College and University, American Association of Collegiate Registrars and Admissions Officers, XLVI, No. 1 (Fall, 1970), 37-45.

colonial governments, in some cases requiring institutions to use part or all of the grants to defray expenses for indigent students. Giddens goes on to cover the efforts of states to financially assist their college students, including Maryland, which established a scholarship plan in 1785, Massachusetts in 1792, North Carolina in 1853, Pennsylvania in 1866, Vermont in 1884, and New York in 1913.[29]

During the 1966-67 academic year states expended more than $97.5 million for scholarship, fellowship, incentive and tuition grant programs, and the number of states operating scholarship programs increased from three in 1954 to twenty in 1969.[30] By the 1971-72 academic year the number of states funding scholarship programs had increased to twenty-two, and those states appropriated slightly more than $279 million during the same academic period.[31]

All of the factors affecting the development of financial need which have been mentioned thus far (social consciousness, development and refinement of the College Scholarship Service and American College Testing Program

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[29] Ibid.

[30] Ibid.

[31] Joseph D. Boyd, "1971-72 Undergraduate Comprehensive State Scholarship/Grant Programs," Third Annual Survey (Deerfield, Ill.: Illinois State Scholarship Commission), September, 1971.

need analysis instruments, federal student aid programs, and state assistance programs) influenced individual colleges and universities to the extent that these institutions have re-established financial need as a fundamental principle in awarding financial assistance to their students. As a result, the federal government, almost half of the state governments, institutions of higher education, foundations, and other organizations each year expend hundreds of millions of dollars to assist financially needy students.

The historical data and background material discussed thus far have a twofold purpose: one, to provide a better understanding of the development of student financial aid on American campuses, and two, to demonstrate the crucial role which financial need plays in the allocation of huge sums of money to college students. Several sources of student aid are not investigated here, for, although they comprise a significant portion of financial aid resources, they are typically not coordinated by the institutional aid office and are often not attended by the same rigorous financial need requirements which lay such an important foundation for this study. Some of these sources are as follows: social security benefits; vocational rehabilitation assistance; survivors benefits for dependents of deceased or disabled veterans; various foundations and private scholarship programs; professional organizations; labor unions; and the indirect assistance to students attending public colleges and universities through state legislative appropriations and to those attending private institutions by means of endowment income and donations. From this point on, the discussion focuses more specifically upon the research study of interest.

Student Budgets

Basically, the determination of financial need involves a two-step process: analyzing the financial strength of a student's family to determine how much money the family can reasonably be expected to contribute toward the student's educational expenses during a given academic year, and then comparing the expected family contribution with the total cost of attending the college or university of the student's choice for one academic year. If the cost of attending a particular institution (student budget) exceeds the expected family contribution, the difference is the amount of financial assistance from outside sources the student needs to attend that institution without encountering financial difficulties which might adversely affect his academic performance. Following is an example of this situation: (David B. wishes to attend State U., where the total cost for the 1971-72 school year is $2,500; it is determined that David and his family can contribute $2,000 from income and assets toward college expenses during the same year; as a result, David would demonstrate $500 financial need, the amount of money necessary to complement the $2,000 family contribution and enable him to attend State U.).

Through constant study and refinement of the Parent's Confidential Statement, College Scholarship Service has developed a defensible, sophisticated system, through which individual family financial situations are analyzed and expected family contributions are computed.[32] As the David B. example reveals, the computation of expected family contribution is one-half of the financial need analysis procedure.

The other half of the financial need analysis procedure, i.e., determining the total cost of college attendance each year (student budget), has not undergone the same concentrated, rigorous, or scientific analysis and review as has the determination of expected family contribution. And it is to this other half of need analysis that this study is related.

The ultimate goal to be sought in the determination of student budgets is finding a fair and reasonable figure to employ, one which provides a standard of living that assures the student not only a reasonable level of physical

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[32] College Scholarship Service, Manual for Financial Aid Officer, 1971 Edition (New York: College Entrance Examination Board, 1971).

comfort, but of psychological well-being as well. The items generally included in the student budget are listed below.

Tuition
Room
Board
Books and Supplies
Personal Expenses (clothing, medical and dental, entertainment, miscellaneous)
Transportation

There is a dearth of published research devoted to the topic of college student expenses, or student budgets. Perhaps it is this state of affairs that caused Johnson to write: "The government is beginning to determine college costs because, in many instances, financial aid officers have not given clear directions. Each aid officer must develop appropriate student budgets for his institution."[33]

Johnson's plea for positive action is supported by Dyer's analysis of the current state of affairs concerning student budget determination: "Identification of average student costs for different types of institutions of higher education under different circumstances with respect to the student's status is still primarily guesswork . . . ."[34]

Often writers fail to cover costs of individual items when discussing the cost of higher education to

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[33]Richard Johnson, "Student Budgets--Where Are We?" MASDAA Newsletter (February, 1972), 2.

[34]James S. Dyer, Assessing the Effects of Changes in The Cost of Higher Education to the Student (Santa Monica, Calif.: Rand Corp., June, 1970), p. 13.

students. In one publication the authors of four separate chapters ignore the topic of individual cost items incurred by all students and conclude only that college students' expenses are high and more and varied kinds of assistance should be made available to them.[35]

Johnson believes it is crucial to study the numerous expenses incurred by various classifications of students if the financial aid community is to retain its usefulness within the higher education community:

> It is one thing to establish budget costs and models and another to verify them. Research must be done and a rationale must be developed for each model and cost cell within the model. The financial aid officer's "best guess" is not good enough. Reliable figures are needed to back any action taken.
>
> . . . it is crucial that the financial aid officer move swiftly to develop sound student budget practices lest his prerogative be taken by others.[36]

One such study is reported in an unpublished paper by the Office of Student Financial Aid at the University of Michigan.[37] As that office has requested that the results not be discussed publicly, the data which they collected and the results generated are not reported here. Interested readers may wish to contact them individually in this regard.

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[35] Financing Higher Education (Atlanta, Ga.: Southern Regional Education Board, 1966), p. 94.

[36] Johnson, p. 3.

[37] "Student Budget Survey, 1970-71," unpublished report done by Office of Student Financial Aid, University of Michigan, 1971.

However, a passage from the Introduction of the University of Michigan survey bears repeating, for it reflects the goals they sought to achieve and relates very well to this study also:

> In its allocation of funds to financially needy students the office attempts to determine the level of aid that each student must receive to enable him to meet his educational goals, and to do so the office constructs hypothetical student expenditure and resource budgets that serve as standards against which the needs of individual student applicants are compared. The resources available for aid to students are limited and it is of paramount importance in achieving a fair and equitable allocation of aid funds that the standard budgets reflect the reality of the financial circumstances of the applicants to whom they are applied.
>
> An ideal financially equitable policy of administering financial aid would lead to the equal treatment of students of equal financial need and to the differential treatment of students of different financial need that reflects the reality of their differences in financial need. The standard budgets used for financial aid decisions must meet these criteria of equity, and to do so they must adequately represent both the level of student expenditures and resources and must reflect differences in financial need of different students and groups of students.[38]

The demographic data requested in the Michigan study are as follows: sex; household status (single, married, divorced or separated, other); household size; race; age, academic status; and type of housing. Those individual variables were analyzed to determine if they and/or their respective sub-groups had an effect on the spending patterns of the student respondents during the 1970-71 academic year.

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[38] _Ibid._

A study was undertaken by College Scholarship Service (CSS) to learn more about the problems of young people: how they and their families are facing the spiraling costs of education, how extensive is their indebtedness for education, and what are their educational goals. It investigates ways in which race, sex, and type of college attended relate to sources of income and expenditures.[39] Concerning expenditures, one chapter of the report is devoted to an analysis of college costs as reported by single students enrolled full-time during the 1969-70 academic year.[40] Also presented are estimates of students' expenses made by college financial aid officers, but comparisons cannot be made between these data, as they cover different academic years.

The population for the CSS study were contacted in July, 1970, and consisted of 8,618 young men and women who were identified in 1968 as attending some post-secondary institution. These students were among 19,612 young people representing a national sample of high school juniors who participated in a special norming administration on the Preliminary Scholastic Aptitude Test (PSAT) in the fall of 1966.

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[39] Elizabeth W. Haven and Dwight Horch, <u>How College Students Finance Their Education</u>, College Scholarship Service, College Entrance Examination Board, 1972, 60 pp.

[40] <u>Ibid</u>., Chapter IV, p. 38.

CSS presents the out-of-pocket costs for college, reported by various classifications of students, in two forms: (1) pie diagrams illustrating what percentage of the dollar was spent in four cost areas (a. tuition and fees, books and supplies; b. food and housing; c. transportation; d. other expenses) by all students and by various subgroups (sex, race, resident vs. commuting students); and (2) tables showing average expenses for the same subgroups of full-time students attending different types of institutions (public 4-year, private 4-year, public 2-year, and other). The dollar amounts presented in the tables are for the following expense items: (a) tuition, fees, books, supplies; (b) room and meals; (c) medical and dental; (d) transportation; (e) clothing, laundry, cleaning; (f) debt repayment; (g) other expenses.

Following is the CSS summary of results from the college cost survey:

> Analysis of the <u>expenses for college reported by students</u> revealed that costs for tuition, fees, books, and supplies accounted for 43 percent of the total budget, and that food and housing accounted for an additional 31 percent. The average total expenses of students in public four-year institutions was $1,869 for the 1969-70 academic year; it was $3,329 at private four-year colleges, $1,347 at public two-year colleges, and $1,952 at other types of institutions. Subgroup comparisons revealed that men spent more on the average than women, that black students lived on a budget that was approximately $500 lower on the average than that of white students,

> and that residents required higher average out-of-pocket expenses than commuting students.[41]

More research such as the CSS study is necessary to establish a benchmark from which the financial aid community can proceed to establish sound, defensible student budgets for the distribution of financial assistance to needy students.

Summary

The literature reviewed in this chapter relates to two facets of financial aid administration. The first area covered is the historical development of student financial aid in America, concentrating primarily at the campus level. This is done to provide a better understanding of the financial aid field in general, as well as the bearing which this study has on the field. The second area covered leads from the first and deals specifically with the topic of college costs incurred by students.

The period of history which is related extends from 1643, when the first scholarship fund was established at Harvard College for needy students, to the present. Throughout this period several critical factors are evident which have influenced the development and current status of financial aid administration. One such factor is the concept of financial need. Except for the period

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[41] Ibid., "Highlights of Study," p. v.

ranging from 1946 to approximately 1960 and other brief interruptions, financial need was the foundation upon which most student assistance programs were constructed, limited as they were. This need based philosophy still holds true today for massively funded aid programs originating from several sources.

A second critical factor is the role played by federal and state governments in the development of student aid in America. Although there have been several instances of state and federal participation in student aid programs, the first enduring state scholarship program was established in New York in 1913 and the first federal student aid program to drastically affect higher education was the post World War II G.I. Bill. By 1971, twenty-two states had scholarship programs, appropriating in excess of $279 million. The G.I. Bill was as significant for its effect on the philosophy of need based student financial aid as for the impact which it had on America's attitude toward higher education in general. Due to the huge sums of money which the Bill authorized for veterans, for a brief period higher education institutions were not severely pressed for student aid funds and reacted with the formulation of scholarship programs attended by eligibility criteria other than financial need. This led eventually to bidding for students who possessed the talents or qualities desired by the institutions. The federal government re-entered the student aid field in 1958 through the National Defense Education Act, in 1964 by means of the Economic Opportunity Act, and in 1965 through the Higher Education Act. In June, 1972, a new, massive higher education bill was signed into law.

A third factor, one which resulted from the problems associated with bidding for students, was the emergence of a defensible financial need analysis system. As a result of pressure exerted by several colleges and universities in the Northeast, the College Scholarship Service (CSS), a branch of the College Entrance Examination Board, was formed in 1954. CSS developed and refined a financial form (Parent's Confidential Statement) that enabled institutions to measure the family financial strength of their aid applicants and arrive at a figure of financial need. The most attractive aspect of this centralized need analysis system was that it could be used consistently and objectively by all collegiate institutions. Although CSS is still the most widely used need analysis agency today, the American College Testing Program has developed a competitor instrument to the Parent's Confidential Statement.

A final factor to be mentioned in the historical development of student aid is the emergence of three distinct types of financial assistance: gift aid, loans, and part-time employment. Gift aid is typically in one of two forms, scholarship or grant, and, as the name implies, is an outright gift and need not be repaid by the student recipient. Loans, of course, do carry a repayment provision, but are usually attended by very attractive interest rates for the borrower. Part-time employment may be on the campus or off, somewhere in the local community.

The little existing literature related to the topic of student expense budgets points to the need for research in the area. Some writers express this need explicitly, and others do it implicitly by skirting the basic issue of analyzing specific cost items for specific groups of students, and instead recording their abhorrence of spiraling educational costs in general.

In an attempt to develop a sound rationale for the establishment of standard student budgets, the Office of Financial Aid at the University of Michigan surveyed a cross-section of their students. The students were asked to identify what type of expenses they incur and what the amounts of those expenses are. Certain demographic data were also requested (sex; household status; household size; race; age; academic status; and type of housing) and these individual variables were analyzed to determine if they and/or their respective subgroups had an effect on the spending patterns of the student respondents.

A similar study was undertaken by the College Scholarship Service, in which college students enrolled full-time during the 1969-70 academic year were surveyed. The CSS study revealed that 43 percent of the student's total budget was spent for tuition, fees, books and supplies and that an additional 31 percent was spent for food and housing. The average total expenses of students attending various types of higher education institutions were as follows: four-year public, \$1,869; four-year private, \$3,329; two-year public, \$1,347; and other, \$1,952. Average expenses for men were higher than those for women, black students lived on a budget that was approximately \$500 lower than that of white students, and average expenses for resident students were higher than those of commuting students.

In conclusion, it is felt that much more systematic research such as the CSS study is necessary in order to develop and maintain fairer and more objective student budgets for the distribution of financial aid funds to needy students.

CHAPTER III

DESIGN OF THE STUDY

Introduction

In contemporary financial aid administration the determination and analysis of student financial need is perhaps the most critical factor involved in the disbursement of various types of financial assistance to college students. As never before huge sums of money, from federal and state governments, institutions of higher education, and private donor organizations, are expended for the purpose of assisting needy students pursue a college education.

Given this emphasis upon financial need as a fundamental criterion for determining the eligibility of students for financial aid consideration, it is readily apparent that the method employed to arrive at a financial need figure for each student should be as fair, objective, and consistent as possible. The analysis method used by most organizations is one which assists in the determination of relative financial need, or how the student's financial resources compare with the total cost of attending the college or university of his choice.

The purpose and need of this study as it relates to the cost aspect of financial need analysis are discussed in Chapter I, as is the general plan to be followed for the entire research project. More detailed consideration is given in this chapter to descriptions of the population and sample, development and utilization of the instrument, including attempts to determine reliability, procedures employed in collecting the data, the design, and statistical analyses used in the study.

The Population and Sample

The population for this examination of education related costs incurred by college students includes all full-time undergraduates who during the 1971-72 academic year, attended any one of the sixty-four (64) higher education institutions in Michigan which participated in the study. Originally, all institutions, and their several campuses were applicable, which participate in the State of Michigan Tuition Grant and/or Competitive Scholarship Programs with full-time undergraduate student enrollment totaling ninety (90) or more during the 1971-72 school year were selected for inclusion. Although the original list included eighty-four (84) college campuses, as samples were collected from only sixty-four campus units, the population must be restricted to students attending the smaller number of institutions. Two reasons account for the twenty institutions failing to participate in the study: (1) the school did not distribute survey instruments to their students, or (2) the institution distributed forms to students but none were returned. In Table 3.1 are listed those colleges and universities which include the population of students for the study, and those institutions which were originally selected to participate but did not.

The sample for the study included full-time undergraduate students, as defined by their respective institutions, randomly selected at each of the Michigan collegiate institutions that participated in the research project. The sample was restricted to full-time undergraduate students because only this group was eligible for financial assistance consideration under all student aid programs during the 1971-72 academic year. As the study was intended to analyze the spending patterns of students most typically eligible for financial aid consideration, graduate students and part-time students were excluded. The number of students selected at each school was based upon the proportion which the institution's 1971-72 full-time undergraduate enrollment was of the total enrollment of all sixty-four schools included in the study. The total number of students in the sample was 4,218. Therefore, the number of students selected at each institution is the same percentage of 4,218 as that

TABLE 3.1.--Summary of Participating and Selected but Non-Participating Institutions.

4 Year Public	2 and 4 Year Private	Junior/Community
Central Michigan	Adrian	Bay De Noc
Eastern Michigan	Albion	Delta
Ferris State	Alma	Genesee
Grand Valley	Andrews	Glen Oaks
Lake Superior	Calvin	Gogebic
Michigan State	Cleary	Grand Rapids
Michigan Tech.	Concordia Lutheran	Henry Ford
Northern Michigan	Davenport	Highland Park
Oakland	Detroit Bible	Jackson
Saginaw Valley	Detroit Business	Kalamazoo Valley
University of Michigan--Flint	Detroit Inst. of Tech.	Lake Michigan
Wayne State	General Motors Inst.	Lansing
Western Michigan	Grace Bible	Macomb County (Center and South Campuses)
	Hillsdale	Mid-Michigan
	Hope	Muskegon County
	Kalamazoo	North Central
	Lawrence Institute	Northwestern
	Madonna	Oakland County (Orchard Ridge)
	Marygrove	St. Claire County
	Mercy	West Shore
	Muskegon Business	
	Nazareth	
	Olivet	
	Owosso	
	Reformed Bible Inst.	
	Shaw	
	Detroit Society of Arts and Crafts	
	Spring Arbor	
	Suomi	
	University of Detroit	
*University of Michigan--Ann Arbor	*Aquinas	*Alpena
*University of Michigan--Dearborn	*Grand Rapids Baptist	*Kellogg
	*Michigan Christian	*Kirtland
	*Northwood Institute	*Monroe
	*Siena Heights	*Montcalm
	*Walsh	*Oakland County (Auburn, Highland and Southeast)
		*Schoolcraft
		*Southwestern
		*Washtenaw
		*Wayne County

*Selected but non-participating institutions.

school's total 1971-72 full-time undergraduate enrollment was of the total enrollment of all schools in the study. That total enrollment figure was 184,847. The institutional enrollment figures from which the random samples were generated were taken from the Higher Education General Information Survey completed by colleges and universities in the Fall of 1971. In cases where an institution's proportion was computed to be fewer than ten students, the number of people selected at the campus was arbitrarily raised to ten.

Individual institutions or campuses were not studied, so the actual number of students selected at each campus is not reported. However, the more general category of institutional type (4-year public college or university, 2 or 4 year private college or university, and 2-year public community/junior college) is an important variable in the study, and the number of students selected randomly and proportionately by each type is as follows: 4-year public--2,713; 2 and 4-year private--770; 2-year community/junior--735.

Instrumentation

The development of the instrument used in this study (a copy of which is included in Appendix) occurred over a period of three months. The question of what data to collect and how to request it was first discussed in an Educational Research 999 course coordinated Winter Term, 1972, by Dr. Andrew Porter and his staff of the Office of Research Consultation in the College of Education at Michigan State University. Advice from colleagues in the Student Financial Assistance Services Division of the Michigan Department of Education was also sought during this initial "thinking out" period. After several drafts had been submitted to the Office of Research Consultation and Student Financial Assistance Services staffs for review and comment, the items listed on the instrument in Appendix A were selected for inclusion in the study. During February of 1972 the Michigan Student Financial Aid Association voiced an interest in supporting and assisting in the study and copies of the instrument were distributed to members of that body's Research Committee for further scrutiny by experts in the financial aid field. The only negative reaction to that review was one committee member's comment that the item requesting racial background of the respondents (Item 4, Section A) should be omitted, as many people are sensitive to the issue and its inclusion could adversely affect the response rate. The minority opinion was overruled in light of the importance of generating educational cost data on the race variable. Staff members of the Research, Assessment and Evaluation Division of the Michigan Department of Education also reviewed the final draft for content, and staff from the Department's data processing division assisted with the physical layout of the form.

In Section A of the instrument, the personal information items 1 through 5 represent variables upon which cost or expense analyses may be made in future research for comparison purposes and for providing insight as to how much money various classifications of college students are spending for education related expense items. Item 8, pertaining to permanent residency of the United States, provided the means by which the cost figures of only permanent United States residents would be included in the study. As only permanent residents are eligible for financial aid consideration through State of Michigan and federal student aid programs, and as the life styles of foreign students in America may result in different spending patterns than those of most American college students, inclusion of foreign visiting students could have confounded the results of the study.

Items 9 and 10 in Section A were used to determine whether the student respondents should be classified as financially dependent upon or independent from their parents or legal guardians according to the guidelines set forth by the United States Office of Education for the 1971-72 academic year. A "No" response to both items 9 and 10 was necessary to classify a student as financially independent. Any other combination of responses to those two items resulted in defining a student as financially dependent upon his parents or legal guardians. The differentiation of financially dependent and independent students was essential because cost data for the former group was collected on a nine month, academic year, basis, while the cost data for the latter group was collected on a twelve month basis. The Expense Period box in Section B was added to further assure that respondents would enter cost data for the appropriate time period (nine or twelve months). Items 6 and 7 in Section A, pertaining to the respondents marital status and number of dependent children, respectively, completed the personal information requested and provided variables upon which expense data for financially independent students could be analyzed.

In Section B, the Directions advised the student to complete the Financial Information items for either a nine month (September, 1971-June, 1972) or twelve month (September, 1971-August, 1972) period depending upon how he responded to questions 9 and 10 in Section A.

The eleven expense items listed in the Financial Information portion of Section B include the categories of education related costs which full-time college students could be expected to incur during the course of an academic or a twelve month year. Appropriate space was provided for the student respondents to list the amount of money spent during the appropriate time period for each of the expense items listed, and a total. As the expense period for both financially dependent and independent students would not have elapsed by the time they returned the completed survey instruments, they were instructed to estimate their expenses between the time of compilation and the end of their expense period, in arriving at an appropriate dollar figure for each item.

To test the reliability of the survey instrument a pilot study was conducted with selected students at Lansing Community College. During the registration period for Spring Term, 1972, ten students were selected by the Lansing Community College student aid office who represented as closely as possible the various demographic classifications, as well as financially dependent and independent students. The students were asked to complete both Sections A and B of the instrument and to record comments or reactions they had which pertained to any aspect of completing the form or participating in the pilot study. All ten respondents returned the completed forms to the Office of Student Financial Aid, Lansing Community College. No comments were recorded and the only noticeable problem involved a financially independent student who provided financial information on a monthly basis instead of listing expenses for the twelve month period.

Ten students were also selected at Hope College, a private college in Holland, Michigan, and ten at Grand Valley State College, a state supported institution, in Allendale, Michigan, for further testing of the instrument.

Upon completion of the instruments by these students, who were also selected to represent as many of the demographic variables as possible, the respondents were interviewed personally. The problems encountered by these students were not of a nature that reflected on the instrument, but which indicated a likelihood that some instruments returned in the formal study would be unuseable. For example, several students at Hope College were classified as financially dependent upon their parents as a result of their responses to items 9 and 10 in Section A, yet they received little actual support from their parents and considered themselves independent. These students completed Section B on a twelve month basis instead of nine, as directed, and consequently made the form unuseable. The other financially dependent students at Hope indicated that they had not seriously considered their expense patterns prior to the pilot study while the true independent students demonstrated a strong concern for personal and family budgetary matters.

The discussions with students at Grand Valley State College were particularly helpful in later determining minimum allowable limits for entertainment and incidental expenses. Students who listed expenditures for these items as low as $20 strongly defended their positions later in the interview situation, in spite of the fact that the

$20 cost level seemed to be unrealistically low. On the other hand, some of the students in the pilot study at Grand Valley who entered larger than anticipated dollar amounts for the expense items, revealed that the amount of money represented what they would have spent had sufficient funds been available, and was higher than the amount actually spent. Again, this information was more enlightening as it pertained to the analysis of the data compilation than to the construction of the survey instrument. It revealed the possibility that, providing the pilot study respondents were representative of the regular survey sample, errors in reporting cost data for various expense items were more likely to be on the high side of the amount of money actually spent than on the low side.

Collection of the Data

As there was a delay in printing the survey instruments, and as timing was very important, on April 5, 1972, a letter (a copy of which is included in Appendix A) containing instructions for distribution of the instruments and a list of random numbers representing the number of students to be selected was sent to the chief financial aid officer at each institution selected for inclusion in this study. The list of random numbers, the total of which equaled the number of students to be selected, had earlier been generated for each college and university, based upon the institution's Fall, 1971, full-time undergraduate enrollment. This list provided the financial aid officers with an easy method to select students for inclusion in the study from their rosters of full-time undergraduates and provided assurance that students were selected randomly and in a consistent fashion at all institutions.

On April 10, 1972, the survey instruments were sent to the selected campuses for distribution to the appropriate student samples. All campuses which participated in the study were able to distribute the forms to their students by April 17, 1972, so that they had a full week in which to complete and return the instrument to their respective financial aid offices. Time was a particularly critical element due to several schools concluding their regular academic year by the first part of May, and the almost impossible task it would have been to conduct the study after students had left the campuses for the summer. The student respondents were requested to return the completed instruments to their respective financial aid offices by April 24, 1972, and the student aid officers, in turn, were asked to forward the completed forms to the Office of Financial Aid at Lansing Community College by May 15, 1972, which provided a three week interval for follow-up studies.

For follow-up purposes it was necessary for the student aid office on each campus to retain a list of the names of students selected at that institution. The respondents could not be identified from the non-respondents for mailing purposes, so to follow-up it was necessary to contact every student selected for the study and request that he complete and return the questionnaire if he had not already done so. This task was entirely in the hands of the financial aid officers and no official data was recorded which pertained to the success of follow-up attempts. However, after conversations with several aid officers it was surmised that an inverse relationship existed between the size of the original sample at a campus and the percentage of students who responded to the follow-up study, where such follow-up attempts were made.

Originally, 5008 survey instruments were delivered to 84 college and university campuses in Michigan, the names and selection of which are described earlier in Chapter III. In Table 3.2 are listed the number and percentage (where indicated) of instruments distributed to and returned by students, as well as the number of campuses which were originally selected for the study and those which actually participated in it to its completion. All the completed survey instruments included in the study were received in Lansing by June 1, 1972. Table 3.3 contains a summary of the characteristics of the students who returned useable

TABLE 3.2.--Record of Participation in the Study by Colleges and Students.

	Type of Institution			
	4-Year Public	2 & 4 Year Private	2-Year Community	Total
Number of campuses to which survey forms were sent	15	36	33	84
Number of forms sent	3172	863	973	5008
Number of campuses from which completed forms were received (%)	13(87%)	30(84%)	21(61%)	64(76%)
Number of forms sent to these participating institutions	2713	770	735	4218
Number of forms returned from participating institutions (%)	845(31%)	430(56%)	323(44%)	1598(38%)
Number of useable forms (%)	801(94%)	402(94%)	300(92%)	1503(94%)

survey forms for analysis. The instruments that were returned unuseable were eliminated by a hand check before any data was key-punched so there would be no risk of mixing them with the good forms. In cases where the number of students in a particular demographic classification does not equal the total number of useable survey forms returned for analysis, the difference is due to missing data on that specific variable.

TABLE 3.3.--Summary of the Characteristics of the Respondents.

Personal Information	Number
1. Type of School Attended	
A. Public Community/Junior College	309
B. 2 or 4 Year Private College	394
C. 4 Year Public Institution	794
2. Class Standing	
A. Freshman	476
B. Sophomore	426
C. Junior	297
D. Senior	290
3. Sex	
A. Male	788
B. Female	704
4. Race	
A. American Indian	1
B. Black	96
C. Spanish Surnamed American	7
D. Oriental	7
E. White and all Others	1377
5. Residence	
A. Dormitory	592
B. With Parents	431
C. Apartment	294
D. Room in Rooming House	39
E. Fraternity/Sorority House	37
F. Maintain Own Home	102

Design of the Study

Although technically this study was of a descriptive nature, because of the dearth of related research in the area of student expenses, it was also to a high degree, exploratory. It is hoped that this research provides a benchmark and a guide for more sophisticated study in the future.

The systematic study of spending patterns on a state-wide basis was not intended to demonstrate whether or not the expenses incurred by students were reasonable. However, it has provided an opportunity to (1) compare the spending patterns of students at various types of institutions, (2) compare the education related expenses of students living in campus housing with the expenses of students residing off-campus with parents or elsewhere, and (3) compare the expenses which were actually incurred by these students with the level of expenses for the same items which the State of Michigan Department of Education utilized in determining student financial need. These several comparisons were based upon cost data reported by students, who, according to United States Office of Education guidelines, were financially dependent upon their parents or legal guardians.[42]

In an independent but similar design it was possible to (1) compare the expenses reported by single and married financially independent students supporting various numbers of dependent children and attending various types of collegiate institutions, and (2) compare the independent student expenses reported with the level of spending which

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[42]Hubert S. Shaw, Program Development Administrative Memorandum No. 2-72, Department of Health, Education, and Welfare, September 28, 1971.

the U.S. Office of Education has suggested is reasonable for them.[43]

Analysis of the Data

The two independent analyses in this study (for financially dependent and independent students, respectively) were similar in nature, in that they both utilized two-way analysis of variance and the t-test.

Financially Dependent Students

For dependent students two-way ANOVA was used to provide a comparison of expenses incurred during the 1971-72 academic year by type of collegiate institution attended and residency arrangement. A graphic representation of the three by three matrix can be found in Exhibit 3.1.

Institution Type	Residency Arrangement		
	Dormitory	With Parents	Other Off-Campus
4-Year Public			
2 & 4-Year Private			
Junior/Community			

Exhibit 3.1.

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[43] *Ibid.*

The residency arrangements and institution types were identified by the students' responses to those items in Section A of the survey instrument. The expense items from Section B included in the analysis were as follows: books and supplies; rent or house payments and utilities; food and other grocery items at place of residence; transportation; clothing; uninsured medical and dental expenses; entertainment; and incidental expenses.

For dormitory students the actual room and board expenses charged by the colleges were substituted for the rent and food expenses reported in order to assure greater accuracy in the total expense figure for that group of students. As it is extremely difficult for students residing with their parents to determine the value of their portion of the family rent or house payment and food expense for the purpose of comparing expenses by residency arrangement and institution type the figure of $750 used by the Michigan Department of Education for room and board was utilized. The tuition and fees expense was excluded from the analysis as it is an item the charge over which the student has no control regardless of institution attended or living arrangement. Elimination of tuition expense, which can be found easily, also allowed for closer identification of variability among the expense items being analyzed. Since only childless dependent students were included in the two-way ANOVA the child care item was omitted as well. For entertainment and incidental expenses, the minimum expense figures allowed were $10 and $20, respectively. These minimum allowable expense items were selected as a result of the previously mentioned interviews with students who participated in the pilot study.

Several t-tests were used to provide a comparison of total costs actually incurred for certain variable cost items by students with the dollar amounts for the totals of the same cost items which the Michigan Department of Education employed in its determination of student financial need.[44] For students residing with parents, the expense items under consideration from Section B of the survey instrument were as follows: books and supplies, transportation, clothing, uninsured medical and dental, entertainment, and incidental. An amount of $750 was arbitrarily selected as the value of room and board (corresponding to cost items 3 and 4) for all students in this residency category, which is equal to the value for those items used by the Department of Education. This was done because of the nearly impossible task of determining an accurate amount for those items and to insure that any variability which occurred between the mean of the totals

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[44]Michigan Department of Education, Student Financial Assistance Services, College Estimate of Student Expenses, Scholarship and Tuition Grant Programs, 1971-72.

of the expense items under consideration and the counterpart figure used by the Department of Education could not be attributed to discrepancies between students' estimates and the Department's estimate for room and board expense. The total dollar amount employed by the Department of Education for the cost items referred to above was $1,450.

For students residing in other off-campus housing and in dormitories, the same cost items were selected from the instrument, and room and board expenses were omitted from the analysis. The cost figure employed by the Michigan Department of Education which corresponded to the total of items 2, 5, 7, 9, 10, and 11 from Section B was $650. As the Department of Education provided identical consideration for dormitory students and those living off-campus but not with parents the t-test was used once to compare the $650 with the mean expenses reported by the two groups of students combined. The t-test was also utilized to test separately the mean expenses of these two residency groups against the $650 figure.

Financially Independent Students

Two-way ANOVA was also used with independent students to provide a comparison of expenses incurred during the twelve month period, September 1971-August 1972, by type of collegiate institution attended and number of respondents' dependents. A graphic representation of the three by five matrix can be found in Exhibit 3.2.

Type of Institution Attended	Number of Dependents by Marital Status				
	Single	Married			
	No Children	No Children	One Child	Two Children	Three or More Children
Public Junior/Community					
2 or 4 Year Private					
4-Year Public					

Exhibit 3.2

Marital status, number of dependents, and institution types were identified by the students' responses to those items in Section A of the survey instrument. The expense items from Section B included in the analysis were the following: rent or house payments and utilities; food and other grocery items at place of residence; clothing; child care; uninsured medical and dental expenses; entertainment; and incidental expenses.

The only expense items for which minimum allowable limits were established were in the entertainment and incidental categories. The minimum allowable limits for single respondents were $10 and $20 for entertainment and incidental expenses, respectively. The minimum allowable limits placed on the same two expense items for married respondents were $20 and $40, respectively. The establishment of minimum allowable limits was based on the belief that it is inconceivable that someone would spend nothing for entertainment and incidental expenses, but that interviews revealed expenditures in those areas may be quite low for some students.

Single respondents with children were not included in the study.

The t-test was performed on each of the dependency variables (columns in Exhibit 3.2) to provide a comparison of total costs actually incurred by students for certain variable expense items with the dollar amounts for the totals of the same expense items considered reasonable by the U.S. Office of Education, and recommended by that agency to colleges and universities for use in financial need determination.[45] The expense items in Section B included for the analysis were the following: rent or house payments and utilities; food and other grocery items at place of residence; clothing; child care; uninsured medical and dental expenses; entertainment; and incidental expenses. The totals of these expense items considered reasonable by the U.S. Office of Education for various sized families follow: single, no children--$2,000; married, no children--$2,800; married, one child--$3,500; married, two children--$4,100; married, three children--$4,700.

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[45]Shaw, op. cit.

Summary

A description of the randomly selected college students from throughout the state of Michigan and the institutions they represented were presented in this chapter. Procedures used in designing the survey instrument, conducting the pilot study, and collecting the data from participants were also described. The inclusion of two independent but related studies, pertaining to students financially dependent upon and financially independent from their parents, respectively, was discussed in the design of the study section of the chapter. Finally identified and discussed were the methods employed in statistically analyzing the data.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

Two statistical techniques were used to analyze the data for each of the two independent, but related studies, which together comprise themajor research project under consideration: two-way analysis of variance and the t-test. Analysis of variance was employed to test for the effect of type of college attended, residency arrangement, and their interaction on the mean education related expenses incurred by financially dependent students. The t-test was used to compare financially dependent students' reported costs for certain expense items with the cost for the same items used by the Michigan Department of Education in determining student financial need. ANOVA was again employed to test for the effect of institution attended, family size, and their interaction, on the level of education related expenses incurred by financially independent students. The t-test was utilized again to compare financially independent students' reported costs for certain expense items with the cost level for the same items considered reasonable by the U.S. Office of Education.

The analyses were done on the CDC 1500 and 3600 computers in the Michigan State University Computer Center. The major findings of the analyses are presented in table and graph form as the eight hypotheses, listed in Chapter I, are reintroduced. A section devoted to interpretation of the analysis is presented later.

As a matter of interest and for information, tables are presented which reveal the mean expense levels of individual expense items for various classifications of students.

Analysis of the Data

This section is divided into two parts, one devoted to analysis of the data submitted by students financially dependent upon their parents and the other pertaining to analysis of data submitted by financially independent students. The first four hypotheses relate to financially dependent students while the second four hypotheses pertain to independent respondents; consequently their order of analysis falls naturally in the same sequence as their presentation in Chapter I.

Financially Dependent Students

The first three hypotheses focus upon the effect of institution attended, residency arrangement, and their interaction, upon the total amount of money expended by students in this category for education related variable expense items. The expense items under consideration from Section B of the survey instrument are as follows: Books and Supplies, Rent or House Payments and Utilities, Food and Other Grocery Items at Place of Residence, Transportation, Clothing, Uninsured Medical and Dental, Entertainment, and Incidental. As the institution of higher learning attended could be identified for each respondent, for those students residing in campus residence halls, the actual room and board charges were substituted for the expense figures listed by the students. This provided an exact cost figure for room and board and reduced the possible sources of variability in reporting by the respondents. Three types of colleges and universities comprised the Institution variable: (1) public junior/ community, (2) two and four year private, and (3) four year public institutions. The Residency variable was also composed of three arrangements: (1) dormitory, (2) with parents, and (3) other off-campus housing.

The null hypotheses associated with these variables are:

Ho_1: For full-time undergraduate students financially dependent upon parents or guardians there are no differences in reported mean variable expenses among institutional types.

Ho_2: For full-time undergraduate students financially dependent upon parents or guardians, there are no differences in reported mean variable expenses among three types of residency arrangements.

Ho_3: For full-time undergraduate students financially dependent upon parents or guardians, there is no interaction effect between the various types of institutions and residency arrangements.

As can be seen in Table 4.1 the analysis of variance found no statistically significant institution effect at the .01 level of significance, among respondents attending (a) public junior/community colleges, (b) two or four year private colleges and universities, and (c) four year public colleges and universities. Statistically significant differences were found to exist among mean reported variable expenses at the .01 level of significance, for respondents residing (a) in campus dormitories, (b) with parents, and (c) in other off-campus housing away from parents. In Table 4.1 is also revealed a significant interaction effect at the .01 level between institution type and residency arrangement.

TABLE 4.1.--Analysis of Variance for Financially Dependent Students.

Source	Df	Mean Square	F	Probability Less Than
Institution	2	761678	1.9423	0.1439
Residency	2	5059054	12.9008	0.0001*
Interaction	4	1679141	4.2819	0.0020*
Error	1105			

*Significant at the .01 level.

Based upon this analysis, the null hypothesis anticipating no differences among the mean variable expenses reported by institution type attended (Ho_1) was not rejected, but those predicting no differences among mean expenses by residency arrangement (Ho_2), and no interaction effect (Ho_3), were rejected.

The mean expense levels for students attending the three types of higher education institutions and residing in the three housing arrangements are listed in Table 4.2. The totals (weighted means) for the residency arrangements provide a numerical presentation of the significant residency effect which was determined to exist through the application of analysis of variance. As no statistically significant differences were found among the mean expenses incurred at the three types of institutions attended, weighted means were not generated for the institution variable.

A graphical representation of the interaction effect, which was found to be statistically significant, can be found in Figure 4.1. It is clearly evident from the graph that the interaction effect was caused almost entirely by the extreme drop in the mean variable expense figure for "other off campus" students attending four year public colleges and universities. With this one exception the lines on the graph are nearly parallel.

TABLE 4.2.--Cell Means for Financially Dependent Students.

Institution	Residency					
	Dormitory	No.	With Parents	No.	Other Off-Campus	No.
Jr./Comm.	$1692	10	$1886	183	$2283	19
2 & 4 Yr. Private	1701	173	1930	72	2290	51
4-Yr. Public	1745	351	1965	99	1923	156
TOTAL (Weighted Mean)	$1748	534	$1917	354	$2036	226

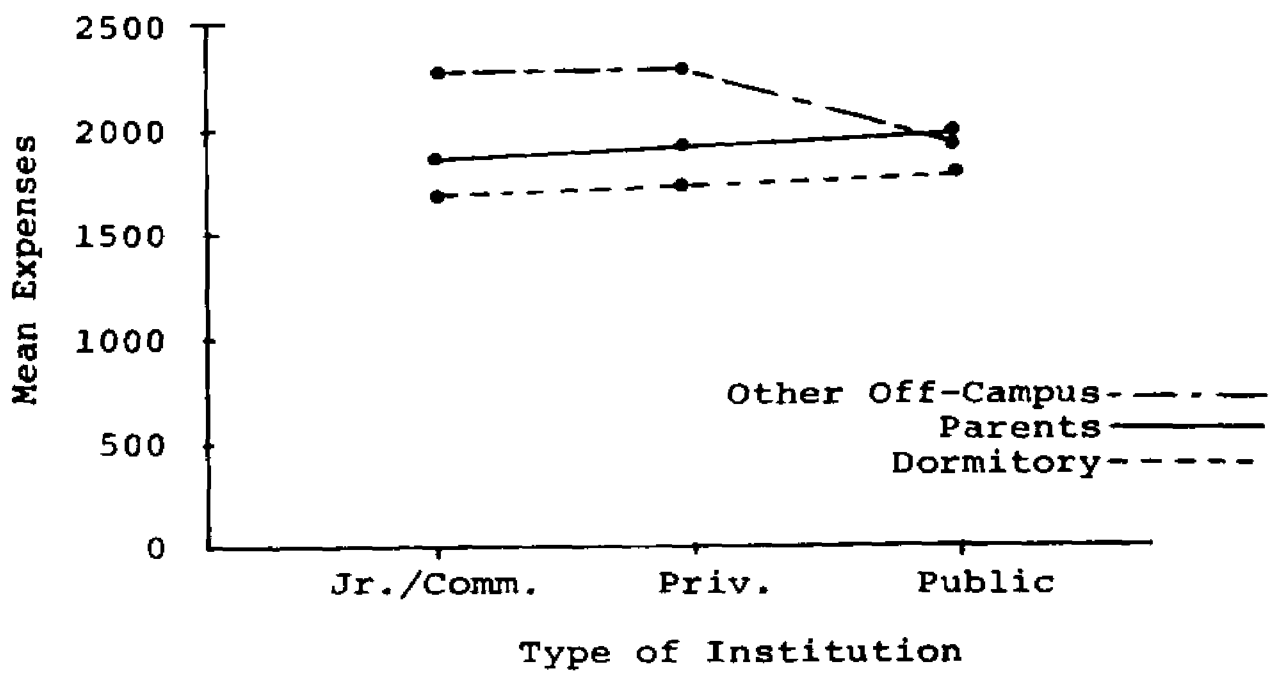

Figure 4.1.--Graph of the Interaction in Analysis of Variance for Financially Dependent Students.

The fourth hypothesis focuses upon comparisons of costs reported by students for certain expense items, and cost levels for the same items used by the Michigan Department of Education. The hypothesis, as presented in Chapter I, is stated in general terms to insure an accurate perception and understanding of the problem under consideration. In the actual statistical analysis the mean expense figures reported by students in each of the three residency arrangements plus a combination of dormitory and other off-campus means were tested against their counterpart figures employed by the Department of Education. Consequently, four separate t-tests were run, each of which allowed for the generation of a null hypothesis relating to the specific comparison being made:

Ho_{4a}: The reported mean variable expense incurred by dependent students residing in campus dormitories does not significantly differ from the variable expense figure utilized by the Michigan Department of Education.

Ho_{4b}: The reported mean variable expense incurred by dependent students residing with parents does not significantly differ from the variable expense figure utilized by the Michigan Department of Education.

Ho_{4c}: The reported mean variable expense incurred by dependent students residing in other off-campus housing (not with parents) does not significantly differ from the variable expense figure utilized by the Michigan Department of Education.

Ho_{4d}: The combined reported mean variable expense incurred by dependent students residing in dormitories or in off-campus housing other than with parents does not significantly differ from the variable expense figure utilized by the Michigan Department of Education.

As can be seen in Table 4.3, no significant difference exists at the .01 level between the mean expense reported by students residing in campus dormitories and the $650 figure considered reasonable for the same expense items by the Department of Education. The means of student reported costs were found to exceed Department of Education levels for each of the other three comparisons made at the .01 level: (a) residency with parents, (b) residency in other off-campus housing, and (c) dormitory residency and other off-campus housing combined.

Based upon the analysis of data in Table 4.3, the null hypothesis predicting that dormitory students' reported costs would not differ significantly from the cost level considered reasonable for them by the Michigan Department of Education (Ho_{4a}) was not rejected. However, the other hypotheses anticipating no significant difference between student reported expenses and Department of Education figures (Ho_{4b}, Ho_{4c}, Ho_{4d}) were rejected.

Interpretation.--The application of analysis of variance to the data collected for this study has revealed that type of higher education institution attended in Michigan did not affect the variable education related

TABLE 4.3.--Comparison of Reported Costs of Financially Dependent Students and Costs Used by Michigan Department of Education.*

Residency	Mean	Dept. Ed. Cost	Difference	t	Sig.**
Dormitory	$ 654	$ 650	$ 4	.3056	.754
Parents	1917	1450	467	12.9731	<.001
Other					
Off-Campus	883	650	233	7.1742	<.001
Dorm. and Off	722	650	72	4.9233	<.001

*Cost items included for analysis: (a) for dormitory and other off-campus--Books and Supplies, Transportation, Clothing, Uninsured Medical and Dental, Entertainment, Incidental; (b) for residency with parents--Books and Supplies, Rent or House Payments and Utilities, Food and Other Grocery Items at Place of Residence, Transportation, Clothing, Uninsured Medical and Dental, Entertainment, Incidental.

**.01 level of significance.

costs incurred and reported by full-time undergraduate students. However, it was revealed that residency arrangement did affect the expenses incurred by the same students. The weighted means for the residency variable progressed from $1,748 to $1,917, to $2,036 for dormitory housing, residency with parents, and other off-campus housing, respectively. This progression holds true not only for the weighted means, but also for the means of two of the institution types under consideration: public junior/ community, and two and four year private. The consistently increasing cost pattern demonstrated by students residing in dormitories, with parents, and in other off-campus housing, was broken only by the means expense figure for students attending four year public colleges and universities and residing in "other off-campus" housing, which figure also caused the interaction affect to occur between the institution and residency variables. Two possible causes emerge for the lower costs reported by students living in off-campus housing away from parents at four year institutions: (1) more multiple dwelling housing units may be available in communities hosting the large, four year public institutions, the availability and use of which would reduce considerably room and board costs, and perhaps transportation and clothing expense; (2) a possibly more permissive attitude toward communal living in these communities.

The results of the t-test applications reported in Table 4.3 illustrate that the cost figures used by the Department of Education, and considered reasonable by them are not very good estimates of what students are actually spending for the same expense items, with the exception of dormitory residents' reported mean cost, which varies from the Department's figure of $650 by only $4. The question of reasonableness of actual expenses incurred by students is cause for another study and will not be addressed here. Reasonable or not, the mean expenses incurred by students living with parents or in other off-campus housing, and the combined mean expense of dormitory residents and students in "other off-campus" housing, all exceeded the corresponding cost levels used by the Department of Education.

Financially Independent Students.--The fifth, sixth, and seventh hypotheses concentrate upon the effect of (1) higher education institution attended, (2) number of respondents' dependents, and (3) their interaction, upon the amount of money expended for certain education related variable expense items by students in this category. The expense items under consideration from Section B of the survey instrument are as follows: Rent or House Payments and Utilities, Food and Other Grocery Items at Place of Residence, Clothing, Child Care, Uninsured Medical and Dental, Entertainment, and Incidental. Items not included in the analysis are Tuition and Fees, Books and Supplies, Transportation, and Car Payments. These line items were not included in the student budget figures generated by the U.S. Office of Education, and therefore, are not included for either the analysis of variance or the t-tests. (The U.S. Office has suggested that each financial aid officer insert the appropriate cost figures for these items in independent students' budgets, to be determined by the cost of living in his geographical area.[46] Three classifications of higher education institutions comprised the Institution variable: (1) public junior/community, (2) two and four year private, and (3) four year public colleges and universities. The Family Status, or family size, variable included five family arrangements: (1) Single--no children, (2) Married--no children, (3) Married--one child, (4) Married--two children, and (5) Married--three or more children.

The hypotheses associated with the institution and family size variable are:

Ho_5: For financially independent, full-time undergraduate students there is no difference in reported mean variable expenses among institutional types.

Ho_6: For financially independent, full-time undergraduate students there is no significant difference in reported mean variable expenses for the various sized family units.

Ho_7: For financially independent, full-time undergraduate students there is no interaction effect between the various institution types and number of students' dependents.

As indicated in Table 4.4, the analysis of variance revealed no statistically significant institution effect at the .01 level of significance among respondents attending (a) public junior/community colleges, (b) two or four year private colleges and universities, and (c) four year public colleges and universities. Overall, it was found that family size did significantly affect the level of

[46]Ibid.

TABLE 4.4.--Analysis of Variance for Financially Independent Students.

Source	Df	Mean Square	F	Probability Less Than
Institution	2	1229629	1.0780	0.3422
Family Size	4	47465511	41.6112	0.0001*
Interaction	8	2131317	1.8614	0.0664
Error	215	1140691		

*Significant at the .01 level.

mean reported variable expenses, but Table 4.5 reveals that the direction normally anticipated did not materialize in its entirety. It can also be seen from the analysis of variance Table 4.4 that no interaction existed between the institution and family size variables.

TABLE 4.5.--Weighted Means for Family Units of Financially Independent Students.

	No.	Weighted Mean
Single, no children	90	$2308
Married, no children	76	3453
Married, one child	35	4231
Married, two children	18	4857
Married, three or more children	11	4588

The mean expense figures for each of the five family sizes are listed in Table 4.5. As mentioned above, the significant effect of family size is numerically represented there, but the usual predicted increase in weighted mean as family size increased did not hold true for the largest family unit.

Based upon this analysis, the null hypothesis antitipating no differences among the mean variable expenses reported by institution type attended (Ho_5) was not rejected. Although family size was found to significantly affect mean reported variable expenses, a linear relationship was not found to exist between family size and amount of education related expenses incurred. Due to the differences found, however, Ho_6 was rejected. The null hypothesis predicting no interaction between the institution and family size variables (Ho_7) was not rejected.

The last hypothesis concentrates upon comparisons of mean cost data presented by each of the five classifications of independent students with cost levels for the same expense items considered reasonable by the U.S. Office of Education. As with its counterpart hypothesis pertaining to financially dependent students, so was hypothesis eight, as presented in Chapter I, stated in general terms to insure an accurate perception and understanding of the problem under consideration. Here also, in the actual statistical analysis the mean expense figures reported by students in each of the family size categories were tested against their counterpart figures recommended for use by the U.S. Office of Education. Five separate t-tests were run, each of which allowed for the formulation of an hypothesis presented in the null form and relating to the specific comparison under consideration:

Ho_{8a}: The reported mean variable expense incurred by independent students who are single and have no children does not differ significantly from the variable expense figure recommended for them by the U.S. Office of Education.

Ho_{8b}: The reported mean variable expense incurred by independent students who are married and have no children does not significantly differ from the variable expense figure recommended for them by the U.S. Office of Education.

Ho_{8c}: The reported mean variable expense incurred by independent students who are married and have one child does not significantly differ from the variable expense recommended for them by the U.S. Office of Education.

Ho_{8d}: The reported mean variable expense incurred by independent students who are married and have two children does not significantly differ from the variable expense figure recommended for them by the U.S. Office of Education.

Ho_{8e}: The reported mean variable expense incurred by independent students who are married and have three or more children does not significantly differ from the variable expense figure recommended for them by the U.S. Office of Education.

The results of the t-test applications in Table 4.6 reveal that the cost figures recommended as reasonable by the Office of Education differ significantly from the reported actual costs of two groups of independent students:

TABLE 4.6.--Comparison of Reported Costs of Financially Independent Students and Costs Recommended by the U.S. Office of Education.*

Family Status	Mean	U.S. Office Cost	Diff.	t	Sig.**
Single, no children	$2231	$2000	$231	2.4654	.016
Married, no children	3453	2800	653	5.3524	<.001
Married, one child	4206	3500	706	3.9870	<.001
Married, two children	4857	4100	757	2.5509	.021
Married, three or more children	4588	4700	-111	-.1780	.862

*Cost items included for analysis: Rent or House Payments and Utilities, Food and Other Grocery Items at Place of Residence, Clothing, Child Care, Uninsured Medical and Dental Expenses, Entertainment, Incidental.

**.01 level of significance.

married--no children, and married--one child. The mean variable expenses reported by the other respondent groups did not differ significantly from the cost levels considered reasonable for them.

Based upon this analysis the null hypothesis anticipating no significant differences at the .01 level between U.S. Office of Education recommended cost figures and the actual mean expenses incurred by (1) single students with no children, (2) married students with two children, and (3) married students with three or more children (Ho_{8a}, Ho_{8d}, Ho_{8e}) were not rejected. The null hypotheses predicting no significant differences at the .01 level between

U.S.O.E. recommended cost figures and the actual mean expenses incurred by (1) married students with no children, and (2) married students with one child, were rejected.

Interpretation.--The application of analysis of variance to the cost data collected from financially independent students has demonstrated that type of higher education institution attended did not significantly affect the average expenses incurred for certain cost items by this group of students. ANOVA revealed that family size did affect the mean variable expenses incurred but a listing of weighted means for the five family category demonstrated that not in all cases did costs increase as family size increased. Possible causes for this phenomenon will be discussed later in a section devoted to a presentation of mean expense levels for individual cost items for various classifications of students. From the table of weighted mean expenses it can be seen that costs increased as family size increased in all cases except the largest family unit under investigation: married--three or more children. The fact that no significant interaction effect existed between institution type and family size demonstrated that these variables, when taken together, did not affect the level of mean variable expenses incurred by independent students.

In the comparisons made between students' expense levels and levels considered reasonable by the U.S. Office of Education, significant differences occurred in only two instances. However, it should be noted that for the purposes of this analysis three major expense items were omitted from the students' and the Office of Education's cost figures: (1) Book and Supplies, (2) Transportation, and (3) Car Payments. The Office of Education excluded these items intentionally; so to provide a meaningful comparison, the same items had to be omitted from the mean variable expenses generated for independent students. Given the cost items included for analysis it can be concluded that for single respondents with no children, married respondents with two children, and married respondents with three or more children, the respective means ($2231, $4,857, $4,588) compared favorably with the corresponding cost levels recommended by the Office of Education for the same sized family units ($2,000, $4,100, $4,700).

General Review of Expenses on a Per Item Basis

Tables 4.7 through 4.10 are presented to provide more detailed information about the individual expense items which together comprised the total mean expenses which were analyzed in the first part of this chapter.

For Tables 4.7, 4.8, and 4.9 the review pertains to average expenses incurred by various classifications of financially dependent students. All cost figures reported

TABLE 4.7.--Mean Expenses of Dependent Students by Type of Institution and Residency Arrangement: Four-Year Public Institutions.

	Dormitory		With Parents		Other Off-Campus	
	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.
Books and Supplies	$122	381	$115	113	$120	167
Rent	-	-	431	95	692	163
Food (Groceries)	-	-	397	98	361	160
Transportation	130	277	376	106	241	141
Clothing	135	381	156	113	142	167
Medical	44	381	66	113	73	167
Entertainment	149	362	210	112	165	163
Incidental	78	363	95	110	92	163
WEIGHTED TOTAL	$651		$1,776		$1,878	
Car Payment	$396	22	$689	35	$567	28

TABLE 4.8.--Mean Expenses of Dependent Students by Type of Institution and Residency Arrangement: Two and Four-Year Private Institutions.

	Dormitory		With Parents		Other Off-Campus	
	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.
Books and Supplies	$122	185	$128	93	$133	55
Rent	-	-	430	78	656	55
Food (Groceries)	-	-	354	76	408	54
Transportation	172	145	337	88	369	50
Clothing	164	185	205	93	165	55
Medical	57	185	77	93	55	55
Entertainment	148	176	172	90	242	52
Incidental	83	181	107	92	119	53
WEIGHTED TOTAL	$736		$1,745		$2,127	
Car Payment	$567	13	$425	23	$469	15

TABLE 4.9.--Mean Expenses of Dependent Students by Type of Institution and Residency Arrangement: Two-Year Community/Junior Colleges.

	Dormitory		With Parents		Other Off-Campus	
	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.
Books and Supplies	$ 94	11	$ 92	227	$ 87	22
Rent	-	-	387	187	638	21
Food (Groceries)	-	-	350	197	400	22
Transportation	205	7	345	221	424	19
Clothing	113	11	155	227	180	22
Medical	47	11	76	227	79	22
Entertainment	169	9	197	216	167	21
Incidental	62	11	95	225	115	22
WEIGHTED TOTAL	$643		$1,572		$2,091	
Car Payment	$2,800	1	$ 493	73	$638	9

by respondents were accepted and utilized in determining means. As every school has its own room and board charges for dormitory students, the figures reported by students for those items were excluded. The variation in numbers who reported individual expense figures reveals that not all respondents filled out the survey form completely. The weighted totals were determined by multiplying the average dollar amount for each item by the number who entered a dollar figure for that item and adding the products. The sum was then divided by the average number of respondents, which division produced the weighted total. Car payment is not included in the weighted total.

TABLE 4.10.--Mean Expenses of All Independent Students by Marital Status and Number of Dependents.

	Single		Married							
	No Children		No Children		One Child		Two Children		Three or More Children	
	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.	Dollar Amount	No.
Books and Supplies	$ 135	95	$ 126	87	$ 148	39	$ 121	21	$ 90	18
Rent or House Payments plus Utilities	899	92	1,598	84	1,768	39	1,924	21	1,408	17
Food (Groceries)	559	89	958	94	1,197	39	1,325	21	1,502	17
Transportation	450	90	543	83	552	38	559	21	479	17
Clothing	219	95	233	87	260	39	391	21	196	18
Child Care	-0-	-0-	-0-	-0-	311	39	299	21	145	18
Medical	135	95	230	87	228	39	309	21	167	18
Entertainment	276	95	279	84	224	37	190	20	209	17
Incidental	183	95	197	87	197	39	184	21	192	18
WEIGHTED TOTAL	$2,828		$4,136		$4,859		$5,293		$4,188	
Car Payment	$821	24	$771	43	$907	22	$764	14	$784	7

To be considered financially dependent the respondents answered YES to either question 9 or 10 in Section A of the survey instrument.

In Table 4.10 the approach taken to the computation of means for individual expense items reported by financially independent students was basically the same as for those who were financially dependent upon their parents. However, any independent students who indicated that they resided in a dormitory were excluded from the computation. A NO response to both questions 9 and 10 in Section A of the survey instrument was required to classify a student financially independent.

A comparison of weighted totals in Table 4.10 with the weighted means for the same groups of students in Table 4.5 at first glance appears to reveal a severe discrepancy. Therefore it should be pointed out that the weighted means in Table 4.5 were compiled with the exclusion of two individual expense items which are included in Table 4.10: Books and Supplies, and Transportation. Car payment is excluded from both the weighted means and weighted totals in Tables 4.5 and 4.10 respectively. Because of different n's some discrepancy is inevitable throughout.

Earlier in the discussion reference was made to the unexpected decrease in total expenses when the respondent's number of dependents increased to four or more. A brief review of certain items may reveal possible causes for the decrease.

Books and Supplies--with limited funds, student may be more apt to buy used books, or to borrow books from professors and library.

Rent or House Payments plus Utilities--may be forced into low cost housing; still averaging over $200 a month.

Food (Groceries)--one area where sacrifices not made.

Transportation--less travel with larger family.

Clothing--possibly more hand-me-downs and home made garments.

Child Care--perhaps too expensive for mother to work.

Medical--less panic and more home remedies.

Entertainment--not out of line.

Incidental--not out of line.

By and large the information contained in Tables 4.7-4.10 is self explanatory; the tables were listed to provide a general review of expenditures on a per item basis for purposes of comparison and for individuals interested in the itemized cost figures reported by specific classifications of students.

Summary

The results of data analyses presented in this chapter indicate that for both financially dependent and independent full-time undergraduate students in Michigan, the type of higher education institution attended did not appear to affect the amount of money expended by them for variable expense items, i.e., items the purchase and consumption of which they have some control. Residency arrangement of financially dependent students did affect the level of expenditures incurred by them for variable cost items, and when the mean expense levels for this analysis were presented in table form it appeared that students residing in campus dormitories incurred the lowest level of expenses, followed by students residing with parents, and in other off-campus housing, in that order. Although it was found that the institution and residency variables, when considered together, affected the level of expenses incurred by dependent students, the effect seemed to be caused entirely by an unexpectedly low expense level reported by dependent students residing in off-campus housing away from parents and attending four year public institutions.

A comparison of certain costs realized by dependent students in various residency situations with cost levels used by the Michigan Department of Education revealed that students (1) residing with parents, and (2) living in other off-campus housing did not spend the amount of money considered reasonable for them by the Department of Education, but exceeded the Department's figures. Dependent students residing in dormitories reported expenses very closely in line with figures used by the Department of Education.

For financially independent students the level of expenses varied with family size, but not necessarily in the order normally anticipated. Expenses increased as family size increased with the exception of the five or more member families, whose reported costs fell below the level for the four member families.

A comparison of costs, similar in design to the comparisons made between dependent students' actual costs and Michigan Department of Education recommended cost levels, was made also with cost data from financially independent students. For the students in this latter group, their mean expense data was compared with U.S. Office of Education suggested reasonable expense levels for various sized family units. These analyses revealed that the amount of money expended for variable cost items by married students with no children and married students with one child differed considerably from the cost figures recommended for them by the Office of Education. The cost levels incurred by the other three family sized units were in line with U.S.O.E. figures.

The last section devoted to any kind of data analysis contains average expense figures for various classifications of financially dependent and independent students on a per item basis. The statistical analyses previous to this were based upon mean totals, and the final, general information section provides for a review of the individual expense items which comprised those totals.

CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Introduction

The purpose, objectives, and research design of this study are summarized in this chapter. Conclusions, discussion, and recommendations are based upon the results of the study.

Summary and Conclusions

An important part of student financial aid administration is the determination of financial need, for it is usually financial need, rather than any other single criterion that determines the amount of money a student is eligible to receive in financial assistance for a given academic year. A critical aspect of financial need determination is the computation of an amount of money which is normally required by students to meet education related expenses during a particular school year, commonly referred to as the student budget.

The purpose of this study was to analyze the education related expenses incurred by various classifications of full-time undergraduate students attending three types of higher education institutions in Michigan.

Actually, two independent, but related, analyses were performed on data collected from various classifications of financially dependent and independent students, respectively. Financially independent students were defined as those whose parents or legal guardians did not claim them as federal income tax exemptions in either 1970 or 1971, and whose parents or legal guardians did not provide more than $200 in support, including value of room and board, during either 1970 or 1971. The financially dependent students were classified by institution attended (public junior/ community college, two and four year private colleges and universities, or four year public institutions) and residency arrangement (dormitory, with parents, or other off-campus housing). Financially independent students were classified by institution attended (same as above) and size of family unit (single--no children, married--no children, married--one child, married--two children, or married--three or more children).

The more specific objectives of the study included determining for dependent students the effect of certain variables on their level of spending for education related expenses, and comparing their actual expense figures with dollar amounts for identical items considered reasonable and used by the Michigan Department of Education. These analyses relate to the following concerns:

1. Does the type of college attended influence the total amount of money expended by dependent students for certain education related expense items;
2. Is the amount of money expended affected by the students' residency arrangement;
3. Do institution type and residency arrangement work together to influence levels of expenditures;
4. How do the total expense levels for certain cost items of students in each of the three residency arrangements compare with cost levels used for these students by the Department of Education.

A second set of data relating to financially independent students allowed for additional statistical analyses related to, but independent from, the analyses pertaining to dependent students. For independent students the analyses relate to the following questions:

1. Does the type of college attended influence the total amount of money expended by independent students for certain education related expense items;
2. Is the amount of money expended affected by the students' family size;

3. Do institution type and family size work together to influence levels of expenditures;
4. How do the total expense levels for certain cost items of students in each of the family size categories compare with the cost levels recommended for these students by the U.S. Office of Education.

The selection of students for this study was done randomly on a proportional basis. First, Michigan colleges and universities with 1970-71 full-time undergraduate enrollments exceeding ninety and which participated in the State of Michigan Tuition Grant or Competitive Scholarship Programs, were selected. Secondly, based upon a sample size of 5000, a number of students for each school was randomly selected which was the same percentage of 5,000 as that institution's full-time undergraduate enrollment was of the total full-time undergraduate student population of all schools selected for inclusion in the study. Every college was sent the list of randomly selected numbers from its population count along with the same number of survey instruments and was requested to select student names for the study from its roster, using the list of random numbers to select appropriate students. As not all selected institutions participated in the study the sample size was reduced to the number of students selected at schools which did participate.

The survey instrument was designed for the collection of both demographic and financial information from student respondents. The demographic items provided the means by which respondents were classified into institutional, residency, and family size variables. The expense items used in one or more of the analyses were the following: (1) Books and Supplies, (2) Rent or House Payments and Utilities, (3) Food and Other Grocery Items at Place of Residence, (4) Transportation, (5) Car Payments, (6) Clothing, (7) Child Care, (8) Uninsured Medical and Dental, (9) Entertainment, (10) Incidental. Tuition and fees were not used in the analyses but students were asked to list the cost for that item, to insure against forcing it into some other cost area. Collected and useable data was statistically treated by analyses of variance and several applications of the t-test. Analysis of variance was used to detect any significant differences between mean expenses levels of various classifications of students, and the t-test provided comparisons of actual expense levels with suggested, or recommended, expense levels for identical cost items.

The following were among the major findings of this study:

1. For financially dependent students, type of higher education institution attended did not substantially affect the mean reported variable expense level.

2. For financially dependent students residency arrangement did significantly affect the mean reported variable expense level.
   a. Dormitory, $1,748.
   b. With parents, $1,917.
   c. Other, off-campus $2,036.
3. For dependent students, institution type and residency arrangement appeared to work together to affect the mean reported variable expense level.
4. Three out of the four mean expense levels reported by dependent students in various residency arrangements significantly varied from the expense levels used for those students by the Michigan Department of Education in determining student financial need.
   a. Mean of students residing with parents exceeded Department figure.
   b. Mean of students residing in other off-campus housing exceeded Department of Education figure.
   c. Combined means of dormitory residents and students in "other, off-campus" housing exceeded Department of Education figures.

   d. Mean of dormitory residents alone was very much in line with Department of Education figures.

5. For independent students, institution attended did not appear to affect the mean reported variable expense level.
6. Family size of independent students did appear to significantly affect the mean reported variable expense level. However, in all cases there was not a corresponding rise in expense level as family size increased. The mean expense level for the five or more membered family fell below that of the next smaller family.
7. It was not determined for independent students that institution type and family size worked together to affect the mean reported variable expense level.
8. Two out of the five mean expense levels reported by independent students with various sized family units varied significantly from the expense levels recommended as reasonable for them by the U.S. Office of Education.
   a. Single--no children--did not differ.
   b. Married--no children--differed (student higher).
   c. Married--one child--differed (student higher).

d. Married--two children--did not differ.

e. Married--three or more children--did not differ.

It can be safely concluded from the interest in and financial support for this study by the Michigan Department of Education and the Michigan Student Financial Aid Association, that those two organizations are concerned about the education related expenses incurred by students as they relate to the determination of student budgets. As mentioned earlier in Chapter I, the determination of student budgets is a critical aspect of the total financial need analysis methodology. The student budget, as much as any other factor, determines the amount of financial need which students demonstrate. Given the integral function of student budgets, the close relationship of this study to student budget determinations, and allowing the tentative assumption that the means of expenses recorded by students in the study were reasonable, several conclusions can be drawn.

1. For state and federal governmental agencies, as well as other non-college organizations that administer financial aid programs for financially dependent and independent students attending numerous colleges and universities, it should not be necessary to establish different sets of budgets for various types of institutions

attended. The institution variable did not affect levels of expenditures, which would allow standardization of budgets for dependent students and independent students respectively.

2. For all financial aid programs pertaining to dependent students where financial need is an eligibility criterion, individual student budgets should be generated for students residing in each of the three generally recognizable housing arrangements. Not only should student budgets for each of the three residency plans differ, but they should ascend in the following order: (1) dormitory students, (2) students residing with parents, (3) students living in other off-campus housing.

3. The Michigan Department of Education has not been using the most appropriate cost figures for all residency arrangements in the determination of budgets for financially dependent students. Analysis of the data pertaining to comparisons of actual student expenses and Department of Education figures, revealed that, with the exception of dormitory residents, the cost figures used by the Department of Education for various housing arrangements were too low during the 1971-72 academic year. This situation caused the total student budgets for the housing plans under investigation (not dormitory) to be unrealistically low. Following the need analysis procedure to its conclusion, the resulting financial need

(Student Budget minus Family Contribution) determined was also unrealistically low. The residency plans in which major cost discrepancies existed were: (1) with parents, (2) other off-campus housing, and (3) a combination of the expenses of dormitory residents and students residing in other off-campus arrangements. The cost comparison was done with the combination of costs because the Department of Education considered those two residency plans identically for financial need determination purposes.

4. Although the education related costs incurred by financially independent students varied with family size, the costs did not rise in all cases as family size increased. The obvious conclusion can be drawn from this analysis that budgets for independent students must be individualized, based upon family size, but it cannot be determined from the study what the increase or decrease should be for expenses as family size changes.

5. The budgets recommended for independent students by the U.S. Office of Education were not appropriate for all family size units. For the two family categories whose actual expenses differed significantly from the budget figures recommended for them by the U.S. Office (married--no children, married--one child) it can be concluded that the financial need figures generated for them were distorted, having presented an unrealistically low need factor, to the disadvantage of the students.

Discussion and Recommendations

The exploratory nature of this research project and the dearth of published materials related to it prohibit a discussion of the study as it pertains to other contributions in the field. Therefore, the discussion henceforth is mingled with recommendations and implications for future research and the contribution to student financial aid administration that was made by the study.

The results of this study reinforce the claim that student budgets used currently by financial aid administrators in the determinat on of financial need are not necessarily valid and do not reflect reasonable expense levels to be incurred by college students. In several instances students in this study reported expenses which varied substantially from recommended levels of state and federal governmental agencies. One of two simple conclusions can be drawn from these analyses: either the students' reported actual costs for education related expense items are unreasonable or the federal and state offices' estimates for the costs are unreasonable. If nothing else this study has provided something more than speculation as to what students are and ought to be spending for education related expense items. The data revealed that flexibility is an essential ingredient in the determination of student budgets. Various student groups revealed different spending patterns, and the treatment of those groups should be individualized as much as possible. Now that there are definite cost figures to compare from both student and agency sources, the problem becomes one of conducting further research into the reasonableness, or fairness, of cost data from both sides with the goal of determining the fairest possible student budgets.

If further research should be desired on costs incurred by students attending Michigan colleges and universities several recommendations should be made. As the response rate for this study was lower than desired and adequate measures were lacking which would insure proper follow-up attempts, in the future fewer institutions should be selected, on a random basis, which in turn would result in a smaller sample size. The researcher should have to rely on as few individuals as possible when carrying out the research project. Working with fewer representative institutions and students would provide the researcher with more control over all facets of the study. To facilitate follow-up attempts intended to increase the response rate, when student participants are contacted a second time they should be provided with a duplicate survey instrument. The most prominent hindering factor in this study was the large sample size, attended by the high level of cooperation needed from the financial aid offices at the participating institutions. The cooperation received while carrying out this study was invaluable but the large numbers of colleges and their scattered geographical locations made it impossible to insure that every step of the survey instrument distribution and collection processes were accomplished in the most efficacious manner.

Several questions surfaced as a result of this study which pertain to the need for related research in the area of student budget determination. One such question concerns whether or not student budgets should be individualized for other student groups than were analyzed in this study (race, sex, class standing). Undoubtedly, there is a point beyond which the proliferation of student budgets would make them impossible to handle, administratively. Nevertheless, this should not deter from researching the subject with the goal of assessing fairly and objectively the financial needs of as many students as possible. Similarly, as the Higher Education Amendments of 1972 allow for financial aid consideration of part time students, this group should be studied as well. Graduate students and international students, respectively, present still another set of needs worthy of investigation.

Another issue which must be addressed is the inclusion or exclusion of a sum for car payments in the total student budget. As not all students own automobiles, the provision for car payment expense in the student budget is a particularly volatile issue in contemporary financial aid administration. The data in this study revealed that car payments comprise a substantial portion of the students' total expenses, so their exclusion or inclusion in student budgets would involve a major policy decision.

Student budgets, to be fair to all parties, must be set at levels which provide not only for physical well-being, but for psychological comfort as well, while at the same time insuring against a level of spending that would be higher than reasonable. If this goal can be attained, it will establish soundly the most critical eligibility criterion in the allocation of financial aid to college students.

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APPENDIX

SURVEY INSTRUMENT AND LETTER OF INSTRUCTIONS TO FINANCIAL AID OFFICERS FOR DISTRIBUTION TO STUDENTS

OFFICE OF FINANCIAL AID
Lansing Community College
Lansing, Michigan 49423

COLLEGE STUDENT EXPENSE SURVEY

ent

gan Student Financial Aid Association, with the cooperation of the Michigan Department of Education, wishes to determine ely as possible, what the education related costs are for college students in Michigan. This survey form is being distrib- idomly selected students attending various types of collegiate institutions throughout the State, with the hope that we can urate, meaningful data concerning the expenses incurred by students during the 1971—72 academic year.

rious participation in this study will enable financial aid administrators to more accurately determine the financial needs o eeking assistance, your efforts in completing this survey are sincerely appreciated.

INSTRUCTIONS: STUDENT - As time is important for data compilation, please return the completed survey to the FINA AID OFFICE on your campus by APRIL 24, 1972.

FINANCIAL AID OFFICER - To allow sufficient time for follow-up, please return completed survey form to the address indicated above by MAY 15, 1972.

SECTION A

L INFORMATION

F SCHOOL YOU ATTEND
Only)
PUBLIC Community or Junior College
2 Year PRIVATE College
4 Year PRIVATE College or University
4 Year PUBLIC College or University

STANDING
Only)
Freshman
Sophomore
Junior
Senior

Male
Female

Only)
American Indian
Black
Spanish Surnamed American
Oriental
White and All Other Individuals Not Included Above

NCE
Only)
Dormitory
With Parents
Apartment
Room in Rooming House
Fraternity/Sorority House
Maintain Own Home

6. MARITAL STATUS
(Check One Only)
☐ a. Single
☐ b. Married
☐ c. Divorced or Separated

7. NUMBER OF YOUR DEPENDENT CHILDREN
(Check One Only)
☐ a. None
☐ b. One
☐ c. Two
☐ d. Three or More

8. ARE YOU A PERMANENT RESIDENT OF THE UNITED STATES?
☐ a. Yes
☐ b. No

9. WERE YOU CLAIMED AS AN INCOME EXEMPTION FOR FEDERAL INCOME TAX PURPOSES BY PARENTS OR LE GUARDIANS IN EITHER 1970 OR 1971?
☐ a. Yes
☐ b. No

10. DID YOU RECEIVE FINANCIAL ASSISTANCE OF MORE $200 OF ANY KIND, INCLUDING ROOM AND BOARD, FR PARENTS OR GUARDIANS IN EITHER 1970 OR 1971?
☐ a. Yes
☐ b. No

(PLEASE COMPLETE THE BACK SIDE, NOTING THE DIRECTIONS WHICH ARE APPLICABLE TO YOU)

SECTION B

ECTIONS:

If you answered YES to EITHER question 9. or 10. on the front page, the information in SECTION B pertains to the entire year, September, 1971 – June, 1972. Please base your computation of expenses on a NINE MONTH school year, and round figures to the nearest whole dollar.

If you answered NO to BOTH questions 9. and 10. on the front page, the cost information requested in SECTION B pertains TWELVE MONTH period, September, 1971 – August, 1972. In estimating your expenses between now and the end of Augu the same time period for last year as a guideline. Please round your figures to the nearest whole dollar.

EXPENSE PERIOD (Check One Only)	☐ 9 Months ☐ 12 Months

NCIAL INFORMATION

ITION AND FEES	$
OKS AND SUPPLIES	$
NT OR HOUSE PAYMENTS AND UTILITIES (If residing with parents, please estimate what your portion of rent or house payments might be)	$
D AND OTHER GROCERY ITEMS AT PLACE OF RESIDENCE (If residing with parents, please estimate what your share of family food expense might be)	$
NSPORTATION (If you drive a car to school, include cost of gas and oil, insurance, maintenance, etc.; do NOT include car payments here. If you do not drive, enter cost of bus or air fare, or your share of a car pool)	$
PAYMENTS (For your car only)	$
THING	$
LD CARE (Babysitting expense and/or nursery school)	$
SURED MEDICAL AND DENTAL EXPENSES (Include cost of insurance if you pay the premiums)	$
ERTAINMENT (Snacks, movies, records, plays, concerts, sports, etc.)	$
IDENTAL EXPENSES (Laundry and dry cleaning, soap, cosmetics, bed linen, meals AWAY from place of residence for commuting students, etc.)	$
TAL	$

Lansing Community Co

419 N. CAPITOL AVE., LANSING, MICHIGA

Serving the Heart
of Michigan

April 5, 1972

Dear Colleague:

The student expense budget survey that was approved at the last Association meeting is nearly ready to be implemented. As there has been a delay in printing the survey instrument, we are sending you these instructional materials now, so that you will be able to distribute the forms as soon as you receive them, which should be within a week.

Enclosed you will find a list of randomly selected numbers. They represent the number of full-time, undergraduate students who should be selected for the study at your institution. The number of students selected at each school is based upon the proportion that its full-time undergraduate enrollment is to the enrollment of all schools in the study. The numbers are listed in descending order, so that you can go down your roster and identify the appropriate students as easily as possible. If you do not have a listing of full-time undergraduates only, please cross off students of all other classifications before making your selections. This is crucial, for inclusion of other types of students will confound the results of our study. If your fill-time undergraduate enrollment is not high enough at this time for you to utilize all the numbers listed, simply go as high as you can and ignore the remainder.

Also, as the students will not be asked to identify themselves by name on the survey form, please retain a list of those whom you select. This is important, for if you have a response rate below 80% it will be necessary to contact all students surveyed on your campus, to request again that they return the completed form to you, if it had not already been done.

Because of the late date, those institutions whose academic year is completed by the first part of May will not be able to follow-up without great difficulty. If you are in that situation a follow-up attempt, resulting from an initial response of below 80%, would be appreciated but not necessary.

The date by which the students are requested to return the form to your office will be indicated clearly on the instrument itself. We ask that you return the completed forms to Neil at Lansing Community College by Monday, May 15, 1972.

As you can see, whether or not meaningful student expense data can be generated from this study depends upon the success which individual institutions have in recovering the completed survey forms. Without your generous cooperation such a massive, important study could not even be contemplated. Thank you in advance for your participation and we shall be in touch with you again shortly.

Sincerely Yours,

Neil G. Shriner
Chairman, Research Committee

James R. Bekkering
Member, ExOfficio