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EARLY PROGRAM INTERVENTION AND ACADEMIC LOAD:
FACTORS INFLUENCING THE ATTRITION RATE OF
MINORITY STUDENTS.

THE OHIO STATE UNIVERSITY, PH.D., 1979

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This dissertation is dedicated to my mother, Maggie L. Eskridge, and to memories of my father, Lloyd G. Eskridge.
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CHAPTER 1
INTRODUCTION

With the advent of the Civil Rights movement and subsequent campus disturbances during the 1960's, increasing numbers of minority students began attending predominantly white colleges. Traditionally, college administrators and faculty saw standardized test scores on college entrance exams and high school grades as the primary basis for evaluating the acceptability of individuals for college study. The "best" students with the "best" grades and the "best" test scores attended the "best" colleges with the "best" faculty. Institutions perceived their social responsibility as exercising "quality control" of their programs. Thus, they saw fit to evaluate their standards in part on the admissions policies they exercised to select the "best" students and maintain the sanctity of their standards.

Under those traditional criteria, the number of minority students admitted had been low. Thus, the pressure to admit more minority students brought into question some traditional values. Faculty feared that changing
admissions criteria would lower quality and therefore threaten their own status. Institutions argued that traditional standardized tests predicted the academic success, or lack there-of, of minorities as well as that of white students (Stanley, 1971). Stanley and Jensen (1971) argued that to admit unqualified minority students was to condemn them to failure.

The issue initiated a back-lash among faculty and administrators. Professor Martin Trow (1970) of the University of California surveyed 600 college professors concerning their attitudes toward the admission of minority students. The results revealed that 30 percent were opposed to such admission if it meant "relaxing" admission standards. Such powerful political figures as Spiro Agnew and Logan Wilson of the American Council of Education spoke out in 1969 against such practices. They claimed that to change standards for this purpose would be anti-meritocratic and anti-egalitarian and encouraged that other post-high school vocational options be developed for minorities.

Amitai Etzioni (1970) of Columbia University advocated the development of an open-door two year college system for students who could not gain entrance to college via traditional criteria. Currently such a system has been established in several states. In California, for example, only students in the top one-eight of their high school graduating class can attend the University of California or any
of its branches. Everyone else, at best, can only attend community colleges (Ballard, 1973).

In most states community colleges by definition are second chance institutions, admitting all high school graduates and those who have failed elsewhere. These colleges were the first to implement remedial education on a large scale. Yarbel (1973) linked lower socio-economic status with community college attendance. The admission of a more diversified population to traditional colleges has not always been the result of the adoption of more egalitarian policies. Rather, it is the result of supply and demand. Many colleges need students and therefore have been forced to alter their admissions criteria. Although this fact appears to have necessitated the implementation of developmental or supportive services, such services are not new to American education.

In 1894, Wellesley College introduced the first remedial course for academic deficiencies, focusing on poor study habits. More recently many institutions of higher education have discovered that increasing proportions of their student body possess learning difficulties of one type or another. Today problem students come from all segments of society. Even prestigious universities like Stanford readily admit to filling developmental classes with straight A students who enter with slovenly and
inefficient study habits (Roueche & Snow, 1977). Their program includes half the freshman class yearly.

In spite of the universality of this phenomenon, the fact remains that a relationship exists between the type of institution and the number and ethnic origin of students enrolled in special developmental education or supportive services programs. Yet insufficient studies have been implemented to ascertain the total impact of such programs on their effectiveness. Also related to this phenomenon is the open door policy of admissions at numerous state institutions throughout the country. Whereas some have adopted programs designed to aid students with inadequate preparation, others have chosen to follow the "sink" or "swim" philosophy. Advocates of the open door claim that it does not lower academic standards within the university but rather only changes admissions standards.

Many educators view the recruitment of minority students who are inadequately prepared as a means of bolstering the universities' coffers at the expense of unsuspecting individuals, creating the so-called "revolving door." Here the institution brings in bodies who will "flunk out" within the first or second year. This revolving door phenomenon can, and does, occur in spite of remedial programs.

Much that is written on this subject of minority attrition, however, fails to point out that half of all
entering freshmen, regardless of their backgrounds, never complete college (Ballard, 1973). Many studies on compensatory education fail to make the comparison between those who dropout within the program and the general dropout rate. As Allen Ballard (1973) notes, few researchers blame the compensatory educational programs themselves or additionally consider that given their lack of preparation, the racism they encounter, and the culture shock they frequently experience, it is a miracle that so many minority students manage to graduate at all! An alternative way of viewing the situation lies in seeing all students as prepared and the institution as lacking in offering diverse educational models to meet the needs of a pluralistic society.

Obviously the problem not only exists with the institutions of higher education but with the society as a whole. Current reports on reading scores alone indicate that public education is failing large numbers of students, not all of whom are minorities. Yet with a more diverse population of students clamoring to enter college, higher institutions must, of necessity, deal with this lack of preparation. Primary and secondary schools must realistically be replaced by facing the needs of entering college students. The question, however, is how? Supportive services and developmental or remedial programs constitute
the most common manner in which most colleges and universities currently respond. The efficacy of such approaches, however, is in dire need of evaluation and validation. These programs demand constant review and development. Given the historical context of these programs, it is imperative that educators face the issues of elitism, meritocracy, racism, and egalitarianism and what these attitudes mean for the welfare of minority students in pursuit of a college education.

A related issue, has also arisen from the recent laws enacted by Congress regarding federal financial aid to institutions. The purpose of these laws is to insure that federal funds are used as intended to help students attain their educational goals. Large numbers of minority students need such financial aid if they are to attend college. That, coupled with the lack of poor academic preparation, puts them at a greater disadvantage than many other students. The 1976 Amendments to the Student Aid Program under Title V of The Higher Education Act of 1965 requires all institutions of higher education to define and enforce Standards of Progress for those students receiving assistance from federal financial aid programs. These Standards of Progress mandate that all students receiving financial aid complete a prescribed number of hours per quarter. The number of hours which must be completed is based on the student's plan to enroll full or half-time as indicated on their aid
application. This adds one more item of pressure to the already long list of obstacles perceived by the institution. The evaluation of supportive services becomes imperative. If the students are to attain their immediate educational goal, it is the institution's responsibility to help them by providing the necessary supportive services.

Statement of Problem

In the early Summer of 1970, The Ohio State University initiated Project 100, a special recruitment effort designed to increase the enrollment of Black students. One hundred and seventeen Black students enrolled on the basis of the normal criteria - a high school diploma and Ohio residency. All eligible students received financial aid. Project 100 was superseded by the Freshman Foundation Program to increase minority enrollment. It included not only a special recruitment program, but also specific supportive services designed to increase retention.

Previous researchers (Hall, 1971 and Franklin, 1973) have considered the impact of special minority recruitment programs, supportive services, and financial aid. Some of these investigations have revealed that supportive services do not positively affect the student's progress. Little is available concerning the nature of such services on the one hand, and the relationship between the use of supportive services as such usage might influence the number of hours
attempted versus the number successfully completed during an academic year, however.

One of the most significant areas of supportive services is designed to enhance the effort of participating students to achieve as well academically, personally and socially as the "traditional" student. However, past data reflect that use of supportive services does not appear to have as beneficial an effect on academic performance as would be expected. Relative to the latter question, a survey of students within the Freshman Foundation Program indicated that a significant number of supportive service users (mostly minorities) often do not complete the number of credit hours for which they initially register during a given year. They frequently fall short of the number of hours required to complete the degree even after enrollment for up to fourteen quarters, two beyond that which is normally expected.

The problem of this study is to determine whether such student characteristics as marital status, race, sex, age, number of hours spent in employment, on or off-campus residency, and/or geographic area of the state from which the student was recruited has an effect on the yearly percentage of course credits completed (as compared to those for which registered) and the extent to which utilization of one or more forms of supportive services; i.e.,
financial aid, academic and/or personal/social counseling is related to dropping of courses.

Rationale

The purpose of this investigation is to determine the extent to which supportive services aid students in completing the number of hours for which they initially register. Procedurally, this study will utilize a demographic instrument designed to determine to what degree and in what manner minority students use supportive services. Respondents will be classified by age, sex, marital status, ethnic origin, place of residency, employment status, and geographic areas of the state from which recruited. Supportive services are classified as follows: (a) financial aid; (b) academic support; and (c) personal or social counseling. The impact of respondent characteristics on academic process will be compared within categories of service use.

The null hypotheses for minority students who use (one or more categories) of supportive service are as follow:

(1) There will be no significant difference by marital status in the percentage of attempted hours successfully completed during the academic year.

(2) There will be no significant difference by sex in the percentage of attempted hours successfully completed during the academic year.
(3) There will be no significant difference by age in the percentage of attempted hours successfully completed during the academic year.

(4) There will be no significant difference by residency in the percentage of attempted hours successfully completed during the academic year.

(5) There will be no significant difference by race in the percentage of attempted hours successfully completed during the academic year.

(6) There will be no significant difference by employment status in the percentage of attempted hours successfully completed during the academic year.

(7) There will be no significant difference by geographic region in the percentage of attempted hours successfully completed during the academic year.

Utilization of supportive services will be looked at as divided into financial, academic, or personal/social supportive services singly or in combination with each other in the testing of the above hypotheses.

Population

The largest group to participate in the Freshman Foundation Program matriculated into The Ohio State University for the 1977-1978 academic year. From the population of the initially enrolled group of 530, the investigation will seek to include students who returned for the second academic year effective Autumn Quarter, 1978. Longitudinal studies by personnel responsible for the Freshman Foundation
Program indicated that students who dropout for one reason or another either do not respond or that inquiries are returned by the U.S. Postal Service marked "No Longer At This Address" or "No Forwarding Address" (Stranges, 1978). Obviously, much more information would be obtained if the total population could be surveyed. However, this sample which includes only returning students should shed some light on the topic considered in this research.

**Limitations of the Study**

1. Research in this study is limited to minority students who remain enrolled in The Ohio State University. No procedure was attempted to determine why some students did not continue whether it was due to dismissal, the "stop and go" syndrome, or other factors. Therefore, analysis will concentrate on performance differences among students who remained in school.

2. The research surveys a sample of students only at a specific institution. Therefore, results will be applicable only to this institution or others with characteristics similar to those in the sample. Generalizations to other populations must be considered with caution.

3. Students were surveyed during their second year at the university. Some researchers suggest that students' academic performance tend to improve the longer they remain
at the institution; thus, interpreting results in relationship to students remaining for a longer period should be considered with caution.

(4) No attempt will be made to determine sociological, psychological or other characteristics of the subjects which influence the results of this survey. Such factors may be nonetheless important to the consideration of total program success.

**Definition of Terms**

For clarity of purpose and meaning, the terms utilized in this investigation will have the following definitions:

(1) **Minority Student**: Minority student is defined in terms used by the administrators of the Freshman Foundation's special recruitment program and includes the following racial or ethnic categories:

   a) Native American Indian
   b) Asian American
   c) Black American
   d) Hispanic American
   e) Appalachian White

(2) **Project 100**: The first special recruitment program specifically designed to increase Black enrollment.

(3) **Freshman Foundation**: A special recruitment program sponsored by the Office of Minority Affairs, implemented to increase minority enrollment and provide special supportive services.

(4) **Office of Developmental Education**: A unit in the University College designed to provide supportive services to students specifically
participating in the Freshman Foundation and to other students requesting assistance.

(5) **Supportive Services (Program Intervention):** All services specifically designed for academically deficient students who, defined by traditional predictive criteria, are less likely to succeed in an institution of higher education. Such programs normally include personal and academic counseling, financial aid, special courses, and tutoring.

(6) **Minimum Standards of Progress (for Financial Aid Students):** Standards developed for only financial aid recipients in order to comply with the Federal 1976 Amendments to the Student Aid Programs under Title V of the Higher Education Act of 1965. These Standards of Progress require that students complete a prescribed number of hours each quarter based on the student's plan to enroll full or half-time as indicated on the aid application. These standards do not apply to the State of Ohio Instructional Grant, which requires a minimum of twelve hours enrollment per quarter.

**Organization of Study**

The present chapter includes sections devoted to a general introduction to the study under investigation, a statement of the problem, a rationale, hypotheses, population, limitations of the study, and definitions of terms.

Chapter II includes a review of the pertinent literature.

Chapter III discusses research methodology, including topics such as sample and selection techniques, instrumentation, and statistical treatment.

Chapter IV contains findings obtained from the analysis of the data and a discussion of these findings.
The concluding chapter will provide a summary of the results, present implications and guidelines for supportive service programs, and suggests possible directions for further research.
CHAPTER II
REVIEW OF RELATED LITERATURE

This chapter reviews the literature to date concerning the impact of early program intervention and academic load on the rate of attrition among minority students. The literature on program intervention can be divided into three areas: financial aid, academic supportive services, and personal/social counseling. Because of the nature of the subject, some analysis and commentary concerning the controversy over the purpose of education in the United States seems especially pertinent. Specifically this refers to the open-door versus an elitist policy and the attitudes of diverse interest groups - faculty, students, and the general public toward these programs.

Origin and Development of Compensatory Education Programs

Historically, junior and community colleges have often led the way in the initiation of compensatory programs. The very nature of such programs make them particularly amenable to programs developed to utilize the talents and abilities of disadvantaged students. For example, Forest
Park Community College and Cuyahoga Community College have programs which include educational counseling, skill development, referral services, and career training (Roueche, 1968). Black colleges in particular have a long history of compensatory education programs, implemented to alleviate some of the deficits of Black students caused by poor high school backgrounds. This was especially true of the Old South (Ballard, 1973). Related to this was the issue of just what type of higher education was suitable for Black students. This was debated at the turn of the century with Booker T. Washington on one end of the spectrum advocating vocational education and W.E.B. DuBois on the other promoting a system similar to "classical white" education, but adapted to the needs and history of Black students. As tends to be the cyclical fashion of so many educational issues, it is worth noting that a similar question concerning whether to emphasize basic skills or not for all students is currently being debated.

Early compensatory programs beginning at the turn of the century addressed themselves to poor study habits and attempted to teach students how to study, how to organize their time, and other such practical issues. In the 1930's and 40's remedial teaching was added to his list (Cross, 1976). All interested students had access to these resources. They were not only for disadvantaged minorities.
More recently, Cross (1971) has pointed out that the overwhelming majority of low achievers who utilize these programs are not minority students but rather the children of blue-collar workers. Furthermore, the use of such programs is not limited to students from lower income brackets; it permeates the entire student population. An increasingly large number of students are graduating from secondary schools without the required skills. And because they are entering universities and colleges in larger proportions than ever, students of all social classes, ethnic backgrounds, and levels of ability find that they need some type of assistance in order to complete advanced courses successfully. In fact, a national crisis seems to have arisen in American education. Indeed, many high school graduates appear to lack the basic skills necessary to survive in today's society (Roueche and Snow, 1977).

The racial strife of the late sixties and the subsequent social efforts resurrected the question surrounding those old issues of who should go to college and where. Simultaneously, the federal government began its large-scale intervention in the development and education of poor children.
Evaluation of Early Programs

Gordon (1970) states that in the previous five years more than ten billion dollars was invested in the education of poor and minority group members and at least seventy-five million dollars on evaluations and special research projects. He further indicates that one can distinguish three approaches or three levels of concern related to the evaluation of compensatory programs. These are reflected in the following kinds of questions which focus individually on the effectiveness of a specific program, its value vis-a-vis other programs and the cause of change: (a) Are developmental and learning processes accelerated following the application of a particular teaching method, curriculum, and so forth? (b) Is the particular intervention more effective than other known methods? (c) What is the nature of the relationship between specific intervention methods and specific associated changes in student behavior?

Responses to these questions are made more complex by other conditions that are associated with an intervention program. Many outcomes may not be the direct result of the treatment itself. For example, Rosenthal (1968) reported that a teacher's expectation can have an important influence on the performance of students. Shephard (1965) reported a similar experience in the early stages of his work in St. Louis. Where the teacher's expectation of the child's
performance was high, the child was likely to show high achievement and vice versa. Consequently, on any compensatory education program the teacher expectations may indeed, also influence student performance. A second condition, the Hawthorne Effect, may also influence outcome. Here, mere participation in experimentation or altered learning conditions may cause a temporary change in performance which is unrelated to the specific intervention method applied. In the evaluation of these compensatory education programs, such interferences have not been considered; hence, the true consequence of the various treatments cannot be accurately determined from these studies.

Hilton (1968) comments that programs to assist Black students have not been successful because administrators have not accurately assessed the feelings and attitudes of this segment of the minority population. He argues that administrators lack the insight necessary to fully understanding Black students. These students have dual perceptions of themselves; they are adolescent human beings with human problems. At the same time, they are Black people with problems peculiar to their race. Wheldon (1971) indicated that a few major assumptions customarily underlie the initiation and development of these programs. These assumptions include the recognition that current practices are racially biased.
Gordon (1967) notes by example, that disadvantaged students require more than remedial instruction. Changed attitudes, the acquisition of new patterns of learning and study skills, and recognition of the effects of family and home environment are all necessary if students are to achieve academic success. Whiting (1969) is in agreement with Gordon. He postulates that a broader program addressing both behavioral and personality difficulties in the college environment is necessary to alleviate the problems of disadvantaged students. There is perhaps some validity to these statements when we note that institutions which have compensatory programs report that the high-risk student who remains after the initial adjustment period performs comparable to other students (Egerton, 1968).

Continuing to Meet the Challenge

Still, what cannot be ignored is that far too many children from economically or ethnically disadvantaged groups are failing to master the traditional learning tasks of schooling. In recent years, many American institutions of higher education have endeavored to assist youth from educationally deprived backgrounds. Egerton (1969) states that over one-half of the colleges and universities in America have special programs for disadvantaged students. Thus, a first impression on the aforementioned data suggests
that higher education is meeting its commitment to the disadvantaged segments of our population.

Gordon and Wilkerson's (1966) research, Compensatory Education for the Disadvantaged, reports a comprehensive list of compensatory education programs developed for pre-school through college age students. They reported that:

Although the vast majority of institutions of higher education have not yet undertaken any compensatory programs or practices, a very substantial number of them have. And it appears that many more of them have accepted, at least in principle, the need for and the validity of special approaches to help socially disadvantaged young people to enter and succeed in college. Their reports are evidence of the developing trend.

Goddard (1969) states that since intercultural understanding is necessary for survival today, colleges and universities must reshape their policies to include Black students and to integrate them successfully into campus life. Possible innovations to achieve these goals should include extending the scope of counseling for students who come from families and neighborhoods which are less able to help them prepare for the social aspects of college life. Administrators should also plan carefully so that all campus resources are responsibly involved in the integration of Black students into the college community.

Although predominantly white colleges and universities vary in the manner in which they address the plight of minority students, they do share a common social concern as
they attempt to ameliorate years of neglect and deprivation regarding minorities (Moore, 1970). Interestingly, Whiting (1969) has noted that many minority students were capable of higher education long before institutions were ready to admit them. Furthermore, although a number of colleges and universities state their social obligations on paper, many fail to follow through with meaningful, effective programs. Janssen (1972) noted that the Eberle Study at Indiana University revealed that only one-quarter of the institutions in the study had initiated special financial aid programs and a mere one-half had developed academic intervention programs. Egerton (1969) notes that only 10.5 percent of 215 institutions surveyed had developed compensatory programs. He wrote:

A great many things are being tried by a relatively small number of institutions to mine the untapped potential of disadvantaged students, but only a handful of these institutions have marshalled all the resources available to them for this task. (p. 49)

Furthermore, meager progress has been made in determining which approaches are the most effective and which the least. Systematic evaluation is still lacking, but essential.

**Trends in Compensatory Education Efforts**

Simon's 1970 study indicated a number of trends in compensatory education programs:
(1) Programs are found predominantly in four year institutions.

(2) There is a slight trend toward an increase in special educational opportunity programs.

(3) Program implementation concentrates on freshman and sophomore enrollment.

(4) Programs follow academic lines with supplemental counseling services.

(5) Student selection is based on regular admission criteria plus personal interviews.

(6) Student and institutional reactions are positive.

(7) The impact of the programs is not sustained in the absence of financial aid to support students.

(8) There is uncertainty about whether activities should occur in an articulated program or in a loosely organized collection of regular curriculum offerings.

As of 1967, a number of programs have been developed for funding and recruitment of programs for the "disadvantaged." The CAP Program of the Carnegie Corporation, Project Opportunity, and the Freshman Foundation Program at The Ohio State University are examples of such a recruitment program. In Maryland, Morgan State College developed a noteworthy remedial program with a three-track program offered for freshmen only. Students are placed in a particular track, depending upon their high school record and standardized test scores (Froe, 1964). The SEEK Project of the City University of New York was implemented to improve student skills in an effort to reduce attrition. This program included remedial courses, study skill instruction,
personal counseling, academic tutoring, and expanded time in which to complete a degree (Menzel, 1969). Research which studies students' attitudes toward this program reveals that the students supported it and felt it increased their motivation (Baehr, 1969). However, it sometimes failed to increase academic success.

Until recently compensatory or remedial education provided primarily for academic deficiencies, with less emphasis on personal/social counseling. With the rapid rise in the cost of higher education and with more minority as well as other students from lower social-economic backgrounds entering college, financial aid has become a significant and vital part of compensatory education programs. In fact, a number of researchers have indicated that various forms of financial aid are essential for the success for special programs (Trent, 1970 and Williams, 1969). Student withdrawal was all too often linked to family financial adversity.

Thus, at present, developmental education programs usually possess three components: (a) academic advisement and tutoring, including special remedial courses in such areas as math, reading, and study skills; (b) personal and social counseling; and (c) financial aid programs - combining federal, state, and school resources. Additionally, many institutions possess special recruitment programs,
especially aimed at minority students. It should be clear that compensatory programs of such breadth must incur a great deal of expense. In 1976, The Ohio State University's remedial freshman English courses alone operated at a cost of $500,000 (Roueche and Snow, 1977). The existing financial crunch in higher education has forced many institutions to review the efficacy of many of these programs at the same time that greater numbers of students with needs identical to those of the past are entering. These concerns along with other related issues which Black educators have presented, have initiated a number of reviews and re-evaluations of the effectiveness of such efforts.

Froman (1971) evaluated the effect of peer tutoring and individual as well as group counseling with and without reinforcement (praise) on the academic achievement of 104 high risk (disadvantaged, non-traditional) college students at the University of Tennessee. His study revealed that those students who received peer tutoring and reinforced individual counseling earned higher weekly quiz grades than risk students in other treatment groups. However, they failed to obtain significantly higher final grades than members of other treatment groups. The dropout rate for students receiving counseling was one-third the rate for non-counseled risk students.

Peer counseling also constitutes an important portion of the personal/social component of many compensatory
education programs. Surveys by Hardee and Powell (1956) and Brown and Zunker (1966) revealed that peer counseling is widely used in colleges and universities. A comparison of the two studies indicates that there is an increasing concern for the selection and training of student counselors. However, both studies found that institutions were employing haphazard procedures in the selection, training and the supervision of their student counselors.

Joyner (1972) utilized the Nelson-Denney Reading Test to measure the reading level of students entering the same program. His findings indicated that students seeking supportive services were in need of both academic assistance and counseling. Franklin (1973) also examined the relationship of planned supportive services and grade point averages for minority students. He noted that achievement in social studies and the sciences is dependent upon reading and comprehension and that remedial English was helpful in improving performance in the required basic English course.

Tutoring serves two purposes: it helps the recipient academically and provides the tutor with employment. In addition, a tutor from a disadvantaged background can serve as an excellent role model for another student.

Personal counseling serves a variety of purposes in addition to narrowing the gap between the disadvantaged student and the educational institution. It aids students
in the development of both personal and career goals, it implements the search for personal identity, and it can help to alleviate many of the anxieties inherent in being in an unfamiliar environment.

More recently Joblonsky (1971) found that a small teacher-student ratio contributed greatly to program success. He also noted that special programs tend to improve self-concepts, parental involvement, interpersonal relationships, and job placement.

In spite of all these attempts to help disadvantaged students compete in traditional colleges and universities, much more needs to be done before these students can successfully meet the challenges. Preventive education through improved primary and secondary programs, earlier intervention, and well-planned curricular innovations would do much to alleviate the problem. Also cooperation between public and private institutions would save both time and money and allow the institutions to share research information on learner characteristics and needs. Such cooperation would maximize efforts.

Stembridge (1968) recommends a national program which would coordinate efforts in both two and four year colleges. He further suggests that such a program should include plans for earlier intervention and pre-college programs. Perhaps such a program could be a model for the latter development.
of cooperative programs that would also include secondary schools.

In pointing out the responsibility of institutions of higher education to meet the needs of all sectors of our society, Johnson (1974) also offered some specific suggestions to improve compensatory education programs as one means to implement this goal. These suggestions include the initiation of developmental programs in all institutions, intensified efforts by administrators to create diverse learning atmospheres, experimentation with curricular changes, extension of the period for graduation, new grading procedures and methods, and additional supportive services.

Recent Federal Influence on Existing Programs

Recent federal legislation has made the financial aid portion of any program less flexible and more difficult to administer. In October 1976, the Congress of the United States passed the Higher Education Amendments of 1976 (Public Law 94-482) in order to permit students to continue to receive financial aid. One of the provisions of this law mandated that a student must maintain "satisfactory progress in the course of study he is pursuing, according to the standards and practices of the institution at which the student is in attendance." In the April 18, 1977, Federal
Register the Department of Health, Education and Welfare indicated that any institution which lacked such standards would be precluded from making any financial aid payments to students under Title IV until it adopted such standards. A corresponding issue developed regarding whether or not it was necessary for such institution to adopt separate guidelines concerning "reasonable academic progress" for financial aid students. This was particularly significant at many public colleges and universities where academic standards remained flexible. Furthermore, some compensatory education programs included provisions which allowed students enrolled in the program to progress at a rate slower than that permitted for other students. Obviously, under these federal guidelines such students would not be eligible for financial aid. Institutions have been varied in their means of fulfilling the law. Nonetheless, the "standardized reasonable progress" requirement will affect many students and doubtlessly prevent some from completing their education.

Alexander Astin (1975) has studied the use of financial aid to enhance student persistence in college. He found that students rely on parental aid more than any other single source. However, Blacks are considerably less likely to do so than whites (65 percent of white women do so, 47 percent of white men, and 33 percent combined of Blacks).
His research revealed that relying on parental support has a small but statistically significant positive effect on persistence in college (the exception is among those attending private universities, especially if parents contribute only a minor portion of the cost). He also found that only approximately one-third of white students received scholarships and grants as compared with 54 percent of Black students. Scholarships give recipients only a slight advantage over the non-recipient in persistence. The effects vary somewhat for the two sexes and for different income groups. However, it is important to realize that without such aid, many students would not be able to enter college in the first place and further that the students most frequently affected are likely to be Black.

Research on the effect of loans has produced varied, even contradictory, results (Astin, 1975). Most of the studies were completed three or more years ago. The increase in student use of loans has been dramatic in those few years. New research needs to be implemented to ascertain any possible effects.

Hall (1971) examined the financial aid program provided for students entering the Developmental Education Program at The Ohio State University. His findings revealed that the security of financial assistance is an important factor in student motivation and academic success.
Other Variables Affecting the Performance of Students Supported by Compensatory Education Programs

In addition to the wide variety of administrative and institutional factors likely to influence the success of compensatory programs, it appears that several other personal variables can be isolated for their effects on such areas as student persistence, dropout rate and achievement. Among these factors are such variables as marital status, race, sex, age, employment, on- or off-campus residency, and geographic areas of the state from which the students were recruited. The work of Astin (1975) is perhaps the most relevant and deserves presentation here.

MARITAL STATUS - Astin (1975) found that married students persist better if the spouse provides major support. Being married at the time of college entrance increases a woman's chance of dropping out by 11 percent, but decreases a man's by 80 percent.

RACE AND SEX - Lynch (1972) conducted a study to determine relationships between student characteristics of race, socio-economic background and sex and use of university academic counseling services. The respondents in this study were undergraduate students enrolled at Indiana University and Purdue University at Indianapolis who had completed at least twenty-seven credit hours. This study revealed that university students' use of academic counseling facilities and their perception of the benefits
derived from these services are not related to the student's race, sex, or socio-economic background. Instead, they are related to the subject area defined by the student as his/her major.

As might be expected, the students' GRA has an effect on persistence. Astin (1975) discovered that placing female students on academic probation produces positive effects whereas the reverse is true for males. Participation in Honors Programs decrease the dropout rate for high achievers.

Since ultimately the purpose of compensatory education is to prevent students from dropping out, Astin's research on non-financial factors which contribute to a lack of persistence seem pertinent. If educators can discover what makes students unlikely to succeed, they can develop more appropriate intervention programs. Astin's empirical data revealed that those students most likely to fail have previous poor academic records, low aspirations, poor study habits, uneducated parents, small town backgrounds, are older than most freshmen, have Protestant parents, possess no religious preferences, and smoke cigarettes. The last item is particularly significant for Black students. Having either Jewish or Oriental parents makes the student much less likely to dropout.
Overall dropout rates by ethnic groups are as follows:

<table>
<thead>
<tr>
<th>RACE</th>
<th>PERCENT OF DROPOUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientals</td>
<td>19</td>
</tr>
<tr>
<td>Whites</td>
<td>24</td>
</tr>
<tr>
<td>Blacks</td>
<td>29</td>
</tr>
<tr>
<td>American Indians</td>
<td>31</td>
</tr>
<tr>
<td>Chicanos</td>
<td>31</td>
</tr>
</tbody>
</table>

Whites and Orientals clearly that the lowest dropout rates, whereas Chicanos and American Indians have the highest rate. The data suggest that the high rate for Chicanos is largely attributable to their high concentration in two-year colleges.

**AGE** - Astin found that age also affected the propensity to dropout. Older students, especially women, were more likely to dropout than students of traditional college age (17-19).

**EMPLOYMENT** - Participation in federal work-study and other employment, improves persistence. Data by income level reveals that the greatest positive effects are for students from the middle income ($10,000 to $20,000) level. On-campus employment improves persistence more than off-campus (off-campus results were contradictory). Full-time employment affects persistence negatively. Federal work-study is limited to part-time employment except during vacation periods (Astin, 1975). However, for those who are
married when they enter college, being employed at that
time, increases the chances of dropping out. Some racial
differences exist also. Whereas on-campus employment for
whites decreases dropout rates by 4 percent for Blacks,
at white colleges the decrease is 13 percent. No signifi­
cant relationship exist for Blacks at Black colleges. The
job held longest produces the most pronounced effect. An
off-campus job that relates closely to the student's career
goals affects the student's chances of staying in school
negatively.

ON- OR OFF-CAMPUS RESIDENCY - Obviously, many of these
factors which are likely to improve a student's chances of
successful college experience lie beyond the control of any
type of institutional program. However, all colleges and
universities are capable of developing programs to improve
study habits and alter motivation should they desire to
do so. Indeed, behavior modification programs are available
at many institutions to assist students should they wish to
cease smoking. In addition, colleges and universities can
implement policies to encourage students to live in
particular environments, both on- and off-campus. Astin
found that dormitory living increased a freshman's chance
of remaining in school by about 10 percent. This is true
of both sexes and Blacks and whites. However, while simply
living away from home increased a male's chances of remaining
in school, private residency outside the parental home decreased a female's chances. Participation in extracurricular activities including athletics, fraternities and sororities enhanced a student's persistence. Both these items relate to the personal/social component of compensatory education programs and should be considered in their development and planning.

**GEOGRAPHIC AREA (HOMETOWN)** - The type of income locality also affects dropout rates. Students who grew up in small towns were more likely to dropout. Men who grew up in large cities or in suburbs also show a greater likelihood of dropping out whereas women from these two environments show greater persistence.

It is an examination of all these variables which is the primary focus of this dissertation.
CHAPTER III

METHODOLOGY

This chapter surveys the methodology employed to investigate the three areas under study. The methods are discussed under three major sectors: (1) the sample; (2) the instrumentation and data collection procedures; and (3) the data analysis procedures.

Sample

The target population includes those students who were recruited under the 1977 Ohio State University Freshman Foundation Program and who returned for the 1978 autumn quarter. The Freshman Foundation Program includes five minority groups: Native American Indians, Asian Americans, Black Americans, Hispanics Americans, and Appalachian Whites. In order to be eligible for this program, students must submit an application for admission to The Ohio State University, must be an Ohio resident, must submit Ohio State University scholarship and financial aids applications, must apply for an Ohio Instructional Grant and a Basic Educational Opportunity Grant, and must have maintained a minimum 2.00 average in their
high school curriculum. The Office of Minority Affairs actively recruits for the Freshman Foundation Program in high schools throughout Ohio. Freshman Foundation students receive three-fourths of their financial assistance in grants or scholarships and one-fourth in loan or work-study.

The Office of Developmental Education provides a variety of supportive services to such students. They include academic advisement, academic and personal counseling, and tutorial and career planning assistance. Counselors and advisors routinely assist these students with class scheduling as well as adding and dropping courses.

In the Autumn of 1977, 700 students were admitted into the program, 530 of whom matriculated. Some applicants are routinely admitted because they meet the basic criteria for eligibility. However, those students who fail to meet the academic requirement are individually reviewed and may be admitted after additional information is obtained from high school counselors or teachers.

The general demographic characteristics of the research participants are presented below. Appendix A presented a more detailed description of the sample in order to show the number of respondents in each of the cells.

**Marital Status** - The total sample consisted of 219 students, 218 subjects responded to this question (one did
not respond); of the respondents, 15 were married and 203 were single or 6.9% and 93.1% respectively.

Race - There were two Native American Indians or .9%, five Asian Americans or 2.3%, 187 Blacks or 85.8%, 9 Hispanics or 4.1%, and 15 Appalachian Whites or 6.9%.

Sex - There were 80 males and 138 females or 36.7% and 63.3% respectively who responded to this item.

Age - The ages of the research participants were 143 or 65.6% between the ages of 16-19, 56 or 25.6% between the ages of 20-23, 20 or 8.7% between the ages of 24 and over. (One student did not respond to this question.)

Employment - Of the total sample of 219 students of which all subjects responded to this item except one; 114 were not employed or 52.3%, 24 worked 1-10 hours per week or 11.0%, 56 worked 11-20 hours per week or 25.7%, and 24 worked 21-30 hours per week or 11.0%.

Residency - Of 219 participants, 100 lived on-campus or 45.7% and 119 lived off-campus or 54.3%.

Region - Of the total sample of 219 students -- 68 or 31.1% were from the Northeast, 16 or 7.3% were from the Southeast, 117 or 53.4% were from the Southwest, and 18 or 8.2% were from the Northwest.

Instrumentation and Data Collection

Prior to beginning this study, the researcher was advised to secure the necessary "permission to conduct
privileged research from the Office of Minority Affairs at The Ohio State University. The required written permission was obtained from the Vice Provost for Minority Affairs. It also authorized use of necessary resources of Minority Affairs and Financial Aid information concerning minority students recruited for the Freshman Foundation Program. Similar requirement permission was also obtained from the Human Subjects Review Committee at The Ohio State University (see Appendix B).

Procedurally, this study utilized a mailed survey questionnaire to obtain demographic data and data regarding the number of hours registered for and the number of hours completed during the freshman year. This survey was designed to ascertain the extent and manner in which minority students use supportive services. An additional purpose was to determine if the impact of supportive service on a student's academic success, by examining the effect, if any, of marital status, race, sex, age, employment status, place of residency, and geographic area of state from which they were recruited on academic success for users of specific types of services. (See Appendix C - revised questionnaire.) Supportive services are classified as follows: (a) financial aid; (b) academic support; (c) personal/social counseling. Students who utilized any single or multiple component of these supportive services were considered a
user of supportive service. They were told that the pur-
pose of the survey was to study ways in which the university
could improve its services to students in its effort to help
them achieve their academic goals. The names of partici-
pants in the study were obtained from the Director of
Financial Aids for Minority Affairs.

The questionnaire was mailed to all students who
initially enrolled in the Autumn of 1977 under the Freshman
Foundation Program and continued to be enrolled in the
Autumn of 1978. There were 315 students in the sample.
A self-addressed, stamped envelope was enclosed to
facilitate return of the questionnaire. A coding system
was used to identify nonrespondents to the first mail-out.
Two weeks after the initial mailing, a follow-up question-
aire was mailed to those who had not responded. Two weeks
after the second mail-out, telephone calls were made to
continued nonrespondents. The researcher requested their
reasons for failing to respond. Of the 117 original non-
respondents who responded to a second request, 30 were
reached by phone, 17 of whom then completed the questionnaire.
These 17 claimed that they simply forgot to fill it out. The
remaining 13 refused to respond for diverse reasons, in-
cluding not viewing themselves as a minority, and not
wanting to be part of the Freshman Foundation Program per se,
but desiring the dollar. In all, 71% of the original sample
returned the questionnaire. This response rate approximates the average rate (78%) for studies where two follow-up attempts are made (Herberlien and Baumgartner, 1978).

For those students who utilized the supportive services, the following demographic data were requested:

- a) marital status
- b) race
- c) sex
- d) age
- e) employment
- f) residency
- g) geographical location (hometown)

Additionally, the following data were requested, (a) number of hours registered for and (b) number of hours completed during the freshman year.

To cross validate the data, this author checked random items on the responses to the questionnaires against The Ohio State University records of the respondents.

**Data Analyses Procedures**

Following data collection, student responses were key-punched and stored on computer cards at The Ohio State University computing facility. The data sets were scanned for missing observations and several descriptive statistics were computed. These statistics included the mean, standard deviation, and relative proportion of cases within each response category for each of the questions concerning financial aid, academic support, and personal and social
counseling, as well as for the demographic information. The percent of hours successfully completed by each student was calculated from the information obtained concerning the number of hours for which they enrolled and the number of hours which they successfully completed. Descriptive statistics including the mean, standard deviation and range were computed for the variables, number of hours registered and percentage of registered hours successfully completed.

Upon inspection of the relative frequencies of respondents occurring in the different categories within the demographic variables, it was discovered that some categories contained an insufficient number of responses for comparative purposes. Certain categories of age, employment, and region were combined to enable the analyses to proceed. Upon inspection of the relative frequency of students in the four (arbitrarily assigned) age categories, it was observed that a more equitable division of the students into age groups could be had by combining categories so that students were classified as either 16-19 years old or 20 years old or over. Likewise, the relative frequency of students in the employment categories were unevenly distributed, and it was decided to combine the categories of 21-30 hours and over 30 hours into one called over 20 hours. Also, the region of origin variable was created by dividing the state into eight equally sized regions ignoring population diversity. Consequently, some
of the rural regions had inadequate numbers of respondents. To alleviate this problem, the state was finally divided into four regions: Northwest, Northeast, Southwest, and Southeast.

In order to test the seven hypotheses in Chapter One, the differences between demographic variable groups on the dependent variable percentage of hours completed was analyzed first. To do this t-tests and one-way analysis of variance were performed. T-tests were performed on demographic variables that had two response categories and analysis of variance were performed on demographic variables that had more than two. Next, the differences between the demographic variable groups on percentage of hours completed was examined separately for three categories of students: those who used various types of financial aid, those who used various types of academic supportive services, and those who used various types of personal/social supportive services. These types of services were further subdivided into the following categories and the relationship of each to the number of hours completed defined by each of demographic variables was examined.

1) Financial Aid were:

a) College Work-Study Program (CWSP)
b) Basic Educational Opportunity Grant (BEOG)
c) Ohio Instructional Grant (OIG)
d) Scholarships (Academic and General Grant)
e) National Direct Student Loan (NDSL)
f) Guaranteed Bank Loan (GBL)
g) None of the above
2) **Academic Counseling:**
   a) Academic Advisement
   b) Tutoring
   c) Reading and Study Skill Center
   d) English Workshop (100.01 and 100.02)
   e) Math Workshop 100
   f) None of the Above

3) **Personal and Social Counseling:**
   a) Peer Counseling
   b) Resident Hall Advisor
   c) Counseling Center
   d) None of the Above

These latter analyses were performed because it was hypothesized that the effects of the demographic variables might differ for students who were receiving different forms of supportive services.
CHAPTER IV
ANALYSIS AND RESULTS

Two methods were utilized to analyze the data. They were t-tests and one-way analyses of variance. T-tests are appropriate for examining differences on continuous dependent variables between two sample groups. This approach was used to compare mean differences in the proportion of hours the student initially registered for and actually completed by marital status, sex, age, and place of residence. For the other independent variables used which involved more than two groups, a one-way analyses of variance was used to determine the difference between race, number of hours of employment, and geographical area of state from which students were recruited in relation to the proportion of hours completed. Scheffe's post hoc analysis was used to determine the source of differences where more than two categories were involved.

The following tables present the data analysis for each of the hypotheses. The .05 probability level was used as criteria for statistical significance.

Test of Ho: There will be no significant difference by marital status in the percentage of attempted hours
successfully completed during the academic year.

Marital status showed a significant difference in the percentage of hours completed for those students using the general category of financial aid and students receiving National Direct Student Loans. Married students completed fewer hours than single students. In all other categories of supportive services, there was no significant difference in percentage hours completed between marital status groups. The results obtained for each of these categories is presented in Table 4-1.

Test of $H_0^2$: There will be no significant difference by sex in the percentage of attempted hours successfully completed during the academic year.

The only significant difference between sex groups was found for students using the services of resident advisors. Here females completed a lower percentage of hours than males. The result of these t-tests are presented in Table 4-2.

Test of $H_0^3$: There will be no significant difference by age in the percentage of attempted hours successfully completed during the academic year.

The results of these tests are presented in Table 4-3. A significant difference between age groups receiving National Direct Student Loans was found. Students 20 years and over completed a smaller percentage of hours than students who were 16-19 years of age.
<table>
<thead>
<tr>
<th>Category of Supportive Service Used</th>
<th>Marital Status</th>
<th>Significance Level (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Married</td>
<td>Single</td>
</tr>
<tr>
<td>(Mean Percentage of Hours Completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>65.78</td>
<td>84.81</td>
</tr>
<tr>
<td>Basic Education Opportunity Grant</td>
<td>79.17</td>
<td>82.76</td>
</tr>
<tr>
<td>Ohio Instruction Grant</td>
<td>58.12</td>
<td>84.41</td>
</tr>
<tr>
<td>Scholarships</td>
<td>72.24</td>
<td>86.89</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>51.17</td>
<td>85.75</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>**</td>
<td>91.87</td>
</tr>
<tr>
<td>PERSONAL/SOCIAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUNSELING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>66.32</td>
<td>84.59</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>100.00</td>
<td>80.62</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>75.00</td>
<td>84.99</td>
</tr>
<tr>
<td></td>
<td>64.14</td>
<td>80.21</td>
</tr>
<tr>
<td>ACADEMIC SUPPORT</td>
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<td></td>
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<tr>
<td>Academic Advisement</td>
<td>68.06</td>
<td>84.26</td>
</tr>
<tr>
<td>Tutor</td>
<td>61.31</td>
<td>83.85</td>
</tr>
<tr>
<td>Tutor</td>
<td>66.03</td>
<td>82.54</td>
</tr>
<tr>
<td>Skill Center</td>
<td>65.81</td>
<td>80.51</td>
</tr>
<tr>
<td>English Workshop</td>
<td>74.87</td>
<td>82.22</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>78.86</td>
<td>82.36</td>
</tr>
</tbody>
</table>

*p < .05

** No students in this group used this service.
<table>
<thead>
<tr>
<th>Category of Supportive Service Used</th>
<th>Sex</th>
<th>Significance Level (p)</th>
<th>(Mean Percentage of Hours Completed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td>86.36</td>
<td>81.15</td>
<td>.104</td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>85.48</td>
<td>81.78</td>
<td>.586</td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>84.75</td>
<td>81.51</td>
<td>.432</td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>88.14</td>
<td>80.32</td>
<td>.107</td>
</tr>
<tr>
<td>Scholarships</td>
<td>88.76</td>
<td>83.36</td>
<td>.330</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>88.54</td>
<td>82.14</td>
<td>.247</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>92.76</td>
<td>90.37</td>
<td>.695</td>
</tr>
<tr>
<td>PERSONAL/SOCIAL COUNSELING</td>
<td>89.07</td>
<td>80.42</td>
<td>.066</td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>85.50</td>
<td>80.00</td>
<td>.380</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>91.95</td>
<td>80.80</td>
<td>.047*</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>85.52</td>
<td>74.03</td>
<td>.191</td>
</tr>
<tr>
<td>ACADEMIC SUPPORT</td>
<td>85.62</td>
<td>81.50</td>
<td>.172</td>
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<tr>
<td>Academic Advisement</td>
<td>84.83</td>
<td>81.10</td>
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<tr>
<td>Tutor</td>
<td>81.36</td>
<td>80.72</td>
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<tr>
<td>Skill Center</td>
<td>82.50</td>
<td>77.83</td>
<td>.482</td>
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<tr>
<td>English Workshop</td>
<td>84.32</td>
<td>78.90</td>
<td>.254</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>88.18</td>
<td>78.27</td>
<td>.121</td>
</tr>
</tbody>
</table>

*p < .05
TABLE 4-3

T-TEST OF MEAN PERCENTAGE OF HOURS COMPLETED BY AGE FOR SUPPORTIVE SERVICES

<table>
<thead>
<tr>
<th>Category of Supportive Service Used</th>
<th>Sex</th>
<th></th>
<th></th>
<th>Significance Level (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16-19 years</td>
<td>20 &amp; over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>84.76</td>
<td>80.44</td>
<td>.221</td>
<td></td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>86.05</td>
<td>78.15</td>
<td>.208</td>
<td></td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>83.43</td>
<td>81.15</td>
<td>.615</td>
<td></td>
</tr>
<tr>
<td>Scholarships</td>
<td>83.87</td>
<td>80.89</td>
<td>.549</td>
<td></td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>85.35</td>
<td>87.07</td>
<td>.777</td>
<td></td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>89.06</td>
<td>77.55</td>
<td>.050*</td>
<td></td>
</tr>
<tr>
<td>PERSONAL/SOCIAL COUNSELING</td>
<td>84.93</td>
<td>80.96</td>
<td>.450</td>
<td></td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>83.43</td>
<td>81.15</td>
<td>.549</td>
<td></td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>85.67</td>
<td>82.95</td>
<td>.688</td>
<td></td>
</tr>
<tr>
<td>Counseling Center</td>
<td>79.34</td>
<td>76.55</td>
<td>.742</td>
<td></td>
</tr>
<tr>
<td>ACADEMIC SUPPORT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Advisement</td>
<td>84.69</td>
<td>80.09</td>
<td>.148</td>
<td></td>
</tr>
<tr>
<td>Tutor</td>
<td>83.34</td>
<td>80.80</td>
<td>.478</td>
<td></td>
</tr>
<tr>
<td>Skill Center</td>
<td>84.58</td>
<td>75.19</td>
<td>.062</td>
<td></td>
</tr>
<tr>
<td>English Workshop</td>
<td>83.23</td>
<td>74.22</td>
<td>.172</td>
<td></td>
</tr>
<tr>
<td>Math Workshop</td>
<td>82.63</td>
<td>78.23</td>
<td>.407</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
Test of $H_{04}$: There will be no significant difference by residency in the percentage of attempted hours successfully completed during the academic year.

Here the results were significant for the general category of financial aid as a whole. However, significant differences between residency groups were found only for students using Ohio Instructional Grants and for students using National Direct Student Loans. Students living off-campus and utilizing these support services completed a lower percentage of hours. The results were also significant for the general category of academic support. Within this category significant differences between residency groups were found for students using academic advisement. Students who used this service who lived off-campus completed fewer hours. There were no significant differences between groups when examining services. The results are summarized in Table 4-4.

Test of $H_{05}$: There will be no significant difference by race in the percentage of attempted hours successfully completed during the academic year.

For all types of financial aid as a general category there were significant differences related to race groups. Native Americans were significantly different from Blacks. Also there were significant differences found in the use of two grant categories: Basic Educational Opportunity Grants (BEOG) and Ohio Instructional Grants (OIG). Among
persons using the Basic Educational Opportunity Grants, Native Americans were significantly different than Asian Americans and Hispanic Americans. Native Americans were significantly different than the other four race groups in the use of the Ohio Instructional Grants.

There were significant differences for race groups using the general category of academic support specifically the area of academic advisement. Native Americans showed lowest mean percentage of hours completed, Blacks had the next lowest, Appalachian Whites were intermediate, Asians were higher than the aforementioned three groups, and Hispanic Americans had the highest percentage of hours completed. The performance of Native Americans was significantly different from that of Hispanics on both academic support specifically the area of academic advisement.

The results are summarized in Table 4-5.

Test of $H_0$: There will be no significant difference by employment status in the percentage of attempted hours successfully completed during the academic year.

There were no significant differences between employment groups on the percentage of hours completed for students using financial or other supportive services. The results are summarized in Table 4-6.
### TABLE 4-4

**T-TEST OF MEAN PERCENTAGE OF HOURS COMPLETED BY RESIDENCE FOR SUPPORTIVE SERVICES**

<table>
<thead>
<tr>
<th>Category of Supportive Service Used</th>
<th>Place of Residence</th>
<th>Significance Level (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On-Campus</td>
<td>Off-Campus</td>
</tr>
<tr>
<td>(Mean Percentage of Hours Completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FINANCIAL AID</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>86.52</td>
<td>80.23</td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>86.01</td>
<td>80.40</td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>85.63</td>
<td>80.66</td>
</tr>
<tr>
<td>Scholarships</td>
<td>88.16</td>
<td>79.00</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>87.87</td>
<td>83.09</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>89.39</td>
<td>78.96</td>
</tr>
<tr>
<td><strong>PERSONAL/SOCIAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counseling</td>
<td>86.48</td>
<td>77.37</td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>83.48</td>
<td>78.14</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>88.28</td>
<td>68.51</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>81.73</td>
<td>76.12</td>
</tr>
<tr>
<td><strong>ACADEMIC SUPPORT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Advisement</td>
<td>86.50</td>
<td>80.03</td>
</tr>
<tr>
<td>Tutor</td>
<td>86.65</td>
<td>79.02</td>
</tr>
<tr>
<td>Skill Center</td>
<td>85.00</td>
<td>77.88</td>
</tr>
<tr>
<td>English Workshop</td>
<td>82.79</td>
<td>76.99</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>80.82</td>
<td>82.14</td>
</tr>
</tbody>
</table>

* * p < .05
**TABLE 4-5**

**ONE-WAY ANALYSIS OF VARIANCE OF PERCENTAGE OF HOURS COMPLETED BY RACE FOR SUPPORTIVE SERVICES**

<table>
<thead>
<tr>
<th>Category of Supportive Service</th>
<th>Native American</th>
<th>Asian American</th>
<th>Black American</th>
<th>Hispanic American</th>
<th>Appalachian White</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINANCIAL AID</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.384</td>
<td>.0002*</td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>** 0.00**</td>
<td>81.23</td>
<td>95.56</td>
<td>93.33</td>
<td></td>
<td>0.799</td>
<td>.5003</td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>40.32</td>
<td>82.19</td>
<td>98.70</td>
<td>81.09</td>
<td></td>
<td>3.553</td>
<td>.0092*</td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>0.0</td>
<td>94.07</td>
<td>81.95</td>
<td>100.00</td>
<td>93.75</td>
<td>5.693</td>
<td>.0004*</td>
</tr>
<tr>
<td>Scholarships</td>
<td>** 85.15</td>
<td>100.00</td>
<td>88.36</td>
<td></td>
<td></td>
<td>0.379</td>
<td>.6869</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>** 82.65</td>
<td>100.00</td>
<td>94.87</td>
<td></td>
<td></td>
<td>1.586</td>
<td>.2129</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>** 82.65</td>
<td>100.00</td>
<td>94.87</td>
<td></td>
<td></td>
<td>1.586</td>
<td>.2129</td>
</tr>
<tr>
<td><strong>PERSONAL/SOCIAL COUNSELING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.064</td>
<td>.3692</td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>** 86.05</td>
<td>81.96</td>
<td>96.03</td>
<td>92.02</td>
<td></td>
<td>0.065</td>
<td>.8012</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>** 82.61</td>
<td>97.83</td>
<td>95.45</td>
<td></td>
<td></td>
<td>1.309</td>
<td>.2808</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>** 86.05</td>
<td>75.72</td>
<td>93.38</td>
<td>78.26</td>
<td></td>
<td>0.579</td>
<td>.6340</td>
</tr>
<tr>
<td><strong>ACADEMIC SUPPORT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.045</td>
<td>.0036*</td>
</tr>
<tr>
<td>Academic Advisement</td>
<td>40.32</td>
<td>91.11</td>
<td>81.91</td>
<td>95.45</td>
<td>90.56</td>
<td>3.397</td>
<td>.0108*</td>
</tr>
<tr>
<td>Tutor</td>
<td>** 91.11</td>
<td>80.13</td>
<td>97.83</td>
<td>**</td>
<td></td>
<td>1.257</td>
<td>.2894</td>
</tr>
<tr>
<td>Skill Center</td>
<td>** 91.11</td>
<td>78.61</td>
<td>86.11</td>
<td>**</td>
<td></td>
<td>0.381</td>
<td>.6851</td>
</tr>
<tr>
<td>English Workshop</td>
<td>** 82.22</td>
<td>80.69</td>
<td>100.00</td>
<td>89.57</td>
<td></td>
<td>0.550</td>
<td>.6503</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>** 82.22</td>
<td>80.69</td>
<td>100.00</td>
<td>89.57</td>
<td></td>
<td>0.928</td>
<td>.3427</td>
</tr>
</tbody>
</table>

* p < .05

** No students in this group used the service.
### TABLE 4-6

**ONE-WAY ANALYSIS OF VARIANCE OF PERCENTAGE OF HOURS COMPLETED BY EMPLOYMENT FOR SUPPORTIVE SERVICES**

<table>
<thead>
<tr>
<th>Category of Supportive Service</th>
<th>Number of Hours Employed Each Week</th>
<th>(Mean Percentage of Hours Completed)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Employed</td>
<td>1-10</td>
<td>11-20</td>
<td>Over 20</td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td>83.77</td>
<td>79.26</td>
<td>84.53</td>
<td>80.65</td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>85.01</td>
<td>69.07</td>
<td>87.14</td>
<td>90.70</td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>84.43</td>
<td>73.70</td>
<td>83.91</td>
<td>83.06</td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>84.50</td>
<td>70.37</td>
<td>83.43</td>
<td>89.28</td>
</tr>
<tr>
<td>Scholarships</td>
<td>83.27</td>
<td>88.05</td>
<td>91.16</td>
<td>84.73</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>87.44</td>
<td>66.55</td>
<td>85.51</td>
<td>78.85</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>94.29</td>
<td>88.89</td>
<td>90.00</td>
<td>88.89</td>
</tr>
<tr>
<td>PERSONAL/SOCIAL COUNSELING</td>
<td>83.74</td>
<td>75.70</td>
<td>86.59</td>
<td>84.67</td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>90.01</td>
<td>68.61</td>
<td>82.37</td>
<td>86.23</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>88.15</td>
<td>71.90</td>
<td>87.38</td>
<td>73.89</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>75.95</td>
<td>77.78</td>
<td>78.74</td>
<td>100.00</td>
</tr>
<tr>
<td>ACADEMIC SUPPORT</td>
<td>84.21</td>
<td>77.63</td>
<td>83.69</td>
<td>81.47</td>
</tr>
<tr>
<td>Academic Advisement</td>
<td>83.41</td>
<td>75.50</td>
<td>84.09</td>
<td>81.19</td>
</tr>
<tr>
<td>Tutor</td>
<td>80.75</td>
<td>76.85</td>
<td>81.27</td>
<td>85.99</td>
</tr>
<tr>
<td>Skill Center</td>
<td>78.71</td>
<td>74.61</td>
<td>83.12</td>
<td>76.30</td>
</tr>
<tr>
<td>English Workshop</td>
<td>85.95</td>
<td>77.41</td>
<td>77.17</td>
<td>75.40</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>87.70</td>
<td>75.93</td>
<td>81.72</td>
<td>78.83</td>
</tr>
</tbody>
</table>

* p < .05
Test of Ho7: There will be no significant difference by geographic region in the percentage of attempted hours successfully completed during the academic year.

There were significant differences between geographical regions from which students were recruited for financial aid as a general category. But the Sheffe's post hoc analysis did not show where these differences existed among the four regions. There was also a difference between region groups who used the general category of academic support. Students recruited from the Northeast were significantly different from students recruited from the Northwest. There were significant differences for those students who used the specific area of academic advisement. Again, the Scheffe's post hoc analysis did not show where these differences existed among the four regions. For those services where significant differences were detected, students recruited from the Northeast section of Ohio completed fewer hours than students recruited from the Southeast and the Southwest. Students from the Northwest had the highest percentage of hours completed. The results are summarized in Table 4-7.
### TABLE 4-7

**ONE-WAY ANALYSIS OF VARIANCE OF PERCENTAGE OF HOURS COMPLETED BY GEOGRAPHIC REGION FOR SUPPORTIVE SERVICES**

<table>
<thead>
<tr>
<th>Category of Supportive Service</th>
<th>Geographic Region of the State From Which Student Was Recruited</th>
<th>(Mean Percentage of Hours Completed)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North-west</td>
<td>South-east</td>
<td>South-west</td>
<td>North-west</td>
</tr>
<tr>
<td><strong>FINANCIAL AID</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Work-Study Program</td>
<td>79.06</td>
<td>100.00</td>
<td>84.10</td>
<td>100.00</td>
</tr>
<tr>
<td>Basic Educational Opportunity Grant</td>
<td>78.20</td>
<td>89.18</td>
<td>82.92</td>
<td>94.67</td>
</tr>
<tr>
<td>Ohio Instructional Grant</td>
<td>78.94</td>
<td>86.26</td>
<td>83.40</td>
<td>94.44</td>
</tr>
<tr>
<td>Scholarships</td>
<td>75.74</td>
<td>88.78</td>
<td>88.22</td>
<td>100.00</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>81.10</td>
<td>92.92</td>
<td>82.39</td>
<td>93.89</td>
</tr>
<tr>
<td>Guaranteed Bank Loan</td>
<td>93.33</td>
<td>91.11</td>
<td>90.96</td>
<td>**</td>
</tr>
<tr>
<td><strong>PERSONAL/SOCIAL COUNSELING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Counseling</td>
<td>80.56</td>
<td>82.50</td>
<td>79.40</td>
<td>100.00</td>
</tr>
<tr>
<td>Resident Advisor</td>
<td>77.71</td>
<td>93.11</td>
<td>84.38</td>
<td>98.70</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>78.71</td>
<td>90.38</td>
<td>70.24</td>
<td>93.68</td>
</tr>
<tr>
<td><strong>ACADEMIC SUPPORT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Advisement</td>
<td>78.74</td>
<td>92.66</td>
<td>81.38</td>
<td>94.62</td>
</tr>
<tr>
<td>Tutor</td>
<td>75.24</td>
<td>90.96</td>
<td>81.99</td>
<td>93.46</td>
</tr>
<tr>
<td>Skill Center</td>
<td>76.78</td>
<td>**</td>
<td>80.38</td>
<td>100.00</td>
</tr>
<tr>
<td>English Workshop</td>
<td>76.34</td>
<td>87.84</td>
<td>83.72</td>
<td>89.20</td>
</tr>
<tr>
<td>Math Workshop</td>
<td>76.98</td>
<td>**</td>
<td>83.46</td>
<td>93.75</td>
</tr>
</tbody>
</table>

* p < .05

** No students in this group used this service.
In this chapter, the findings of the study have been presented for each hypotheses tested. Chapter V will include a summary of these findings, conclusions drawn from these findings, and recommendations for further study.
CHAPTER V
SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The primary objective of this study was to locate sources of problems for minority students. More specifically, to identify some characteristics of students who had difficulty completing the academic hours for which they initially registered each quarter. The student characteristics investigated were marital status, race, sex, age, number of hours spent in employment, on-or off-campus residency, and geographic area of the state from which the student was recruited. These variables were examined in relationship to the type(s) of supportive services which they utilized.

Participants were chosen from the target population who were recruited under the 1977 Ohio State University Freshman Foundation Program and who returned for the 1978 autumn quarter. The Freshman Foundation Program includes five minority groups - Black, Hispanic American, Native American, Appalachian White, and Asian American.

Data for this study were gathered using a survey questionnaire which sought responses to questions concerning
the use by minority students of supportive services. An additional purpose of the study was to determine whether there was a relationship between students' academic success as determined by the percentage of registered hours successfully completed and their utilization of supportive services. Those students who utilized one or more component of a particular supportive service were considered a user of supportive service. Questionnaires were mailed. Follow-up requests for responses were made by telephone. Questionnaires were returned by mail to the researcher. There were 219 responses from a total population of 315 students. There were ninety-six nonrespondents.

A review of the literature reveals a paucity of information about this particular topic.

The methods of analysis of the data were t-tests and one-way analyses of variance. T-tests were performed with independent variables having two categories and analyses of variance were performed for independent variables with more than two categories. The computations were supervised and checked by a research consultant in the Research and Evaluation Consulting Service, College of Education, The Ohio State University.

All hypotheses were tested in null form and were rejected if the calculated \( t \) or \( F \) value was significant at or beyond the .05 level of probability. Seven null
hypotheses were stated and tested. The framework, design, and the analysis of the study are explained in Chapter III. The results of the analysis of the data are presented in Chapter IV.

**Findings**

A summary of the hypotheses that were tested along with the findings related to each are as follows:

**Ho**

There will be no significant difference by marital status in the percentage of attempted hours successfully completed during the academic year.

The null hypothesis as stated was rejected because marital status showed a significant effect on the percentage of hours completed for those students using general category of financial aid receiving National Direct Student Loans.

**Ho**

There will be no significant difference by sex in the percentage of attempted hours successfully completed during the academic year.

The null hypothesis was rejected because the sex of the respondent revealed a significant difference in the percentage of hours completed for those students using resident advisor assistance.

**Ho**

There will be no significant difference by age in the percentage of attempted hours successfully completed during the academic year.
The null hypothesis was rejected because age of the respondent revealed a significant difference on the percentage of hours completed for those students using National Direct Student Loans.

$H_0^4$ There will be no significant difference by residency in the percentage of attempted hours successfully completed during the academic year.

The null hypothesis as stated was rejected because the residency of the respondent revealed a significant difference on the percentage of hours completed for those students utilizing financial aid, specifically Ohio Instructional Grants, National Direct Student Loans and academic support, specifically academic advisement.

$H_0^5$ There will be no significant difference by race in the percentage of attempted hours successfully completed during the academic year.

The null hypothesis as stated was rejected because the race of the respondent revealed a significant difference on the percentage of hours completed for those students using financial aid specifically Basic Educational Opportunity Grants, Ohio Instructional Grants, Academic Support and academic support, specifically academic advisement.

$H_0^6$ There will be no significant difference by race in the percentage of attempted hours successfully completed during the academic year.
The null hypothesis could not be rejected because employment did not have any significant effect on the percentage of hours completed within any category of supportive service.

\[ \text{Ho} \] There will be no significant difference by geographic region in the percentage of attempted hours successfully completed during the academic year.

The null hypothesis as stated was rejected because the geographic region from which the respondent was recruited made a significant difference on the percentage of hours completed for those using general categories of financial aid and academic support, specifically academic advisement.

Conclusions

The findings of this study seem to justify the following conclusions. They should be generalized only to the extent that they are valid for data collected on minority students at one institution; and these minority students continued to be enrolled after their freshman year. Generalizations are also limited to those variables investigated.

(1) The results of data analysis showing a relationship between National Direct Student Loan support Astin’s (1975) study which revealed that married students persist better in college if the spouse provides the major support
in addition to aid. Among students who received loans, those who were married did more poorly than those who were not married. If receipt of loan is indicative that a spouse was not providing support, it is possible that the student is more persistent in reaching their academic goal if he or she also received no financial aid.

(2) Females completed fewer hours than males if they sought counseling from the residence hall advisor. A possible conclusion is that females could not relate to the residence advisors of different ethnic and cultural backgrounds as well their male counterparts.

(3) The study indicated that older students generally completed fewer of the hours for which they registered than younger students. It is quite likely that older students have more difficulty in adjusting to college life. The difficulty is further increased when the burden of future loan repayment is added to other possible problems. This finding also supports those of Astin's (1975) and Newman's (1965).

(4) Results show that students living off-campus completed fewer hours than those living on-campus if they used financial assistance or personal counseling. This suggests that residential proximity to campus and the residence hall not only reduces the time and effort expended in commuting and independent living but also allows
students to benefit from living in an environment with an atmosphere conducive to study - hence the completion of a greater number of hours. This finding reaffirms that of Astin's (1975) who found that off-campus residence particularly affects those students who receive National Direct Student Loan and Ohio Instructional Grant and those seeking academic support. Astin's (1975) study also revealed that grants had a positive effect only when not combined with a loan. One possible explanation for the results on academic advisement may be that academic advisors are more likely to recommend fewer hours to those students living off-campus.

(5) The study shows that Native Americans and Black students who were awarded Basic Education Opportunity Grant and Ohio Instructional Grant (free money) completed fewer hours than students who had a combination of free money and earned money. This supports Astin's (1975) findings that students who combine other forms of aid with employment show greater persistence. However, his findings also show that employment alone brings even greater persistence. One implication may be that students who receive free money are less likely to develop an appreciation of the cost of an education to the same extent as they would if it were necessary for them to work. However, this effect is true mainly for Native Americans and Blacks. Perhaps these groups feel the university is more foreign than others. Hence they
encounter a greater number of problems related to their academic endeavors than do other student groups.

(6) Students who were employed completed the majority of hours for which they originally registered and there was no negative effect as a function of employment. This re-affirms the conclusion in item five. It is also possible that students who must spend a portion of their time in employment attempt to maximize the time spent relative to their studies so that they can complete their educational program as soon as possible.

(7) Those students receiving financial aid and academic advisement who come from the Northeast area completed fewer hours. The Northeast section of the state included such cities as Cleveland, Akron, and Youngstown. Students from Northwestern cities such as Toledo, Sandusky, and Findlay on the other hand, completed the largest number of hours. These findings are in disagreement with those of Cope (1972) and Newman (1965) who found that students growing up in small towns showed less persistence. Northeastern Ohio has a greater concentration of larger cities and suburbs than does other regions of the state. It is also possible that students who attend high schools in larger cities are also less likely to receive the same degree of personalized counseling and other academic preparation for college as students from high schools serving a smaller number of students.
In summary, a description of students who utilized supportive services based on the conclusions of this study and who completed more hours can be described as single, male, age 16-19, living on-campus, employed, and coming from Northwest Ohio. Students who completed fewer hours are those who are married, female, over 20 years old, living off-campus, unemployed, and recruited from Northeastern Ohio.

Recommendations

Even the most thorough study is likely to give rise to a number of unanswered questions. This study attempted to answer some important questions and there have arisen new ones from the findings which are in need of more investigation. This component addresses itself to a few of those areas of concern.

First, it would be useful to analyze the social, psychological, economic, and familial data relative to students who utilize supportive services in contrast to students who do not utilize supportive services. These differences could then be related to the pattern of completing or not completing the number of hours for which both groups register. This study could answer the following two questions.

(1) Are the socio-economic background of students who utilized supportive services different from the
socio-economic backgrounds of the students who did not use supportive services.

(2) Are the geographical locations prior to college entry of students who utilized supportive services different from the geographical locations prior to college entry of students who did not utilize supportive services?

(3) Counseling and Advisement - One use of academic counseling is to assist students in organizing their activities so that they can succeed in meeting the demands of the academic portion of their college careers. It appears from the study that such goals may not always be accomplished. The results may indicate some need for a training program aimed at preparing academic counselors more adequately to meet the varied personal, social, and academic needs of students so that these students may be successful in planning and completing course requirements with minimum adjustments and/or program discontinuation.

(4) Financial Aid - This research recommends that there should be further research in order to answer certain questions concerning the nature of financial aid services. Specifically, it is recommended that inasmuch as free money alone appears to have a negative effect on student performance that free money should be combined with work in providing the student with the needed financial aid. Several questions deserve attention. Among them are why do loans have negative effects, under certain conditions,
when combined with other forms of financial aid? What should be the nature of proposed packages when sex, parental income, and college costs are considered? How important is the amount or particular form of aid? Finally, what forms of aid are most advantageous in enhancing student persistence?

(5) Housing and Student Services - The recommendation is also made that there should be further research on residential living in order to provide an accurate assessment of its influence on student persistence in college. Several rhetorical questions should be answered. Does a student who lives on-campus increase his or her chances of completing college during a shorter period of time than the student who lives off-campus? Should institutions of higher learning give more priority to minority students who come from a long distance than those students who live in the same city or in nearby cities? Finally, for minority students, is there a positive value to living in a residence hall on-campus as opposed to living in a private room or apartment?

(6) Non-traditional versus tradition student - Whereas the traditional student is more persistent because of age, marital status, prior background, social and economic factors, it is highly recommended that further research be conducted to determine what factors may possible influence the non-traditional student in order to improve their
persistence in completing college requirements. Should the
counseling, advisement and other supportive services they
receive differ in important ways? Are they effectively
utilizing supportive services in order to meet their
academic objective? Finally, what factors are most likely
to interfere with their chances of completing required
credit hours? The form of these studies may involve the
use of control groups, may require longitudinal studies,
personal interviews, etc. with enrolled students at dif-
ferent stages in their career as well as dropouts if the
most thorough insight concerning the usefulness and success
of supportive services in universities and colleges is to
be determined.

An old Chinese proverb accentuates the struggle of
program intervention in higher education: "A journey of one
thousand miles begins with one step." Taking the initial
step has been the focus of this study, but a long and
arduous journey still remains . . . . . .
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DESCRIPTION OF MALE PARTICIPANTS SHOWING SAMPLE SIZE REPRESENTED FOR EACH VARIABLE IN STUDY
## Description of Female Participants Showing Sample Size Represented for Each Variable in Study

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### Native American

- **Un.E.**
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  - 20 & over: 1

- **11-20:**
  - 16-19: 5
  - 20 & over: 2

### Asian American

- **Un.E.**
  - 16-19: 1
  - 20 & over: 1

- **11-20:**
  - 16-19: 6
  - 20 & over: 2

### Black

- **Un.E.**
  - 16-19: 9
  - 20 & over: 3

- **11-20:**
  - 16-19: 2
  - 20 & over: 2

### Hispanic American

- **Un.E.**
  - 16-19: 11
  - 20 & over: 1

### Appalachian White

- **Un.E.**
  - 16-19: 1
  - 20 & over: 1
Dear Dr. Holloway:

As Director of The Ohio State University's College Work-Study Program for the past four years, I have become increasingly concerned with the number of minority students who fail to make reasonable progress during their stay here at Ohio State.

As you well know, past history has indicated that the basis for the Freshman Foundation Program has been the hope and prayer that a college education should be available to all high school graduates without respect to race, sex, or economic status. Yet in the case of minority students, a number of those who have been admitted to the program have not made reasonable progress in terms of number of hours and grade point average. As a result, students have been remaining in University College becoming frustrated and disenchanted. The psychological aspects of not progressing at least at an average rate seems to have an impact on academic progression. Further, with the Basic Educational Opportunity Grant providing only 12 (twelve) quarters of support, finds funding beyond the normal four year program necessary from alternative sources. The emphasis is not on cost in terms of dollars but time and energy expended by students toward completion of program.

As part of my Ph.D. dissertation in Guidance and Counseling, I wish to address this problem. Specifically, I would like to examine demographic data in an attempt to discover factors that may contribute to and/or prevent problems affecting academic progress. With your permission, I would like to use the records of students in the
Freshman Foundation class of Spring Quarter, 1977, as part of the data I will be collecting. (Data for a comparable group of non-minority students will be collected from records in Financial Aids.) The identities of students whose records are involved will of course be kept strictly confidential; and my study will in no way present negative evaluations of minority students.

Sincerely,

Larry Eskridge, Director
College Work-Study Program

cc: Dr. H. Peters
    Dr. R. Kelsey
    Dr. B. Mehl
    Dr. B. Chapin
    Dr. J. Stranges
    Mr. R. Harrison
March 1, 1978

Mr. Larry Eskridge  
Director  
College Work-Study Program  
5th Floor  
Lincoln Tower  
1800 Cannon Drive  
Columbus, Ohio 43210  

Dear Mr. Eskridge:

I am approving your request to use data from the Freshman Foundation Student Records for your dissertation.

As a member of the OMA Advisory Committee you know of our interest in ways to improve the opportunities for retention and graduation of minority students. Your work in this area should be beneficial to us.

Please let me know how my staff can be of assistance to you in your work.

Sincerely,

[Signature]

William J. Holloway  
Vice Provost for Minority Affairs  

WJH/eab

xc:  Dr. Mac Arthur Stewart  
Dr. Joseph Stranges  
Mr. William Johnson  
Dr. Tina Cade  
Mrs. Rosetta Moore
I respectfully request the Waiver of Subject Consent Forms for my dissertation study entitled "Early Program Intervention and Academic Load: Factors Influencing the Attrition Rate of Minority Students." The rationale to justify this waiver request is based on the following points:

A. There is little or no risk on the part of the subjects to be used; hence, physical, psychological, or social injury is not a problem due to the nature of the study.

B. There will be no probing for sensitive information that subjects might consider personal, threatening, or offensive.

C. Participation is voluntary as the researcher has no leverage to exercise in requiring the respondents to complete the questionnaires. Subjects will only be asked to voluntarily participate in generating any knowledge to be gained from the investigation.

D. The identity of individual subjects will not be required or revealed in any publication of the research.

E. Permission has been obtained from the Office of Minority Affairs. The office perceives the existing study as a significant contribution to the ongoing study of services to Minority Students.

F. The study would be delayed significantly by having to obtain consent forms via mail prior to mailing questionnaires. Thus, time and costs would be a burden and add no significant value to the results of the survey.

Your consideration to this request is appreciated.
REVIEW OF RESEARCH, DEVELOPMENT, OR RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS

SUMMARY SHEET

PRINCIPAL INVESTIGATOR(s): Dr. H. J. Peters/ Dr. R. Kelsey - Larry Eskridge (Student)

Education: Guidance and Counseling - College of Education

35b Arps Hall

PROTOCOL TITLE (INCLUDE PROPOSAL TITLE FOR EXTERNALLY-FUNDED ACTIVITIES IF THE TITLE IS DIFFERENT FROM THE PROTOCOL TITLE): The impact of early program intervention and academic load as factors influencing attrition rate of minority students.

WHEN SUBMITTING A PROPOSAL TO THE BEHAVIORAL AND SOCIAL SCIENCES HUMAN SUBJECTS REVIEW COMMITTEE, WE WOULD APPRECIATE YOUR SUPPLYING THE FOLLOWING INFORMATION IN SUMMARY FORM. HAVING THESE DETAILS PRIOR TO READING AND REVIEWING THE PROTOCOL CAN EXPEDITE THE PROCESS. PLEASE BE AS SPECIFIC AS POSSIBLE SUCH THAT THE READER CAN HAVE A CLEAR AND ACCURATE IDEA OF WHAT YOUR SUBJECTS WILL EXPERIENCE WHEN THEY PARTICIPATE IN YOUR RESEARCH, AS WELL AS KNOW THE PROTECTIONS THAT HAVE BEEN INCLUDED TO SAFEGUARD THE SUBJECT AGAINST ADVERSE CONSEQUENCES (E.G., ARE THEY FREE TO NOT PARTICIPATE IF THEY CHOOSE, DO THEY OR THEIR PARENTS KNOW EXACTLY WHAT THEY ARE GETTING INTO BEFORE THEY ARE COMMITTED TO PARTICIPATE, WILL BOTH THEIR PARTICIPATION AND ANY COLLECTED DATA BE COMPLETELY CONFIDENTIAL).

1) IN A SENTENCE OR TWO, BRIEFLY DESCRIBE WHY THE PROPOSED PROJECT IS OF INTEREST. THE INTENT OF THIS QUESTION IS TO GIVE THE REVIEWER A BRIEF IDEA OF THE BACKGROUND AND PURPOSE OF THE RESEARCH.

The study will determine whether supportive services affect the number of hours minority students attempt versus the number of hours they complete during an academic year; thus providing an assessment of whether such services enable students to complete their educational goals within a predictable time.

2) BRIEFLY DESCRIBE EACH OF THE DIFFERENT CONDITIONS OR MANIPULATIONS TO BE INCLUDED WITHIN THE STUDY.

The subjects are students enrolled in the Freshman Foundation Program who were enrolled from Autumn 1977 -- Spring 1978 and re-enrolled for Autumn 1978. They will be responding to a survey questionnaire.

3) WHAT IS THE NATURE OF THE MEASURES OR OBSERVATIONS THAT WILL BE TAKEN IN THE STUDY?

The responses will be analyzed along the following variables -- sex, age, place of residency, type of employment, race, marital status, type of financial assistance, and geographic area from which recruited as regards to effect of supportive services.

4) IF ANY QUESTIONNAIRES, TESTS, OR OTHER INSTRUMENTS ARE TO BE USED, PLEASE PROVIDE A BRIEF DESCRIPTION AND EITHER INCLUDE A COPY OR INDICATE APPROXIMATELY WHEN A COPY WILL BE SUBMITTED TO THE COMMITTEE FOR REVIEW.

The respondents will be asked to answer a questionnaire to indicate their marital status, sex, race, employment status, place of residency, age, use of supportive services, versus attempted, and hours completed. (Please see attached copy of questionnaire).

Form ES-008A (#777)
5) Will the subjects encounter the possibility of either psychological, social, physical or legal risk?  
☐ YES ☒ NO  If so, please describe.

6) Will any stress be involved in the study?  ☐ YES ☒ NO  If so, please describe.

7) Will the subjects be deceived or misled in any way?  ☐ YES ☒ NO  If so, please describe and include a statement regarding the nature of the debriefing.

8) Will there be any probing for information which an individual might consider to be personal or sensitive?  ☐ YES ☒ NO  If so, please describe.

9) Will the subjects be presented with materials which they might consider to be offensive, threatening or degrading?  ☐ YES ☒ NO  If so, please describe.

10) Approximately how much time will be demanded of each subject? Approximately 10-15 minutes will be needed to respond to the questionnaire.

11) Who will be the subjects in this study? How will the subjects for this study be solicited or contacted?  
Second year minority students who are enrolled in the Freshman Foundation Program at The Ohio State University. They will be mailed a questionnaire to the student's local address.

12) What steps will be taken to insure that the subject's participation is voluntary?  
The introduction to the questionnaire explains its purpose. Subjects will be asked to voluntarily complete the mailed questionnaire. Respondents will not be coerced in any manner.

Form HS-0068 (8/77)
13) IT IS IMPORTANT THAT A SUBJECT BE INFORMED REGARDING THE GENERAL NATURE OF WHAT HE WILL EXPERIENCE WHEN HE PARTICIPATES IN A STUDY, INCLUDING PARTICULARLY A DESCRIPTION OF ANYTHING HE MIGHT CONSIDER TO BE EITHER UNPLEASANT OR A RISK. PLEASE PROVIDE A STATEMENT REGARDING THE NATURE OF THE INFORMATION WHICH WILL BE PROVIDED TO THE SUBJECT PRIOR TO HIS VOLUNTEERING TO PARTICIPATE.

A cover letter will be included briefly describing the nature and purpose of the study and asking the subjects to participate.

14) WHAT STEPS HAVE BEEN TAKEN TO INSURE THAT THE SUBJECTS GIVE THEIR CONSENT PRIOR TO PARTICIPATING? WILL A WRITTEN CONSENT FORM BE USED? YES NO IF SO, PLEASE INCLUDE IT. IF THE SUBJECTS ARE MINORS, WILL THEIR PARENTS' CONSENT BE OBTAINED? YES NO IF SO, PLEASE INCLUDE THE FORM AND IF NOT, PLEASE INDICATE WHY NOT.

The manner in which the study will be implemented necessitates that the respondents consent to participate before they fill out the questionnaire. The cover letter will be worded in such a way to insure consent prior to participation.

15) WILL ANY ASPECT OF THE DATA BE MADE A PART OF ANY PERMANENT RECORD THAT CAN BE IDENTIFIED WITH THE SUBJECT? YES NO

Students are not identified by name or other process in responding.

16) WILL WHETHER OR NOT A SUBJECT PARTICIPATED IN A SPECIFIC EXPERIMENT OR STUDY BE MADE A PART OF ANY PERMANENT RECORD AVAILABLE TO A SUPERVISOR, TEACHER OR EMPLOYER? YES NO

17) WHAT STEPS WILL BE TAKEN TO INSURE THE CONFIDENTIALITY OF THE DATA?

Respondent will not be required to identify themselves.

18) IF THERE ARE ANY RISKS INVOLVED IN THE STUDY, ARE THERE ANY OFFSETTING BENEFITS THAT MIGHT ACCRUE TO EITHER THE SUBJECT OR SOCIETY?

There are no risks involved.

19) WILL ANY DATA FROM FILES OR ARCHIVAL DATA BE USED? YES NO
THE OHIO STATE UNIVERSITY

RESEARCH INVOLVING HUMAN SUBJECTS

PROPOSED USE OF HUMAN SUBJECTS: ACTION OF THE REVIEW COMMITTEE

The Behavioral & Social Sciences Review Committee has taken the following action:

1. Approve

2. Approve with Conditions

3. Disapprove

with regard to the employment of human subjects in the proposed research
entitled: The Impact of Early Program Intervention and Academic Load as Factors Influencing the Attrition Rate of Minority Students

Herman J. Peters/R. Kelsey/Larry Eskridge is listed as the principal investigator.

The conditions, if any, are attached and are signed by the committee chairperson and by the principal investigator. If disapproved, the reasons are attached and are signed by the committee chairperson.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period.

Date August 25, 1978 Signed (Chairperson)
SUPPORTIVE SURVEY QUESTIONNAIRE

Thank you in advance for agreeing to complete this questionnaire. I am studying the ways in which the University can improve its services to students. Specifically, I wish to find out how it can best help students achieve their academic goals. The information you provide will be kept strictly confidential.

Larry Eskridge

A. Marital Status
   _____ married
   _____ single

B. Race
   _____ Native American Indian
   _____ Asian American
   _____ Black American or Afro-American
   _____ Hispanic American
   _____ Appalachian White

C. Sex
   _____ male
   _____ female

D. Please check your age (on last birthday).
   _____ 16-19
   _____ 20 and over

83
E. Employment
Your present job status?

______ not employed
______ 1-10 hours per week
______ 11-20 hours per week
______ more than 20 hours per week

F. Check the item which indicates the manner by which you finance your education while you are in school.

______ College Work-Study
______ Basic Educational Opportunity Grant
______ Ohio Instructional Grant
______ Scholarships (Academic General Grant)
______ Loan (NDSL)
______ Guaranteed Bank Loan
______ None of above

G. Where did you reside during the 1977-1978 school year?

______ on-campus
______ off-campus

H. When you first entered O.S.U., what city were you from?

I. During 1977-1978, did you use any of the following supportive services? (Check all that apply)

______ Academic Advisement
______ Tutoring
______ Reading and Study Skill Center
______ English Workshop (100.01, 100.02)
______ Math Workshop 100
______ None of above

J. During 1977-1978, did you use any of the following personal/social counseling services? (Check all that apply)

______ Peer Counseling
______ Resident Hall Advisor
______ Counseling Center
______ None of above
K. For how many total hours did you register for the school year, Autumn 1977 - Spring 1978?

L. How many hours did you complete during the school year, Autumn 1977 - Spring 1978?
BIBLIOGRAPHY


Baehr, R. T. Project Success. Chicago: Kennedy-King College, December, 1969, ERIC, ED 039 870.


Franklin, H. "The Relationship of Planned Supportive Services for Minority Students and Grade Point Average at The Ohio State University," Ph.D. Dissertation, The Ohio State University, 1973.


