AN ANALYSIS OF SELECTED CHARACTERISTICS AND NEEDS OF ADULT UNDERGRADUATE STUDENTS ATTENDING MICHIGAN STATE UNIVERSITY FALL TERM, 1966

Thesis for the Degree of Ph. D.
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ABSTRACT

AN ANALYSIS OF SELECTED CHARACTERISTICS AND NEEDS OF ADULT UNDERGRADUATE STUDENTS ATTENDING MICHIGAN STATE UNIVERSITY FALL TERM, 1966

by Mildred Brinkmeier Erickson

An individual's educational "credential" has increasingly become the key to upward social mobility, to job status, and to measurement of ability to perform. The resulting educational impact has been a rapid acceleration in the number of adults who are attempting to acquire or complete a college education. Adults who plan to earn an undergraduate degree, a "credential," seem to be confronted with problems which differ from those of the direct-from-high-school students. Therefore, the present study was designed to collect information on the problems of adult undergraduates: specifically, the number of adult undergraduates at Michigan State University fall term, 1966, their characteristics and their needs as the adult students perceived them.

The information obtained may be used as a basis for improvement and development of educational programs for adults, and may begin a catalogue of information usable by those charged with educational planning in this and

similar institutions.

Computer records were used to determine the population to be studied; a questionnaire was developed to obtain the desired information, and an opportunity was given for open-ended responses from the students.

The study was made of a portion of the total data collected. Four hundred ninety-four of 520 responses to the questionnaire were analyzed, and an additional analysis was made of 255 open-ended responses.

The 26 years of age or older undergraduates were studied as a group, according to sex, and, in areas where age may be of special significance, according to age groups. For convenience in reporting, their characteristics were divided into personal, family background, educational, and vocational groupings. Needs of the students were studied from responses to check lists and from open-ended data.

A brief summary of some of the findings follows:
there were more males coming or returning for undergraduate education; the females were older; more of the females were married, widowed or divorced; the adults were generally well-satisfied with their lives and jobs; they tended to come from small population areas and non-college parental backgrounds; their spouses tended to have some college education, but more male spouses had done graduate work; they tended to come from middle class backgrounds according to job status and income.

Educationally, it seemed significant that more of them were full-time students than part-time. However, more females were part-time. Most of the group planned to get degrees, the males aiming almost equally for bachelor's and master's degrees and for higher degrees than the females; many of the females were in education, while social science, business, agriculture, engineering, and education (in fifth place) were the choices of the males. Almost three-fourths had credit from another college; although utilitarian reasons, such as improvement of income potential, were more important for males, intellectual stimulation and becoming socially useful were high on the list for both males and females.

It was notable that the undergraduate adults wanted courses on campus, special help and refresher courses, night courses and summer courses (also at night); they preferred "lecture and discussion" as a method, and frequent examinations for evaluation.

A majority of the students found working a necessity, and while males were found in a variety of jobs, females were concentrated in office, clerical and sales work or professional work such as teaching or nursing. A very high percentage of both males and females planned to work in the future.

The following categories of needs were emphasized by the adult undergraduates: academic and curricular improvement, special adult facilities, special advisement and counseling, improved evening and summer programs, specific general education courses, improved enrollment and registration procedures, changes in evaluation and grading, financial aid, improved planning for housing, and special orientation for adults.

More detailed findings of the study are presented in Chapter Three, and possible implications of the data for educational institutions are suggested in Chapter Four.

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Ву

Mildred Brinkmeier Erickson

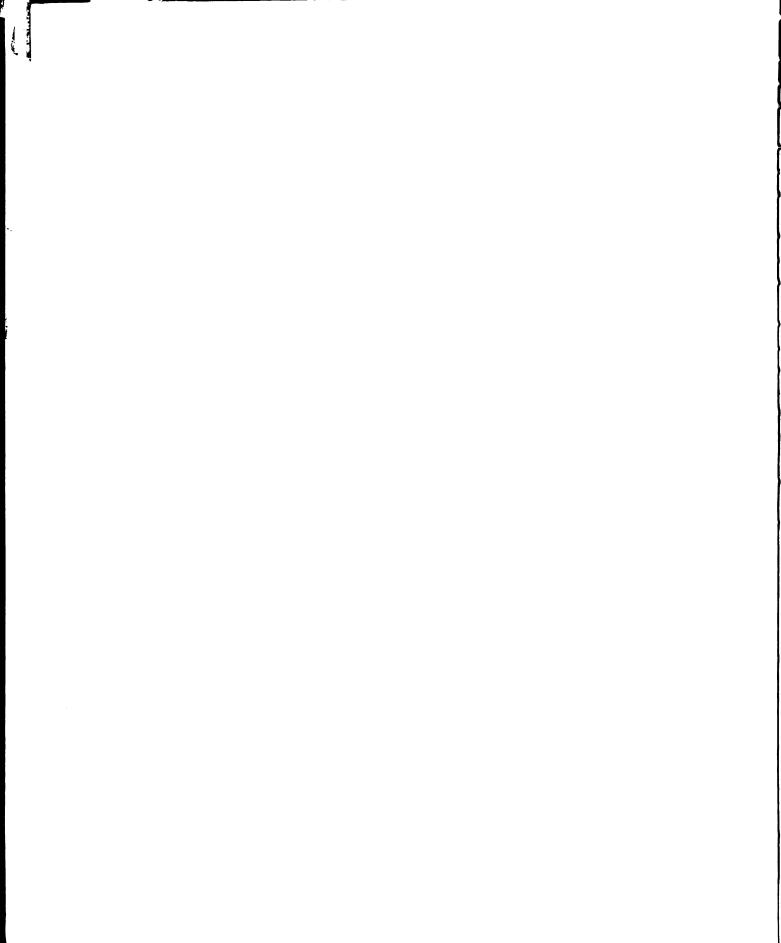
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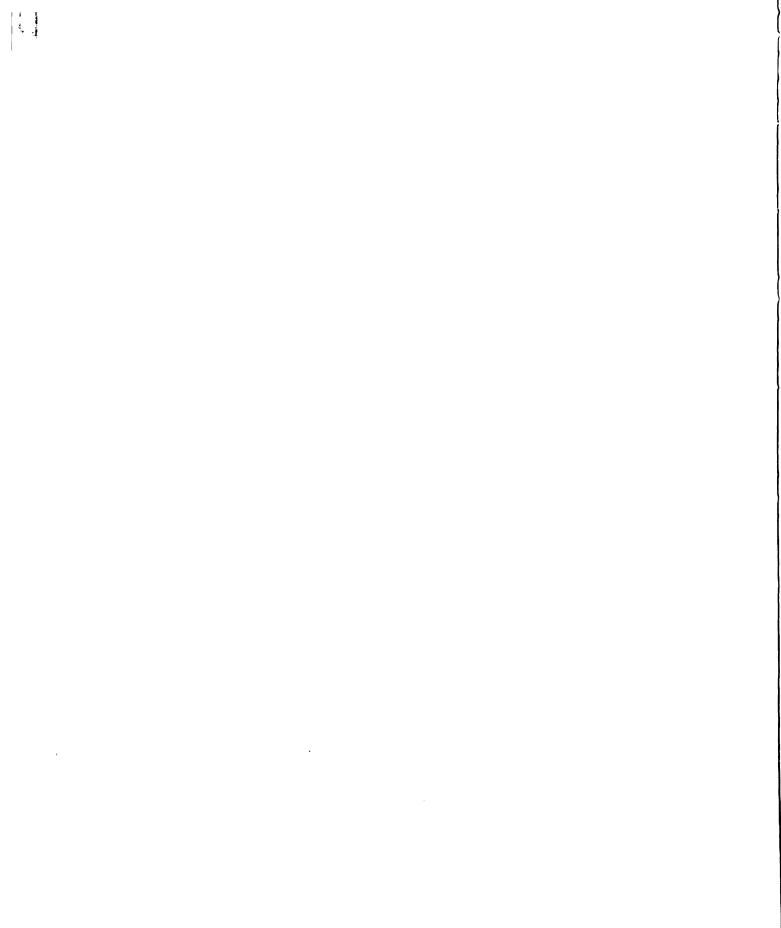
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CHAPTER I

INTRODUCTION

In the academic advisement of undergraduate students at the Student Affairs Office of the University College of Michigan State University, it became apparent to the writer that older undergraduates were an unrecognized group with characteristics and needs which differed from those of students who came to the University directly from high school. While continuing education has been planned for graduate students, for extension students, and for adults taking non-credit courses, older undergraduates who are earnestly seeking their first college degree have been given little attention. Berniece Neugarten of the University of Chicago has expressed the situation succinctly:

We are operating with expectations of adolescence in an institution that has been geared to adolescence, and it is very clear that we must worry about how to fit an education system to adults when the system hasn't been built for adults before. 1

¹Berniece Neugarten in Sarah E. Sagoff, Adults in Transition (Summary of a Conference at Chatham, Massachusetts, May 1965. Winchester, Massachusetts: New England Board of Higher Education and Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1965), p. 8.

I. STATEMENT OF THE PROBLEM

The study was, therefore, devised to identify the adult undergraduates, their numbers (how many) and their characteristics (who they were), and to discover their educational needs.

Secondly, the information about the numbers of adult undergraduates, who they were and their stated educational needs could be made available for use in developing an improved educational environment. Improving the educational climate could include all phases of administration, teaching, curriculum, facilities, advising and counseling. Specifically, the Student Affairs Office of the University College desired information for improving its help to the adult undergraduates; information which might call attention of the entire University to the numbers and problems of the group; and information which might be used as a basis for initiating and developing a program designed especially for this group.

Thirdly, information from the study was planned as a beginning catalogue of information about adult undergraduates who come or return to educational institutions. Information collected by a number of similar institutions could be of assistance, generally, in the educational planning for and in the improvement of education for adult undergraduates.

		1

The specific problem, then, was to develop a method to accomplish the above purposes; to collect and analyze the data about the students studied, and to report the findings and implications of the study.

II. SIGNIFICANCE OF THE PROBLEM Within the Total Educational Structure

One of the revolutionary changes in higher education which is occurring at an accelerating pace is the demand of adult students for continued and continuous education. Johnstone and Rivera in Volunteers for Learning, an extensive study published in 1965 under a Carnegie grant, pointed out that more than one in five adults makes a systematic effort each year to acquire new knowledge, information, or skills. Furthermore, one half of the adult population engages in further education at some point during their lives. A significant number of these adults come to our colleges and universities as undergraduates seeking degrees. There are at least four

²John W. C. Johnstone and Ramon J. Rivera, <u>Volunteers</u> for <u>Learning</u> (Chicago: Aldine Publishing Company, 1965), p. 1.

of the students in college were 17 to 22 years of age. Kate Mueller, Student Personnel Work in Higher Education (Boston: Houghton Mifflin, 1961), p. 30, "...The number of persons age 25 or more who have attended college four years or more has doubled since 1940; 9.9 per cent of Americans over 25 have attained a college level of education." In "Population Trends Signal School Needs,"

National Education Research Bulletin, XLVI (March, 1968), 24.

groups involved: a number of the almost 50 per cent who did not graduate from high school; ⁴ high school graduates who did not go to college; many of the approximately 50 per cent who began but did not finish college--the so-called drop-outs; ⁵ the mature students who attended or completed a junior or community college and later wish to complete a degree.

Some of the factors tending toward an increased stress on adult learning include: 6

^{4&}quot;Today about half the people 25 or over have finished high school; by 1985, it will be two thirds.
..." Jean M. White, "200 Million Computer Lie," (in the Washington Post), The State Journal, November 19, 1967, p. 3.

^{5&}quot;. . . American colleges lose, on the average, approximately half their students in the four years after matriculation. Some 40% of college students graduate on schedule, and in addition, approximately 20% graduate at some college, some day." John Summerskill, "Drop-Outs from College," in The American College, edited by Nevitt Sanford (New York: John Wiley and Sons, 1962), p. 631; "Studies at Princeton and the University of Illinois showed that the great majority of their college dropouts (85 percent and 70 percent respectively) eventually returned to college and earned baccalaureate degrees." Willard Dalrymple, "The College Drop-out Phenomena," The Michigan Education Association Journal LXVI, (April, 1967), 13.

⁶James E. Crimi, Adult Education in the Liberal Arts College (Chicago: Center for the Study of Liberal Education for Adults, 1957), pp. 28-38; Roger DeCrow (ed.), Growing Time (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1964), passim; Lowell Eklund, "The Oakland Plan for Continuing Education of Alumni," Adult Leadership (November, 1966), 154-156; Fred Harvey Harrington, "Adult and Continuing Education" in Edgar L. Morphet and Charles O. Ryan, Designing Education for the Future, No. 2 (New York: Citation Press, 1967),

- (1) A higher educational attainment is prerequisite to many jobs. 7
- (2) Increased mechanization has lessened work which demands physical ability and increased the importance of continuous mental development.O. Meredith Wilson phrased it this way, "The
 - burden of life has shifted from man's back to man's mind."
- (3) The amount of new information is believed to be doubling every ten years. 9
- (4) There is a likelihood that most people will be forced to change jobs or vocations several times in a lifetime.

pp. 129-140; Cyril O. Houle, Major Trends in Higher Education (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1959), passim; A. A. Liveright and Roger DeCrow, New Directions for Degree Programs Especially for Adults (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1963), pp. 1-2.

⁷The Census Bureau reported that in 1966, 49.9 per cent of the people aged 25 and over had at least four years of high school against 41.6 per cent in March, 1957. In that time, also, the college educated climbed from 7.6 per cent to 9.8 per cent. Bureau of Census Report (Washington, D.C.: United States Government Printing Office), news release.

^{80.} Meredith Wilson in Lawrence E. Dennis (ed.), A Woman's Life (Washington, D.C.: American Council on Education, 1963), p. 3.

⁹Lowell Eklund, "The Oakland Plan for the Continuing Education of Alumni," Adult Leadership (November, 1966), 154-156.

Half the jobs now held by Americans did not exist forty years ago. The vocational shifts between 1960 and the next few decades will be equally violent. Yet our educational system gives too little attention to the re-education of the citizen. . . . I predict that half of the children born this year will be forced to educate themselves vocationally three times before their productive lives run out. Just to preserve the validity of the concept that man can be entrusted to govern himself, to make wise choices on problems that vitally affect him and his neighbor, call for a continuing adult education program that is found in very few communities. 10

- . . . And I think that if Whitehead were alive. . ., he probably would say that "very likely in a single lifetime, in these days, there will be at least two cultural revolutions." In other words, the living individual will not have to adjust to only one cultural revolution but to more than one.
- (5) A change is occurring in our work-oriented value systems. One consequence is increased "leisure" time.

At a conference in Chatham, Massachusetts, May 1965, the effect of technology on adults was considered carefully and summarized by Sara E. Sagoff in Adults in

William J. Ellena in "Man's Tomorrows," prepared for the Phi Delta Kappa Study Committee and quoted in The Phi Delta Kappan, XLVI, No. 8 (April, 1965), 387.

¹¹Malcolm Knowles in <u>Growing Time</u>, Roger DeCrow (ed.) (Brookline, Massachusetts: <u>Center for the Study of Liberal Education for Adults, 1964), p. 63.</u>

Transition: Technology has brought an end of work as the focus of life, a tendency to change jobs and fields of work frequently, a need for worthwhile use of leisure time, an increase in urbanization, and increasing ability through the use of computers to predict and influence human action, and increasing power to define problems in terms of techniques for solving them, a greater centralization of institutions with decisions not in the hands of typical citizens, an alienation of citizens from the centers of power, an increasing variety of ways people will seek to make sense out of or opt out of organized society, and an increasing difficulty for man to feel his life has meaning and purpose. Persons at lower levels of achievement and ability will have the most leisure; the highly trained and intelligent will have less and less. 12

Glenn T. Seaborg expressed his view of changes which are occurring:

[Cybernetics may bring] depersonalization, a separation of man and product, a collapse of time, a further reduction of human work, and a shift of needs and skills. . . . [There is] an increasing uneasiness about the state of our personal and community lives in a highly materialistic society, a concern over the complexity and impersonali-

¹² Sara E. Sagoff, Adults in Transition, (Summary of a Conference at Chatham, Massachusetts, May 1965. Winchester, Massachusetts: The New England Board of Higher Education and Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1965), pp. 4-5.

zation of that society, a "groping for national purpose," and a feeling that the unity of man, referred to by poets and philosophers throughout the ages is becoming a reality with immense psychological and physical implications. . . . These feelings forecast the need for a huge reevaluation of our goals and values, and it will be in our universities where such a re-evaluation will take place.

monumental task, many changes will probably have to take place in the universities and our educational system in general. One such change will involve reconciling the continuing importance of specialization with a growing need for interdisciplinary thinking - not only in science and technology, but in all areas of our economic, social, and human development. Specialization has been giving us increasing amounts of knowledge, but the world cries out today for more of something beyond knowledge - for wisdom.

All of this demands a new role of leader-ship from our educational system. Most of today's schools are involved to a great degree in serving the requirements of an industrial age, in fulfilling the needs of a society which has been only partly and indirectly of their making. In the future, this role will shift to one in which the nature of society is determined more by the thinking of the university, and in which the industrial community will tend to serve goals created by that thinking.

What we must look for from the universities is the development of an education which turns out individuals of the highest intellect and broadest outlook, able to understand man and machine, and live creatively with both. Such an education could not be expected in a four-year curriculum or even a six- or eight-year one. It would start as early as the beginning of school or sooner and involve continuing education of one type or another throughout a person's lifetime. And, as Robert Theobald indicates, education

in the age of the Cybernetic Revolution would not be directed toward "earning a living" but toward "total living."

This is a big order involving imagination, energy, and bold leadership from the academic world. But the time is certainly ripe for this kind of leadership. 13

(6) Adults will make up a greater proportion of our population. The Carnegie Corporation Quarterly,

January 1966, reported:

It is estimated that the population as a whole will grow by about 35% over the next two decades--but the increase in the number of adults under thirty-five will probably be close to 70%. Furthermore, very conservative estimates suggest that within twenty years the population will contain 65% more adults who have been to college, 59% more who have attended high school, and 15% fewer with only a grade school education. In short, the potential audience for adult education is increasing at a much faster rate than the population as a whole. 14

- (7) There is increasing affluence and, in some segments, upward social mobility.
- (8) Milton Stern expressed the idea that "life has grown longer in the middle."

¹³Glenn T. Seaborg, "The Cybernetic Age: An Optimist's View," The Saturday Review, XLIX, (July 15, 1967), 23.

^{14&}quot;Adults as Students: Volunteers for Learning,"

<u>Carnegie Corporation of New York Quarterly</u>, XIV (January, 1966), 5-6.

"selecting out" to "including in" the adult group, that education on a continuing basis for adults is as important as education at any level, that adult education is of utmost importance in the process of social change and one of the chief integrating forces in our nation, that continuing education is less costly than correction and remediation, that adult education is the least structured of the levels of education and, therefore, a good place for innovation, and that universities need to be persuaded of the importance of adult education. 15

(9) The emphasis in higher education on applied knowledge is decreasing: we do not know what the problems will be-let alone the answers.

Esther Peterson of the United States Department of Labor stated:

It is impossible to predict what specific skills and talents will be needed in the future. Our young people must be prepared for work that does not yet exist and for a life that we can only imagine. 16

¹⁵Milton R. Stern, "Generation in Command," Adult Leadership, XV (March, 1967), 309-310.

¹⁶ Esther Peterson in Lawrence E. Dennis, Education and A Woman's Life (Washington, D.C.: American Council on Education, 1963), p. 60.

Industries have begun to look for individuals who have well-balanced educations. They prefer to train the employee in the specifics of the job. 17

(10) Increasing numbers of women are returning to college and to job careers.

In 1964, 30 per cent of the women students at Washington University were 25 or more years of age. ¹⁸ In 1963, more than half of all women 45-54 were in paid employment and the numbers are increasing yearly. ¹⁹ "Some 40 per cent of American women work outside the home today." ²⁰

- (11) Increasing numbers of adults from junior and community colleges deserve an opportunity for continued education.
- (12) There are many returning veterans and others who

¹⁷ Eklund, loc. cit.

¹⁸ University of Washington, Brochure (Seattle: University of Washington, 1964), p. 1

The President's Commission on the Status of Women, Margaret Mead and Frances B. Kaplan (eds.), American Women (New York: Scribner, 1965), p. 10.

^{20&}quot;Population Trends Signal School Needs," National Education Association Research Bulletin, XLVII (March, 1968), 26.

have government grants for college education and who have passed high school equivalency examinations while in service.

The number of Michigan adults seeking high school diplomas has tripled since the Legislature removed the age limit on students enrolled in high school completion courses in 1965. Last year 98,809 Michigan adults returned to classes to get high school diplomas. This compares to 30,746 in 1963-64 when fees were charged for the courses.

- (13) Non-high-school graduates who are successful in careers desire an educational attainment concomitant with their position in the community.
- (14) Early retirees, especially from the armed services, desire college educations.
- (15) Many adults want degrees for personal satisfaction or humanistic reasons.
- (16) Recognition is being given to the salvage value of the citizens who have been left behind.

Within Michigan State University

While advising students at the Student Affairs

[&]quot;Adults Flood Schools," The State Journal, October 9, 1967, B2.

Office of University College and Evening College students, the writer discovered that the group of adult undergraduate students at Michigan State University were experiencing difficulty in finding classes scheduled at times they could attend, finding consistent help in learning about the University and its channels, obtaining evaluations of previous educational experiences, finding instructors sympathetic to adults' problems, earning a degree on a part-time basis, finding answers to personal, educational, and career questions, finding financial aid, finding interested counselors or advisers. Furthermore, it was evident that due to a decrease in course offerings at night, the numbers of evening college students were dwindling.

Consequently, with encouragement from University
College administrators, a study was begun in 1965 to
determine what other institutions were doing to help
adult undergraduates. A committee was named from the
University College and from Continuing Education which
made recommendations for a liberal studies program for
adult undergraduates. The writer was asked to prepare
the committee report which was submitted to the Provost's
office in June 1966. In order to emphasize further the
importance of improvements in adult undergraduate education, the writer was encouraged by the Assistant Dean

for Student Affairs of the University College, other administrators of the University College, members of the Ad Hoc Committee mentioned above and others to identify the numbers of students involved, their characteristics, and their needs. It was hoped that such research would underline the urgency for the development of a program for adult undergraduates at the University and that action would result.

That the potential clientele for adult undergraduate education in the East Lansing area is great was revealed in recent research. In a study of the educational level and sex of Ingham County residents twenty-five years of age or older, according to the 1960 census, John Centra of the Office of Institutional Research at Michigan State University reported in 1966 that 43,240 adults had completed high school or had one to three years of college. Of these 18,347 were males, 24,893 were females. 22 Since the 1960 census, these numbers will have increased greatly. Furthermore, Ingham County represents only a small portion of the area served by the University.

John A. Centra, "Some Considerations in Establishing a Special Degree Program for Adults at Michigan State University," (East Lansing, Michigan: Office of Institutional Research, 1966), p. 2. (Mimeographed.)

Opinions of Leading Educators

Also, the study of characteristics and needs was in direct response to suggestions contained in the literature that additional studies of adult education are urgently needed, particularly research of the characteristics and needs of potential adult clientele.

Thomas H. Hamilton believes that "the primary function of a university is to improve the intellectual and cultural level of the society in which it operates." One of the ways to develop progress in a university is to assess and respond to local needs; there is, in fact, an obligation if the university is to serve the entire community. This includes the adult members of a community among whom it is increasingly realized that education is a life-long process. The presence of adults on campus makes younger students sensitive to learning as continuous. 24

Harold Howe states that:

We are getting away from the notion that education is a neatly packaged period of years inserted into a person's life somewhere between his first pair of long pants

Thomas H. Hamilton in <u>Growing Time</u>, Roger DeCrow (ed.), (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1964), p. 56.

²⁴ Ibid., passim.

and his first vote. Education no longer ends with a high school diploma or a college degree. I think within twenty-five years we will come to regard it as entirely natural for a person to return periodically to college or technical institution to renew and refresh his education. 25

In his book, <u>A Necessary Revolution in American Education</u>, Francis Keppel writes:

A necessary revolution in American education implies continuing education. No longer can individuals talk of completing their education. For those who move to college and graduate school and into professions there is a constant need to keep up to date.

faced by the technological progress of automation, workers need frequent retraining if their skills are not to become obsolescent and if they themselves are not to become unemployable.

... With the trend toward earlier retirement and longevity there is need also for adult education to bring new dimensions of meaning to the lives of older persons.

...

Paul A. Miller believes:

The presidents and trustees of institutions must realize that continuing education of adults is as vital as the education of adolescents. This function must be part

Harold Howe, II, "Recruiting for the New Partnership" (address at the Georgia Vocational Association, Atlanta, Georgia, March 18, 1966), p. 9.

Francis Keppel, The Necessary Revolution in American Education (New York: Harper and Row, 1966), p. 26.

of the normal budget of the institution, such like research and teaching, not an expendable extra.²⁷

Malcolm Knowles expresses his feeling:

the threshold of becoming the largest and most important part of our total educational system; that, in fact, it does not make sense in an age in which the time span of cultural revolution is less than a lifetime, for childhood and youth education to be anything but preparation for adult learning. The function of youth education will be primarily the development of the tools of learning-the ability to learn. 28

Earl McGrath, known for his leadership in adult education, says:

No matter how important the preparatory education of the schools and colleges may be, the opportunities for continuing adult education, in many instances leading to degrees, must be placed near the top of any priority listing of the nation's requirements in education.²⁹

A. A. Liveright and Roger DeCrow believe in special programs for adults:

Paul A. Miller, "The University and Adult Education," (excerpt from an address at the University of Rhode Island, October 1966), p. 8. Copies released by the Center for Continuing Education, Durham, New Hampshire.

²⁸Malcolm Knowles in <u>Growing Time</u>, Roger DeCrow (ed.), (Brookline, Massachusetts: <u>Center for the Study of Liberal Education for Adults, 1964), p. 67.</u>

²⁹Earl McGrath, "Research on Higher Education for Adults," <u>Educational</u> <u>Record</u>, XLIV (Winter, 1964), 95.

Every year thousands of adults enroll in university classes in search of a degree. In some cases they are planning part-time graduate study, but in many, many more they are looking for their first undergraduate degree. By and large, universities have attempted to provide part-time education which replicates the regular day-school program. This has been and will continue to be appropriate for many adult students. Increasingly, however, adult educators are recognizing that this is not appropriate for all mature Americans, and they have been considering the problems and possibilities of degrees that are designed especially for adults. . . . An education designed for younger people . . . is not necessarily appropriate for adults. 30

Currently among the questions to be researched by Clark Kerr, as head of a commission financed by the Carnegie Corporation to discover "Whither High Education," is how much education for adults. 31

Paul Woodring in <u>The Saturday Review</u> for October, 1966, stated that ". . . adult education is still a dangling appendage rather than an integrated part of the American educational system. . . ." For intelligent

Joan Jacobs Jaco

News item in Phi Delta Kappan, XLIX (March, 1967), 375.

³²Paul Woodring, "Education," The Saturday Review, XLIX (October 15, 1966), 91.

integration of adult programs into our educational system, research and planning are indicated.

III. DEFINITION OF TERMS

To be assured that the writer and the reader have similar interpretations of certain terms used in this study, the following definitions are listed:

- (1) Adult. Ordinarily, a student graduates from high school in his eighteenth year. If four years are allowed for military service and four years for working or college experience for the males, or eight years beyond high school for the females, sufficient time for maturation should have elapsed for an individual to be classified as an adult. For the purposes of the study, then, all students were included who were twenty-six years of age or older and who were undergraduates. This contrasts, specifically, with the undergraduate who attended regularly and recently finished high school.
- (2) Mature. This is a word implying a process which in reality is never completed. However, for purposes of this study, it will be used to indicate the attainment of a certain number of years of age--at least 26.
- (3) Counseling. This will be used as a general term covering educational, vocational, and personal advisement.

- (4) Sustained or continuing education. These terms will be used in this study as synonymous with undergraduate education in a degree-granting institution unless otherwise indicated.
- (5) Significant. In this study, significant or significance will be used in a non-statistical sense.

IV. PROCEDURE

The study concerns the adult undergraduates attending Michigan State University fall term, 1966. The group may be considered typical of adult undergraduate students attending any fall term if adjustments are made for economic and social changes occurring from year to year. The fall term general student population is usually somewhat larger than that of winter and spring terms.

Population

During fall term, 1966, a request was made to Data

Processing at Michigan State University to identify from

computer records all students twenty-six years of age or

older who were enrolled as undergraduates that term.

Information requested on IBM cards included name, birth

date, male or female, address, phone, curriculum, year

(freshman, sophomore, junior, senior), and high school

code. The computer carried home addresses rather than

campus addresses of students. Because birth dates were

missing on several hundred cards, they had to be rechecked

by hand through records at the Office of the Dean of Students. At that time 1,159 students fell into the category which was desired. A complete description of the population studied is found in Chapter III, pp. 39-41.

Instrumentation

Also during fall term, 1966, a questionnaire was developed which was designed to obtain the information desired about the needs, characteristics, experiences, and suggestions of the adult undergraduate students enrolled at Michigan State University fall term, 1966. A study was made of questionnaire development and of questionnaires used in other research; a number of knowledgeable people were consulted: members of the Doctoral Committee, the Assistant Dean for Student Affairs of the University College, other faculty and administrators, individuals in Evaluation Services and the Bureau of Institutional Research, and several adult students.

By January, 1967, the questionnaire was ready to mail to a random sample of 25 students. Twelve questionnaires were returned quite promptly; a thirteenth somewhat later. Returns from the pilot study were encouraging.

Some refinements of the instrument were made.

Questionnaires were mimeographed for the students identified as adult undergraduates. A questionnaire and

a business reply envelope were mailed to each home address to be in the hands of students during their March, 1967, spring vacation. A sample questionnaire may be found in Appendix A, page 207. Signatures by the respondents to the questionnaires were optional; therefore, it was not feasible to use follow-up letters.

Procedures for Analysis of Data

Five hundred twenty questionnaires were returned.

More than half of those who responded added comments in essay form or attached letters. A number of students who answered the questionnaire also called for appointments to talk about their needs or came to the office to visit personally.

After the questionnaires were sorted, the responses were coded, transferred to IBM answer sheets, and cards were punched. The next step was to contract for computer time. Specialists from Evaluation Services, Dr. Leroy Olson and Dr. John Uppal, programmed the material which was processed three times to make certain refinements. Additional partial runs were made for further information.

For analysis, the total population was divided into sub-populations: male and female, and to a limited extent into age groups. For reporting, the information was divided into personal, family background, educational and vocational categories, and objective and open-ended data On needs.

A difficulty encountered in the study was timing. Information on addresses was not available from Data Processing until November 17, 1966. By the time correct birth dates were located on several hundred cards, students were on Christmas vacation. Meanwhile, the questionnaire had been developed and was ready for the pilot study in January. After returns from the pilot study were received, the instrument was refined and mailed in time for spring vacation to home addresses. The responses processed should be representative of the adult undergraduates who remained at the University after a number of seniors were graduated fall and spring terms.

V. ORGANIZATION OF THE DISSERTATION

The study of the adult undergraduate population of a selected educational institution is organized into four chapters. In Chapter One the problem and its significance in a particular university and in the larger field of education are discussed; the terms used are defined; the procedure is outlined; and the organization and scope of the study are indicated. In Chapter Two related literature is summarized. In Chapter Three the findings are presented in graphic and narrative form, and in Chapter Four a summary of findings, some comparisons, implications and conclusions are made.

VI. SCOPE OF THE STUDY

The reported research begins a catalogue of information about adult undergraduates at Michigan State University which may be used for the development of a program for them. A series of clientele studies here and in other institutions is important, if the needs of the community and of society are to be heard and acted upon. The research report is limited to a summary of the selected characteristics and needs which seemed of significance in the problem being studied. Not all of the information in the questionnaire is essential to or included in the design of the dissertation.

CHAPTER II

REVIEW OF THE LITERATURE

A search of the literature on adult education revealed no published studies which were confined to adult undergraduates attending on-campus classes for credit. However, some related investigations are of sufficient value to be summarized here.

As early as 1946 Paul E. Klein and Ruth E. Moffit delineated some of the needs of adults returning for further education: help in getting acquainted with what is available, in studying and scheduling of time, in developing a plan, in reassurance of ability, in taking tests, in finding a counselor or friend, in getting inspiration and encouragement, and in having available

Some of the sources of information used included:
Edmund de Schweinitz and Others, An Overview of Adult
Educational Research (Chicago: Adult Education Association of the United States, 1959); Lawrence C. Little, A
Bibliography of Doctoral Dissertations on Adults and Adult Education (Pittsburgh: University of Pittsburgh
Press, 1963); Review of Educational Research (Washington,
D.C.: American Educational Research Organization, National
Education Association); The Education Index (New York: H.
W. Wilson Co.); Educational Research Information Center,
United States Department of Health, Education, and Welfare (Washington, D.C.: United States Government Printing Offices).

flexible programs, arrangements, and times.²

James B. Whipple in 1957 identified:

. . . six areas in which there are distinctive characteristics of adults-characteristics which are relevant to the educational experience. First, the factor of adult experience requires special consideration in course planning. Second, emotional meanings provide a variety of overtones for adults which generally are outside the experience of youth. Third, adult patterns of thought tend to be fixed. Fourth, the time perspective of adults is different. Fifth, the time available for organized educational experience varies. Sixth, adult motivations tend to be complex and directed toward practical objectives.³

In 1960, A. A. Liveright and Harry L. Miller reported on the characteristics of adults attending evening college and extension classes:

In 1959 most people attending adult programs in institutions of higher education were primarily vocationally oriented. In the urban evening colleges the largest number ranges in age from 20 to 30 and represents men and women who are continuing interrupted education. Hundreds of thousands of these young men and women are attending evening colleges and extension classes for special programs in business, industry, or engineering, or to complete the bachelor's degree essential for promotion

Paul E. Klein and Ruth E. Moffitt, Counseling Techniques in Adult Education (New York: McGraw-Hill Book Company, 1946), passim.

³James B. Whipple, <u>Especially for Adults</u> (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1957), p. 9.

in business and industry.

Second only to this group are the many teachers taking courses to qualify for promotion, or to complete State-required certificates. But John Dyer, in Ivory Towers in the Market Place, makes the point that there is no typical student: "Perhaps the first characteristic of the evening college is heterogeneity. One finds here many students who already have college degrees and others who have only finished high school. The age range is from eighteen to sixty-five or seventy, with the median age being thirty-plus. One-third is under twenty-five; 10 per cent over forty-five."

Dyer emphasizes the variety of motivation among these students, but suggests that there are two major ones: one growing from "life space" areas (the non-academic motivation) and the other from "life chance" areas (rational, economic motivations).4

"A Study of the Mature Women Students Attending Day Classes at Riverside City College during the Spring Semester, 1964," was made by Phyllis Sensor and reported in Research in Education in July 1967:

This study defined a mature woman as being 25 years old or older or married. Data were collected on 225 mature women attending Riverside City College during the 1964 Spring semester, including date of birth, marital status, academic success

⁴A. A. Liveright and Harry L. Miller, Adult Education in Colleges and Universities (Brookline, Massachusetts: The Center for the Study of Liberal Education for Adults, 1960), pp. 14-15.

test scores, grade point average, units of study, major, and schools of transfer. A questionnaire was sent to a random sample of this group. The responses indicate that the basic problem encountered by these women was lack of time for both home duties and study.
... Most indicated no financial problem. More classes from 10 a.m. - 2 p.m., more one and one half hour classes, and a school nursery would alleviate many of the time problems.

Lawrence A. Allen and others were participants in "A Profile Study of the Evening Student - His Interests, Motivations and Characteristics" reported in <u>Adult Education</u> research summaries. The completion date was to have been January, 1964, but further information on the study was not found.

Frances H. DeLisle in a 1965 study of undergraduate advising said:

Adults who are beginning the college program in the later years or resuming after an interruption have needs which require special knowledge and understanding on the part of the academic adviser. Many factors with which the

⁵Phyllis Sensor, "A Study of the Mature Women Students Attending Day Classes at Riverside City College During the Spring Semester, 1964," Research in Education (Washington, D.C.: Educational Research Information Center), Volume VII (July 1967), 41.

⁶Lawrence A. Allen and Others, "A Profile Study of the Evening Student - His Interests, Motivations and Characteristics," Adult Education, XIII (1963-1964), 209.

adviser should be familiar must be evaluated as a basis for making judgments. The major complaints of adults in this category relate not only to the absence of a centralized facility to handle their problems, but also to the fact that the personnel to whom they are referred finally, possess no authority to make some of the decisions that need to be made. This reference is made to the rigidity in the making of exceptions and the failure to tailor-make the program to the interests, needs, and background of the adult.

Raymond P. Carson in 1965 undertook a research study on "Factors Related to the Participation of Selected Young Adult Males in Continuing Education" in which he investigated the relationship between certain educational, vocational and sociological factors and full-time and part-time participation in continuing education. He found statistically significant relationship between continuing education and these variables: mental ability, father's education, mother's education, father's occupation, vocational aspiration when in high school, number of siblings with college training, and marital status.

Worthy of mention here is a unique and recent large-

Frances H. DeLisle, A Study of Academic Advising of Undergraduate Students (East Lansing, Michigan: Office of Institutional Research, Michigan State University, May 1965), p. 110. (Mimeographed.)

Raymond P. Carson, "Factors Related to the Participation of Selected Young Adult Males in Continuing Education," Ed.D. thesis, Florida State University, Department of Higher Education, summarized in Adult Education, XVL, No. 4 (Summer 1966), 24.

scale study of adults as students which was published in 1965 as a result of a survey conducted by the National Opinion Research Center under a Carnegie grant. The results are found in Volunteers for Learning, by John W. C. Johnstone and Ramon J. Rivera. Based on the activities of members of 12,000 American households, this study attempted to discover on a national scale the numbers and characteristics of adults engaged in studies of various subjects, the methods of study employed, and the types of institutional settings involved, attitudes and opinions of adults toward educational experiences and the reasons they expressed for continuing formal education, the types of facilities available to urban situations, and a special study of 17 to 24 year olds.

While the Johnstone and Rivera study was not restricted to adult undergraduates or to colleges or universities as the means of continuing education, some of the findings are valuable for comparative purposes:

(1) Between June 1961 and June 1962, approximately twenty-five million American adults, or more than one person out of each five, engaged in a systematic effort to acquire new knowledge, information or skills.

⁹John W. C. Johnstone and Ramon J. Rivera, <u>Volunteers</u> for <u>Learning</u> (Chicago: Aldine Publishing Company, 1965), passim.

- (2) More than one half of the adults who seek continuing education are under forty; almost four in five are under fifty; there are about equal numbers of men and women, and no differential in race when Negroes are compared with whites of similar educational background.
- (3) The average participant in adult education has had more education than the average adult.
- (4) Participants tend to be white collar workers and have higher salaries.
- (5) Participants tend to be from outlying areas and suburbs, not from the inner city or rural areas.
- (6) More westerners seek continuing education.
- (7) The younger adults usually cited occupational reasons for continuing their education while the older ones were more likely to take courses for general knowledge or for spare-time interests. Women were more likely than men to take courses to expand their social horizons or to get away from daily routine.
- (8) Adults seemed to prefer formal methods of study over informal ones; persons of middle socio-economic circumstances were more likely to prefer formal classroom work than those in lower positions.
- (9) Reasons given for continuing their education were:
 - 33 per cent preparation for a new job
 - 30 per cent an interpersonal influence

- 20 per cent additional training for the
 present job
- 10 per cent change in family status or
 composition
- (10) Many who enrolled indicated some degree of personal dissatisfaction. 10

In one summary sentence, Johnstone and Rivera identified the adult student as "young, urbane, and fairly well-educated." 11

The University of Wisconsin in a recent (1967) brochure about A I M, its Articulated Instructional Media program, reported some statistics on its students who are extension students—both graduates and undergraduates who are on campus for short periods only:

Richard Christie, coordinator of counseling, averaged out the bald statistics to come up with a representative student profile. By this yardstick, the "average" A I M student is 35 years old with a full-time occupation (either as family breadwinner or busy housewife and mother). He, or she (half the students are housewives), is the parent of three children under 15 and has a family income of \$6,500. In several cases both husband and wife are A I M students, and in all cases the greatest contributing factors to a student's success are the encouragement and enthusiasm of his or her spouse.

¹⁰Ibid., pp. 1-22.

^{11&}lt;u>Ibid</u>., p. 19.

The average A I M student doesn't turn to education because he's bored. He genuinely seeks a higher education, having missed out when younger because of marriage, military service or economic hardship.

Occupations vary so greatly there is no "average." An A I M student might be a mailman or a city comptroller; a chancellor's wife or a barmaid; a designing engineer or a logger. About half have had one to three semesters of college. 12

The most closely related study found in the literature is that of Alan B. Knox on Adult College Students at the University College of Syracuse University. This is an exploratory study of the characteristics of part-time students attending University College, the Syracuse Program of the adult education division of Syracuse University, for credit courses in 1956. It did not include part-time adult students who were enrolled in other programs offered by University College. Contained in the study were the personal, occupational, motivational, and educational characteristics of the group.

Knox suggested that comparative clientele analyses would be helpful in developing a professional body of

¹² Articulated Instructional Media Newsletter (Madison, Wisconsin: The University of Wisconsin University Extension Articulated Instructional Media Program, June, 1967), p. 1.

¹³Alan B. Knox, A Summary Report on Adult College Students (Syracuse, New York: University College Adult Education Division of Syracuse University, 1959), p. 11.

knowledge about university adult college programs. According to Knox, "Few published research studies have been conducted in the area of adult education clientele analysis, and none of these have dealt with college students." 14

Some findings by Knox include:

In terms of personal characteristics, a majority of the part-time adult college students were men, a majority were between twenty-five and forty-five years of age, a majority were married, and a majority resided in the city. . . . Almost all of the students were employed full-time. When given an opportunity to state in their own words why they were attending, onequarter of the students indicated that they wished to obtain a degree, one-fifth listed increased job competence as their reason, and one-eighth gave a combination of the above two reasons. . . . When given an opportunity to select their first, second, and third choices from eighteen reasons for attending adult college classes, threequarters selected a vocational reason as their first choice and one-quarter selected a cultural reason. . . . In their second and third choices of reasons for attending, students selected significantly more cultural and social reasons. . . . Half of the students received educational financial aid while attending adult college classes, one-quarter receiving the "G.I.Bill," onetenth being reimbursed by their employer and one-tenth receiving remitted fees from the University. 15

Older students tended to be married and have

^{14 &}lt;u>Ibid</u>., p. 1.

¹⁵Ibid., p. 4.

grown children, have higher status occupations and a higher level of education, and select less vocationally oriented courses. 16

The distribution of credit students produced a positively skewed curve with a majority of the students between twenty-five and thirty-five. 17

The study, based on part-time students enrolled in an evening division only, including both undergraduates and graduates, matriculated and non-matriculated, degree and non-degree students, also concluded that the occupational levels of the students were higher than those of the general population; that older students had attained a higher status in their occupational, educational, and family lives than the younger students, and that, therefore, the purpose of the older students in continuing their education was not likely to be a vocational reason. 18

While there has been little published research about adult undergraduates, the following studies are in progress and promise to add to the information now available.

Nancy K. Schlossberg of Wayne State University has begun a study in the area of role activity and particularly worker role activity.

¹⁶ <u>Ibid</u>., p. 12.

¹⁷ Ibid.

^{18 &}lt;u>Ibid</u>., pp. 13-14.

The subjects of my study are men, 35 or over, who are in the process of change and are currently enrolled in an undergraduate program at Wayne State University. They are proving the thesis that one's destiny can be shaped and reshaped, even after the age when such change may be seen by others as inappropriate or impossible. These subjects can provide us with insights into the uncertainties, ambivalences, and the stresses and strengths experienced by an adult going against the main stream. 19

Fred Harvey Harrington, President of the University of Wisconsin, is currently preparing a special study on "The Role of Adult Education in the University" under a Carnegie Corporation grant in collaboration with Donald R. McNeil, Chancellor of University Extension at the University of Wisconsin. President Harrington has stressed the need for the identification of people in the community who need continuing education. 20

He believes that . . . political and educational leaders are coming to realize that it is not enough to educate the young - that our nation cannot prosper if we do not teach grown-ups as well. There have always been a few persons who have made this point. Now

Nancy K. Schlossberg, "Adult Development: Research and Practice," ADGA Newsletter (Detroit, Michigan: Association for the Developmental Guidance of Adults, October, 1967), p. 2.

Charles O. Ryan (eds.), Designing Education for the Future, No. 2, Implications for Education of Prospective Changes in Society (New York: Citation Press, 1967), pp. 135-140.

there are many; and we can say with confidence that adult and continuing education are coming into their own. We can say further that educational planners can no longer afford to neglect this field. They must give it their attention as they assess the needs and opportunities of the next two decades. 21

Summary

A summary of research which is somewhat similar to the present study, though not of adult undergraduates, it is recognized that adults have distinctive characteristics, such as wider experience, deeper emotional reactions, less flexibility, lower reaction rate and complex motivation; adults going or returning for additional education seem to need information and orientation, "aid" courses, reassurance, an identifiable friend or authority, and flexible arrangements, times, programs and evaluations; the adult group is heterogeneous; its purposes for acquiring more education include vocational, cultural, social, leisure reasons; many are planning to be teachers; there are more males than females; most of the adults are married; the majority are 25 to 45 years of age; most are working; they tend to have average or above incomes; they work at a variety of jobs, desire a degree, are encouraged by their families; they may need financial aid; their education was interrupted by marriage, military

²¹Ibid., p. 129.

service or lack of funds. More females than males found lack of time an important factor in continuing their education.

This information can be compared with that found by Johnstone and Rivera about the population at large engaged in study in a variety of facilities, not limited to colleges and universities: the majority was under 40; equal numbers of men and women were involved; the group was more educated than the general population; the majority were white collar workers; incomes were at least average; they came from outlying areas or suburbs; their reasons for more education included occupational, informational, social and leisure; their preference was for formal study, and many expressed some dissatisfaction.

Some comparisons of the findings of these studies with the findings of the present study will be made in Chapter IV.

CHAPTER III

ANALYSIS OF DATA

The data assembled on characteristics and needs of adult undergraduates at a particular university at a specified time are presented in Chapter III. The findings can be used as a basis for program planning for adult undergraduates at Michigan State University and for adult undergraduates in similar educational institutions.

Because there is presently an emphasis on adult education for females, the population studied was divided into sub-groups of males and females. Differences between the characteristics and needs of the male and female groups will be detailed. On the hypothesis that age may make a difference in needs, several investigative categories were studied by age groups. Some noteworthy comparisons will be mentioned. Complete tables on which the findings are based may be found in the Student Affairs Office, University College, Michigan State University.

The study will be reported in these categories:

- (1) number of adults involved, (2) personal characteristics,
- (3) family background parents and siblings, and spouse,
- (4) educational characteristics, (5) vocational information, and (6) needs.

I. NUMBER OF ADULTS

This study was made of 494 adult undergraduates. approximately 45 per cent of those identified and included in the adult category in the fall of 1966 at Michigan State University. Of the 1,159 who were originally identified as 26 years of age or over and undergraduates, 46 were listed with foreign addresses and were not mailed questionnaires, and 23 letters were returned by the post office-address unknown. Thus, the final number of students sent questionnaires was 1,090. There were 520 respondents: two letters were written instead of answering the questionnaires; three individuals responded in person, and one response arrived too late to process, making a total of 525 answers, or 48.16 per cent of 1,090. It was indicated in Chapter I, p. 23, that some of the potential respondents were among the 1,548 who were graduated fall and winter terms.

Of the 520 questionnaires completed, 19 were not included in the final study: 15 identified themselves as having graduated since fall, 1966; one junior overlooked several pages of his questionnaire; one response arrived too late to include, and two respondents identified themselves as somewhat less than twenty-six years of age.

Of the 501 remaining respondents six were students who had received one bachelor's degree but were returning for additional undergraduate work; one response was lost

in the mechanical processes; therefore, the final computer study was of 494 responses.

It should be emphasized that all tables which follow are based on 494 responses unless it is specified that a particular table is based on that portion of 494 students who cared to respond to a particular inquiry. The questionnaire stated: "If there are items which you prefer not to answer, omit them." It should also be emphasized that students could check more than one response to a question.

Seven hundred eleven of the 1,159 originally identified were males (61 per cent); 448 were females (39 per cent). Of the 494 in the final study, 250 were males (51 per cent) and 244 were females (49 per cent). It is possible that the difference in proportion may be accounted for, in part, by these factors: most of the foreign students eliminated were males, home addresses of males changed more frequently and were lost, and, perhaps, proportionately more females than males responded to the questionnaire. It is significant to the University that more than eleven hundred adult undergraduates were identified in the total student body.

II. PERSONAL CHARACTERISTICS

Included in this section of the study are sex, age,
marital status, place of birth (size and region), region
of elementary education, income level, satisfaction expressed

with present life and job, reading habits, and activities.

Sex

As indicated in Section 1, the study included 250 adult males (51 per cent of the total) and 244 adult females (49 per cent of the total). From a review of literature in Chapter II, it was evident that the number of males who pursue continuing education (not just at the undergraduate level) seems to be greater than the number of females who continue.

Age

Table 1 indicates the ages of adult undergraduates. Five groupings were chosen rather than asking individuals for specific ages: 26-31, 32-37, 38-43, 44-50, and 51 or older. Only three individuals did not report their ages. Of the adults, 53.44 per cent (more than half) were in the 26-31 age category; 74.70 per cent (almost three-fourths) were 26-37 (a combination of groups one and two); 24.70 per cent (one-fourth) were 38 or older (groups three, four, and five). The female group was significantly older than the male group with 38.53 per cent of the females 38 or older compared with 11.20 per cent of the males. Differences in ages of male and female adult undergraduates point to the variance in life patterns of males and females; women often interrupt their education for marriage and family.

The distribution by age of adult undergraduates is shown

Table 1. Ages of Adult Undergraduates

Age	Ma	1e	Fem	Female	To	Tota1
Groups	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
26-31	188	75.20	76	31.15	264	53.44
32-37	34	13.60	7.1	29.10	105	21,26
38-43	14	5.60	20	20.49	64	12.96
44-50	11	4.40	28	11.48	39	7.89
51 or Older	8	1.20	16	6.56	19	3.85
				No response	23	99'

graphically in Figure 1. It would appear that the large numbers of adult undergraduates fall in the 26-37 age range; it would appear, also, that the female group is older than the male group.

Race

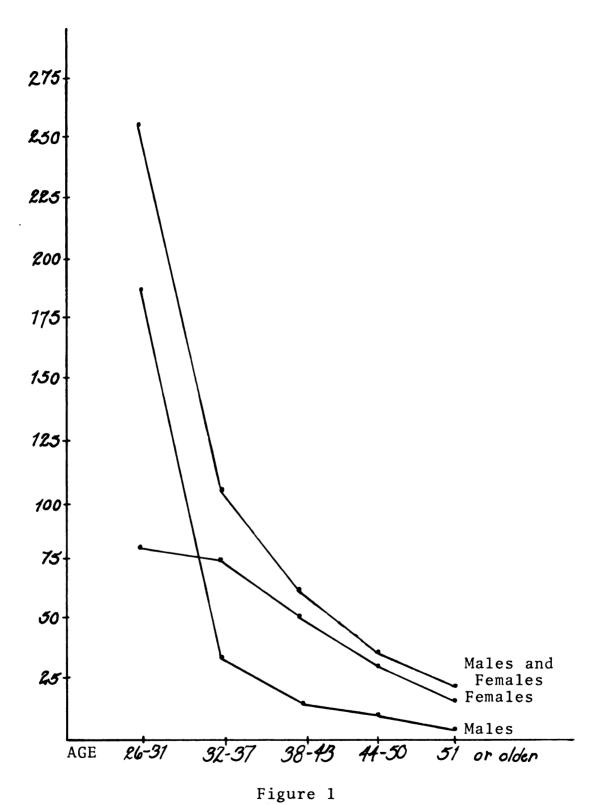
The proportion of white and Negro students is shown in Table 2. The adult population was largely white, 95.95 per cent, as compared with 3.04 per cent Negro. Since those who listed foreign countries as home addresses were excluded from the study, other figures are not included. It would appear that very few adult Negroes are coming to the University for undergraduate education.

Marital Status

Table 3 shows that 75.91 per cent (slightly more than three-fourths) of the adults were married. There were more single males, 23.60 per cent, than single females, 9.43 per cent. More females were divorced or had lost their spouses. That there were more single males is undoubtedly related to the fact that the males were a younger group. That there were more widows may well be related to the fact that the female group was older than the male group. See Table 1, page 43.

Place of Birth (Size)

Table 4 indicates that of the adult undergraduate students, 69.43 per cent were born in small cities, small



Age Profile of Adult Undergraduates

Table 2. Race

	Ma	.1e	Female	ale	To	Total
Race	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
White	241	96.40	233	95.49	474	95.95
Negro	9	2.40	6	3.69	15	3.04
				No response	S	1.01

Table 3. Marital Status

Marita1	Ma J	1e	Female	ale	To	Total
Status	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Single	59	23.60	23	9.43	82	16,60
Married	186	74.40	189	77.46	375	75.91
Divorced	7	. 80	20	8.20	22	4.45
Separated	83	1.20	4	1,64	7	1.42
Spouse Deceased	0		8	3.28	œ	1,62

Table 4. Place of Birth (Size)

Place	Mal Number	le Percentage (of 250)	Female Number P	Percentage (of 244)	To	Total Percentage (of 494)
Farm or Rural	55	22,00	58	23.77	113	22.87
Small Town (Under 10,000)	41	16,40	52	21.31	93	18.83
Small City (10,001- 150,000)	7.7	30,80	09	24.59	137	27.73
Medium City (150,001. 500,000)	32	12.80	35	14.34	67	13.56
Large City (Over 500,000) 45	45	18,00	39	15.98	84	17.00

towns, or rural areas (all under 150,000 population). Only 30.56 per cent were born in areas of over 150,000 population (medium large cities). Differences in size of place of birth between males and females were insignificant.

Place of Birth (Region)

As shown in Table 5, 77.53 per cent (more than three-fourths) of the adult undergraduate students were born in the midwest. From the east were 9.31 per cent (almost one-tenth). Differences in region of birth between men and women were small. Educational services at this institution, thus, are largely for midwesterners and, probably, largely for Michiganders.

Region of Elementary Education

Table 6 shows that 79.35 per cent (almost four-fifths), of the adult undergraduate students obtained most of their elementary education in the midwest. The east was the locale for 8.70 per cent (less than one-tenth); very low percentages mentioned west or south or a combination of these and education abroad. There was little difference between males and females in region of elementary education. Thus, the group studied was, for the most part, born and educated in the midwest.

Students' Personal Income Levels

In Table 7 incomes were divided into six levels: \$1,000-\$3,000; \$3,001-\$6,000; \$6,001-\$9,000; \$9,001-\$12,000;

Table 5. Place of Birth (Region)

Birth Number	101	0	Female	ale	To	Total
		rercentage (of 250)	Number	rercentage (of 244)	Number	rercentage (of 494)
		8.80	24	9.84	46	9.31
Midwest 200		80.00	183	75.00	383	77.53
West 7		2.80	œ	3.28	15	3.04
South 6		2,40	14	5.74	20	4.05
Other 15		00.9	15	6.15	30	6.07

Table 6. Region of Elementary Education

	Tota	tal	Female	ale	To	Total
Region	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
East	21	8.40	22	9.02	43	8.70
Midwest	201	80,40	191	78.28	392	79.35
West	7	2.80	œ	3.28	15	3.04
South	2	2.00	10	4.10	15	3.04
Other	14	5,60	12	4.92	26	5,26
				No response	3	09.

Table 7, Students' Income Levels

Income	Male	1e	Female	ale	To	Total
Level	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
\$1,000- \$3,000	20	20.00	37	15.16	87	17.61
\$3,000- \$6,000	51	20,40	32	13.11	83	16.80
\$6,001- \$9,000	28	23,20	25	10.25	83	16.80
\$9,001. \$12,000	16	6.40	0	0	16	3.24
\$12,001. \$15,000	5	2.00	H	.41	9	1.21
Above \$15,000	7	. 80	-	. 41	3	, 61
Totals	182	72.80	96	39,34	278**	56.27

278 students reported personal incomes.

\$12,001-\$15,000; above \$15,000. About 73 per cent of the males and 40 per cent of the females reported incomes. first three income levels of adult undergraduate males and females were reversed. More males earned \$6,001-\$9,000, next \$3,001-\$6,000, and third \$1,000-\$3,000; more females earned the third figure, then the middle figure, and fewest the highest figure. Factors to be considered in interpreting these figures are: while attending the University men are more likely to work full time than women; females tend to have lower status jobs and lower pay; more females may have support from spouses, and more males receive monthly government stipends. Only twenty-five males and females reported incomes above \$9,000. In Table 7 it appears that more than half (56.21 per cent) of the adult students had personal incomes while attending the University, and that the income levels tended to be modest. Only 278 reported their income levels contrasting with information in Table 53, page 136, where 329 (66.60 per cent) reported working full time, part time or occasionally. Not all of the students may have been working at the time they answered the questionnaire; not all of the students may have reported their incomes.

Satisfaction with Present Life

In response to the general question "Are you satisfied with your present life," 78.95 per cent of the total 494

adults were either very satisfied or moderately satisfied with their present lives, as indicated in Table 8. If the 478 who responded to the question are used as a base, then 81.58 per cent were in the very or moderately satisfied class. Only 3.55 per cent (17 students) of the 478 were very dissatisfied. Adult females appeared to be more satisfied than adult males. Of the 478 answering this question, 55.31 per cent (130) of the females were very satisfied with their present lives compared with 34.15 per cent (83) of the males; indicating satisfaction (very or moderately) were 85.95 per cent of the females and 77.36 per cent of the males. It appears that dissatisfaction with life in the adult group is not a significant reason for their seeking additional education.

Satisfaction with Present Job

In Table 9, two hundred sixty-five, 53.64 per cent of the 494 adults, reported themselves employed at the time they responded to the questionnaire. One hundred ninety-six, 73.95 per cent of the 265, were very or moderately satisfied with their jobs. Of the 265, 64 per cent were males, 36 per cent were females. Of the males, 72 per cent were very or moderately satisfied with their present jobs; of the females 78 per cent were very or moderately satisfied with their current jobs; almost 11 per cent of males were very dissatisfied, however, as

Table 8. Satisfaction With Present Life

Degree of Satisfaction	No.	Male Percent- age (of 250)	Percent- age (of 243)	No.	Female Percent-Percent- age age (of 244) (of 235)	Female Percent-Percent- age age (of 244) (of 235)	No.	Total Percent- age (of 494)	Percent- age (of 478)
Very Satisfied	83	33.20	34.15	130	53.28	55.31	213	43.12	44.56
Moderately Satisfied	105	42.00	43.21	72	29.51	30.64	177	35.83	37.02
A Little Dissatisfied	46	18.40	18.93	25	10.25	10.63	71	14.37	14.85
Very Dissatisfied	6	3.60	3.70	∞	3.28	3.40	17	3.44	3.55
Totals	243	97.20	66.66	235	96.32	76.96	478	96.76	86.66
					N	No response	16	3.24	

Table 9. Satisfaction With Present Job

Degree of Satisfaction	No.	Male Percentage (of 250)	e t- Percent- age 0) (of 169)	No.	Female Percent- Percent age age (of 244) (of 96)	le Percent- age (of 96)	o N	Total Percent- age (of 494)	Total ercent- Percent- age (of 494) (of 265)
Very Satisfied	64	25.60	37.87	43	17.62	44.79	107	21.66	40.37
Moderately Satisfied	57	22.80	33.72	32	13.11	33.33	89	18.02	33.58
A Little Dissatisfied	30	12.00	17.75	17	6.97	17.70	47	9.51	17.73
Very Dissatisfied	18	7.20	10.65	4	1.64	4.16	22	4.45	8.30
Totals	169*	67.60	66.66	* 96	39.34	86.66	265*	53.64	86.66
			Not working or	ing o	r not responding	onding	229	46.36	

*One hundred sixty-nine males are 63.77 per cent of 265 responses; ninety-six females are 36.23 of 265 responses.

compared with 4 per cent of the females. The larger percentage of males indicating some job dissatisfaction correlates with the reasons some males list for returning to the University: improvement of income potential and preparing for a better job. See pages 105-106.

Reading Habits

Figures in Table 10 show that most of the adult students read newspapers (90.28 per cent) and magazines (82.19 per cent) regularly; fewer read books other than texts regularly (65.99 per cent). Females reported reading more books than males; males read slightly more magazines than females. It would appear that the adult group reads widely.

<u>Activities</u>

In Table 11 it is shown that adults participated most widely in church (51.01 per cent) and recreational (43.32 per cent) activities. Females participated more widely in church, club, community, volunteer and cultural activities, whereas males participated more widely in recreational activities. Of the females, 62.30 per cent indicated church activity as compared with 40 per cent of the males. Differences in life roles of males and females as presently conceived are pointed up in this activity analysis.

Table 10. Reading Habits

Media (Read	Male	1e	Female	a1e	To	Total
Regularly)	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Newspapers	221	88.40	225	92.21	446	90.28
Magazines	209	83.60	197	80.74	406	82.19
Books (Other Than Texts)	134	53.60	192	78.69	326	62.99

Table 11. Activities

	Ma1]e	Female	ale	Tot	Total
Activities	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Church	100	40.00	152	62.30	252	51.01
Club	43	17.20	64	26.23	107	21.66
Community	28	11.20	54	22.13	8 2	16.60
Volunteer	13	5.20	47	19.26	09	12.15
Cultural	21	8.40	59	24.18	80	16.19
Recreational	116	46.40	86	40.16	214	43.32
Others	5	2.00	10	4.10	15	3.04

III. FAMILY BACKGROUND

This section will delineate information regarding the backgrounds of adult undergraduate students: A. father, mother, siblings; B. spouse and dependents.

A. Data on Parents and Siblings Father's Level of Education

The level of education of the fathers of adult undergraduates shown in Table 12 was similar for both males and females: 28.54 per cent of the fathers attended but did not graduate from high school; 25.10 per cent completed eighth grade or less (some had specialized or technical training); 21.86 per cent completed high school; 11.54 per cent had college degrees; 10.53 per cent had some college but did not graduate. Approximately three-fourths (72.47 per cent) of the fathers, therefore, had education beyond elementary school (sum of the first four items); almost one-fourth (22.07 per cent) had education beyond high school (sum of items three and four). It would appear that the adult undergraduates came from homes where the fathers were mostly non-college graduates.

Mother's Level of Education

In Table 13 adult undergraduates reported that 19.64 per cent of their mothers had an elementary school education or less or possibly some technical education; 30.57 per cent of their mothers had attended high school but had not

Table 12. Father's Level of Education

Level of	Mal	1e	Female	ale	To	Total
Education	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Attended High School But Did Not Complete	7.4	29.60	67	27.46	141	28.54
Completed High School	57	22.80	51	20.90	108	21.86
Attended College But Did Not Graduate	22	8.80	30	12.30	52	10.53
Has College Degree	27	10.80	30	12.30	57	11.54
Other (Mostly Eighth Grade or Less)	64	25.60	9	24.59	124	25.10
				No response	12	2.42

Table 13. Mother's Level of Education

Level of	Ma16	1e	Female	a1e	To	Total
4	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Attended High School But Did Not Finish	7.0	28.00	81	33.20	151	30.57
Completed High School	& &	35.20	54	22.13	142	28.74
Attended College But Did Not Finish	20	8.00	28	11.48	48	9.72
Completed College	21	8.40	26	10.66	47	9.51
Other (Mostly Eighth Grade or Less)	48	19.20	49	20.08	97	19.64
				No response	6	1.82

completed it; 28.74 per cent of their mothers had completed high school; 9.72 per cent of their mothers had attended but not finished college; 9.51 per cent of their mothers had completed college. A higher percentage of the mothers of male students had completed high school; higher percentages of the mothers of female students had attended some high school but did not finish or had attended or completed college. Almost four-fifths (78.54 per cent) of the mothers, therefore, had education beyond elementary school (sum of first four items); almost one-fifth (19.23 per cent) had education beyond high school (sum of items three and four). In comparing Table 13 with Table 12, it is evident that there is a marked similarity in the levels of education of the fathers and mothers of these students. A small percentage more of the mothers had education beyond elementary school; a small percentage more of the fathers had education beyond high school. The mothers of some of the adult students lived in a period when a college education for females was sometimes considered "unnecessary" or even "frivolous."

Fathers' Occupations

To study fathers' occupations, the following classification for occupations was used: (1) manual worker, (2) skilled worker, (3) business owner, (4) farm owner or operator, (5) executive or manager, (6) office, clerical or sales

worker, (7) professional worker, (8) service worker. The most frequently mentioned occupational backgrounds of fathers were: skilled laborer (23.89 per cent), business owner (14.37 per cent), executive or manager (14.17 per cent), farm owner or operator (12.96 per cent), and manual worker (12.75 per cent). The occupations of the fathers of the males and of the females were similar. Four per cent more of the males came from homes where the fathers were manual workers. Evidence in Table 14 suggests that the adult undergraduates under study tended to come from middle-class homes judged by the occupations of their fathers.

Mother's Work Outside Home

In Table 15 the adult undergraduates indicated that 42.31 per cent of their mothers had not worked outside the home at any time. Mothers had worked most frequently during or after the student's college years (51.42 per cent) or during the student's high school years (34.01 per cent). Mothers had worked least frequently when their children were pre-schoolers (12.35 per cent). Differences reported in the working patterns of their mothers by male and female students were insignificant. The figures on mothers working outside the home contrast rather sharply with the intentions of the females in the adult group under study. In Table 58 (page 142), 87 per cent of the females indicated that they planned to work in the future. However, 9.43 per

Table 14. Fathers' Occupations

occupation	Mal Number	le Percentage (of 250)	Female Number P	ale Percentage (of 244)	Tota Number	al Percentage (of 494)
Manual Worker (No Special Training)	37	14.80	26	10.66	63	12.75
Skilled Laborer	64	25.60	54	22.13	118	23.89
Business Owner	29	11.60	42	17.21	71	14.37
Farm Owner or Operator	31	12.40	33	13.52	64	12.96
Executive or Manager	36	14.40	34	13.93	7.0	14.17
Office, Cleri- cal and Sales Worker	18	7.20	19	7.79	37	7.49
Professional Worker	23	9.20	22	9.02	45	9.11
Service Worker	6	3.60	∞	3.28	17	3.44
Totals	247	98.80	238	97.54	485	98.18
				No response	6	1.82

Table 15. Mother's Work Outside Home

Mother Worked	Ma Number	Male Percentage (of 250)	Female Number P	ale Percentage (of 244)	To	Total Percentage (of 494)
While You Were Pre-School	38	15.20	23	9.42	61	12.35
During Your Elementary School Edu- cation	8 23	23.20	49	20.08	107	21.66
During Your High School Education	98	34.40	82	33.61	168	34.01
During Your College Education	26	22.40	63	25.82	119	24.09
After 4 Above or Presently Working	89	27.20	67	27.46	135	27.33
Has Never Worked Out- side the Home	86	39.20	111	45.49	209	42.31

cent of the group were single, and not all of the married adults necessarily had children. There is, however, an accelerating trend for women to work outside the home.

Income Level of Parents

Table 16 shows that the adult undergraduates believed their parents had average, as opposed to above- or below-average, incomes in 58.20 per cent of the families. A few more, 26.11 per cent, of parental incomes were believed below-average than were indicated as above average, 20.65 per cent. An equal percentage of males and females reported average parental income; a few more females than males suggested a below-average parental income. (The categories below were selected rather than specific income figures since it is unlikely that children or young adults would know the exact incomes of their parents.)

Influence of Parent's Occupation on Student's Career Choice

As shown in Table 17, 82.59 per cent (items two and three) of the adult undergraduates believed that their parents' occupations had little or no influence on their own choices of careers. Of the 13.56 per cent who perceived an influence, some believed it was positive; others believed it was negative.

Number of Siblings

In Table 18, in order of frequencies, adults reported

Table 16. Income Level of Parents

Income	Ma]	1e	Female	ale	Tot	Total
Level	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Below Average	59	23.60	7.0	28.69	129	26.11
Average	126	50.40	122	50.00	248	58.20
Above Average	58	23.20	44	18.03	102	20.65
Don't Know	2	1.20	4	1.64	7	1.42
Totals	246	98.40	240	98.36	486	98.38
				No response	∞	1.61

Table 17. Influence of Parent's Occupation on Student's Career Choice

	Number	e Percentage	Female Number P	ale Percentage	To. Number	Total Percentage
		(of 250)		(of 244)		(of 494)
Decidedly 46		18.40	21	8.61	67	13.56
Very Little 48		19.20	48	19.67	96	19.43
Not At All 145		58.00	167	68.44	312	63.16
Totals 239		95.60	236	96.72	475	96.15
				No response	19	3.84

Table 18. Number of Siblings

Number of	Mal	1e	Female	ale	To	Total
Siblings	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
None	23	9.20	33	13.52	56	11.34
One	57	22.80	29	27.46	124	25.10
Тwo	53	21.20	52	21.31	105	21.26
Three	41	16.40	39	15.98	80	16.19
Four or More	7.2	28.80	49	20.08	121	24.49
				No response	8	1.61

one, four or more, or two sisters and brothers, with three reported almost as frequently. Only 11.34 per cent indicated no siblings. More male adults had four or more siblings. The largest number of adult students reported one sister or brother; almost as many reported four or more. That almost one-fourth of the adults came from large families may have contributed to their delay in completing college.

Education of Siblings

Of the siblings of high school or college age reported by adult undergraduates, 1,092 (73.68 per cent) had not gone to college while 390 (26.32 per cent) had gone to college or were in college. Since no attempt was made to determine the number of siblings in high school or at a lower educational level at the time of the study, conclusions from Table 19 should be made with caution.

B. Data on Spouse

Educational Level of Spouse

Responses indicated in Table 20 showed that 52.43 per cent of the spouses had some college education (total of levels four, five, and six); 24.29 per cent had a high school education or less (total of levels one, two, and three), and 8.30 per cent had technical, commercial, nursing, or other special education. Husbands of the

Table 19. Education of Siblings

Amount of Education	Males Reporting	Number of Siblings Reported	Females Reporting	Number of Siblings Reported	Total Reporting	Total Number of Siblings Reported
Did Not Complete High School	42	83	36	69	7.8	152)
Completed High School	151	330	120	283	271	(613) (1092)
Did Not Go To College	91	189	63	138	154	327)
Are In College	46	57	32	36	7.8	93)
Are Graduated From College	69	103	74	66	143	202) 390
Have Done Gradu- ate Work	32	38	40	57	72	95)
Totals	431	800	365	682	196	1482

Table 20. Educational Level of Spouse

Educational Level	Mal Number	le Percentage (of 250)	Female Number P	Percentage (of 244)	Total Number P	tal Percentage (of 494)
Finished Ele- mentary School	2	08.	2	.82	4	.81
Began But Did Not Finish High School	∞	3.20	12	4.92	20	4.05
Completed High School	61	24.40	35	14.34	96	19.43
Began But Did Not Finish College	55	22.00	26	10.66	81	16.40
Was Graduated From College	28	11.20	31	12.70	59	11.94
Has Done Gradu- ate Work	- 26	10.40	93	38.11	119	24.09
Other (Technical, Commercia Nursing, etc.)	a1,	10.00	16	6.54	41	8.30
Totals	205	82.00	215	88.39	420	85.02

female students had done more graduate work (38.11 per cent versus 10.40 per cent); wives of the male students had completed high school more frequently (24.40 per cent versus 14.34 per cent) and had begun but not finished college more frequently (22 per cent versus 10.66 per cent). Wives of male students tend to help their husbands finish college as undergraduates or graduates and then resume their own education at a later date.

(In Table 3, page 47, 59 males and 23 females indicated they were single. Table 20 would indicate 45 single males and 29 single females. Discrepancies may be due, in part, to some having checked more than one category in Table 20 to the way an individual regards his relationship to a former spouse, or to the failure of some to respond to the question.)

Occupation of Spouse

Of the 494 adults, 76.92 per cent classified the occupations of their spouses as reported in Table 21. The highest percentage, 30.16 per cent, were in professional work; in second place were 14.98 per cent in office, clerical and sales work; in third place were 12.15 per cent who were identified as housewives. Following these in small percentages were: executive or manager, skilled laborer, service worker, business owner, manual worker, and farm owner or operator.

Table 21. Occupation of Spouse

Occupation	Mal Number	es Percentage (of 250)	Females Number P	les Percentage (of 244)	Totals Number P	nls Percentage (of 494)
Manual Worker (No Special Training)	1	. 40	9	2.44	7	1.42
Skilled Laborer	4	1.60	15	6.15	19	3.85
Business Owner	7	08.	10	4.10	12	2.43
Farm Owner or Operator	0		4	1.64	4	.81
Executive or Manager	9	2.40	34	13.93	40	6.10
Office, Cleri- cal, Sales Work	55	22.00	19	7.79	74	14.98
Professional Work	49	19.60	100	40.98	149	30.16
Service Work	∞	3.20	7	2.87	15	3.04
Housewife	09	24.00	0		09	12.15
Totals	185	74.00	195	79.92	380	76.92
				No response	114	23.07

*Other students were probably not married or did not respond.

To picture occupational differences of males and females, the number reporting will be used as a base. Not included in Table 21 are these percentages: of the 380 reported, 185 were female spouses (48.68 per cent), 195 were male spouses (51.31 per cent). Of this number, the adult, undergraduate, married males indicated their wives were housewives (32 per cent), in professional work (30 per cent), or office, clerical or sales work (26 per cent). The females indicated their husbands were in professional work (51 per cent), executive or managerial (17 per cent), office, clerical and sales work (10 per cent), or skilled labor (8 per cent).

This data reflects the fact that a number of wives work at clerical and secretarial jobs, nursing, and teaching while their husbands are in school. It also correlates with the fact that the adult undergraduate females are older than the males and have spouses who may be well established in their occupations. Furthermore, some of the male spouses may have been graduate assistants which would give them a professional rank. (Figures in Table 21 indicate 76.92 per cent of the students having spouses. These are comparable with figures in Table 3, page 47, indicating 75.91 per cent were married.)

Spouse's Income Level

To study the income levels of student spouses, five categories were used: (1) \$5,000 or under, (2) \$5,001-

\$10,000, (3) \$10,001-\$15,000, (4) \$15,001-\$20,000, (5) more than \$20,000. Reporting working spouses in Table 22 were 334 of the 494 adults, 192 females and 142 males. The 142 males reported that their spouse's income levels were one and two, between \$5,000 or less and \$10,000; the 192 females indicated that their spouse's incomes ranged through all five levels, with most of them in levels two and three or between \$5,000 or less and \$15,000. It appears that the income levels of husbands of students are higher than those of wives of students. This agrees with the higher status jobs reported in Table 21, page 75. The differential may be explained, in part, by these factors: the males and their wives were younger than the females and their husbands and thus had not reached equal income potentials; many young wives worked part-time or at low-paying jobs while their husbands attended the University, and women, generally, are paid lower salaries than men.

Number of Dependents

In Table 23 it appears that the dependents of the male students were younger than the dependents of the female students. While 50.74 per cent of the males reported their children in the 1-5 age category, only 20.84 per cent of the females reported their children were in this category; only 10.94 per cent of the males reported their children were 14 or older (categories three and four) while 33.54 per

Table 22. Spouse's Income Level

Income	Males	es Percentage (of 494)	Females Number P	les Percentage (of 494)	Totals Number P	als Percentage (of 494)
\$5,000 or Under	91	18.42	18	3.64	109	22.06
\$5,001- \$10,000	51	10.32	97	19,64	148	29.96
\$10,001- \$15,000	0		52	10.53	52	10.53
\$15,001- \$20,000	0		17	3,44	17	3.44
More Than \$20,000	0		∞	1.62	∞	1.62
Totals	142	28.74	192	38.87	334	67.61
				No response	160*	32.39

* Includes those not married and not responding.

Table 23. Number of Dependents

	Males Repor dents in Catego	Reporting lts in Varior Categories	ting Depen- Various ries	Females pender Ca	Females Reporting De- pendents in Various Categories	ng De- rious	Males a porting	Males and Females Re- porting Dependents in Various Categories	ss Re- nts in ries
Number of Dependents	Number	Per- centage (of 201)	Number of De- pen- dents	Number	Per- centage (of 307)	Number of De- pen- dents	Number	Per- centage (of 508)	Number of De- pen- dents
1 to 5 Years of Age	102	50.74	153	64	20.84	94	166	32.74	247
6 to 13 Years	29	33,33	114	135	43.97	278	201	39.64	392
14 to 17 Years	14	96.9	21	99	21.49	94	80	15.77	115
18 or Older	∞	3.98	14	37	12.05	89	45	8.87	82
Other Dependents Totals	$\frac{10}{201}$	4.97	$\frac{10}{312}$	307	$\frac{1.62}{99.97}$	6 540	15	2.95	16 852

cent of the females reported their children were 14 or older (categories three and four). This again correlates with the fact that the females in the adult group were older than the males. An additional factor to be considered is that women tend to be younger than men when they have children. The greater number of children reported by females correlates with evidence in Table 3, page 47, that more females than males were or had been married.

Only 15 adults reported dependents other than children. Therefore, it can be assumed that only a small portion of the adults in the study were caring for parents, relatives or others.

Again, it should be stated that the data above are based on those who reported. Some may not have responded to the question.

IV. EDUCATIONAL CHARACTERISTICS

In this section both objective and subjective data regarding the educational characteristics of adult undergraduates will be reported.

Full-time and Part-time Students

That more adults were full-time students, 54.45 per cent, than were part-time, 44.94 per cent, is shown in Table 24. More males were full-time students, 67.60 per cent, while more females were part-time, 58.61 per cent.

Table 24. Full-Time and Part-Time Students

	Ma_]	1	Female	ale	To	Total
Full- and Part-Time	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Full-time	169	67.60	100	40.98	269	54.45
Part-time	79	31.60	143	58.61	222	44.94
				No response	3	09.

Attendance Plans

When asked if they planned to attend the University regularly, most (88.86 per cent) of adult students answered affirmatively: 91.20 per cent of the males and 86.48 per cent of the females. Table 25 shows the attendance plans of adults. Plans to attend regularly tend to agree with the plans of most students to get degrees as reported in Table 51, page 132.

Colleges in Which Adults Enrolled

The colleges in which the 489 responding adults enrolled varied widely for males and females, as indicated in Table 26. Two hundred forty-one women were in the traditional roles of education, arts and letters, no preference, social studies, and home economics. It is interesting to note that 6.15 per cent were enrolled in natural science. Males chose social science, business, agriculture, engineering and education, followed by natural science in sixth place, on the same choice level as females but a slightly higher percentage choosing it (7.20 to 6.15 per cent). Male choices fit the pattern of increasing interest in social usefulness with increasing age. It is interesting to note that 41 per cent of the females and 10 per cent of the males were in the field of education.

Table 25. Attendance Plans

Plans to	Ma	1e	Female	ale	To	Total
Attend Regularly	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Yes	228	91.20	211	86.48	439	88.86
No	18	7.20	29	11.89	47	9.51
				No response	∞	1.82

Table 26. Colleges in Which Adults Enrolled

Males	les		Fem	Females		T	Total	
Enrolled in	Number	rer- centage (of 250)	Enrolled in	Number	Per- centage (of 244)	Enrolled in	Number	Per- centage (of 494)
Social Science	59	23.60	Education	66	40.57	Education	123	24.90
Business	52	20.80	Arts and Letters	43	17.62	Social Science	82	16.60
Agriculture	33	13.20	No Prefer- ence	25	10.25	Business	28	11.74
Engineering	28	11.20	Social Science	23	9.43	Arts and Letters	57	11.54
Education	24	9.60	Home Economics	21	8.61	Natural Science	33	6.68
Natural Science	18	7.20	Natural Science	15	6.15	Agriculture	33	6.68
Arts and Letters	14	5.60	Communication Arts	7	2.87	No Prefer- ence	31	6.28
Communication Arts	1 12	4.80	Business	9	2.47	Engineering	28	5.67
No Prefer- ence	9	2.40	Veterinary Medicine	2	.82	Home Economics	21	4.25

Table 26. (Continued)

Ma	Males	,	Fel	Females	1	T	Tota1	1
Enrolled in	Number	Per- Number centage (of 250)	Per- Enrolled in Number centage (of 244)	Number		Fer- Enrolled in Number centage (of 494)	Number	Per- centage (of 494)
Veterinary Medicine	2	.80	Engineering	0		Communication Arts	n 19	3.85
Home Economics	0		Agriculture	0		Veterinary Medicine	4	.81
Totals	248			241			489	

Educational Level, Fall 1966

Table 27 shows that 74.08 per cent of the adults in the study were at the junior or senior levels; 20.85 per cent were freshmen and sophomores; 3.04 per cent failed to respond to their class standing, perhaps through uncertainty of credits necessary for class ranking. The high percentage of juniors and seniors is due, in part, to many returning drop-outs and many junior college and other transfer students. (The ten adults who reported being high school graduates or less fall term may have received G.E.D.'s - certificates of high school equivalency - or may have completed high school previous to the term.)

For New Students, Length of Time Since High School

Thirty-two males and thirty-eight females, a total of seventy adults, indicated in Table 28 that they were new University students having had no previous college experience prior to fall, 1966. The males had been out of high school for a lesser number of years than the females.

Twenty-three of the thirty-eight females reported that it had been more than sixteen years since they had been in high school.

Credits Earned Since Coming or Returning to the University

Table 29 indicates that 26.52 per cent of the group studied had earned 86 or more credits since coming or return-

Table 27. Educational Level, Fall 1966

Educational	Male	le Percentage	Female Number P	ale Percentage	ToNumber	Total Percentage
High School		(65. 10)		(447 10)		(+6+ 10)
Graduate or Less	4	1.60	9	2.45	10	2.02
Freshman	14	5.60	22	9.01	36	7.29
Sophomore	25	10.00	42	17.21	29	13.56
Junior	7.0	28.00	84	34.42	154	31.17
Senior	131	52.40	81	33.19	212	42.91
No Response	9	2.40	6	3.68	15	3.04

Table 28. For New Students, Length of Time Since High School

Years Since High School	Male Number	Female Number	Total Number
One - Three Years	2	1	3
Four to Six Years	3	1	4
Seven to Ten Years	12	6	18
Eleven to Fifteen Years	10	7	17
More Than Sixteen Years	5	23	28
Totals	32	38	70

Credits Earned Since Coming or Returning to the University Table 29.

	Mal	1e	Female	ale	ToT	Total
Credits Earned	Number		Number	Percentage (of 244)	Number	Percentage (of 494)
Less than 15	20	8.00	48	19.67	89	13.76
15 - 30	46	18.40	59	24.18	105	21.26
31 - 45	38	15.20	28	11.48	99	13.36
46 - 85	53	21.20	44	18.03	9.7	19.64
86 or More	7.7	30.80	54	22.13	131	26.52
				No response	27	5.46

ing to the University; 21.26 per cent had earned 15-30 credits; 19.64 per cent 46-85 credits; 13.77 per cent less than 15 credits; and 13.36 per cent 31-45 credits since coming or returning. About 48 per cent had earned one year or less of credit (45 credits or less); about 46 per cent had earned more than one year of credit. The seriousness of their purpose is corroborated by the number of credits earned by the adult students.

Number of Other Colleges or Universities Attended

Table 30 shows that 44.33 per cent (almost one half) of the adult students had attended one other college or university; 21.86 per cent (about one-fifth) had attended two others; 22.87 per cent (about one-fifth) had attended no others. Patterns for men and women were very similar. This table indicates the high number of adult undergraduates transferring credit from other universities and colleges.

Resources Used for Non-Credit Courses

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The most widely utilized facilities for non-credit courses used by this group of adults were: high school adult programs (23.68 per cent), the armed services (21.86 per cent), university evening college (16.40 per cent), business and industry (14.17 per cent), and commercial colleges (12.15 per cent). Facilities used by males and females differed widely (ranked most to least):

		_
		:
		i

Table 30. Number of Other Colleges or Universities Attended

Number of	Male	le Percentage	Female Number P	ale Percentage	Total	tal Percentage
3		(of 250)		(of 244)		(of 494)
None	56	22.40	57	23.36	113	22.87
One	109	43.60	110	45.08	219	44.33
Тwo	28	23.20	20	20.49	108	21.86
Three	20	8.00	16	95.9	36	7.29
More than Three	9	2,40	4	1.64	10	2.02
				No response	∞	1.61

Males

- 1. Armed services
- 2. Business and industry
- 3. High school adult programs
- 4. Evening colleges
- 5. Commercial colleges and trade schools

Females

- 1. High school adult programs
- 2. Evening colleges
- 3. Public lecture courses
- 4. Commercial colleges and trade schools
- 5. Private instruction

It would appear from Table 31 that adults are genuinely interested in learning whether they receive college credit or not. (Responses could be made to more than one item.)

Reasons for Not Going to College After High School

The most-named reasons listed by adults in Table 32 for not going on to college after high school were for the males: financial problems, military service, tired of going to school, school was not interesting, grades were not good, lack of self-confidence, and could get job desired without going on to school. For the females, significant reasons were: financial problems, desire to be married, lack of self-confidence, and could get job desired without going on to school. Military service and lack of interest in school were important factors for the males whereas desire to be married entered significantly for the females. For the combined groups, the most frequently named reasons were (1) financial problems, (2) military service, (3) tired of going to school, (4) school was not interesting, (5) lack of self-confidence, (6) desire to get married, (7) grades not good. Often a combination of

Table 31. Resources Used For Non-Credit Courses

38 32 32 32 13 es 105 49 15 15 re 11		Mal	1e	Female	ale	To	Total
38 1 32 1 13 4 49 1 15 30 1	cilities	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
32 1 13 4 49 1 15 30 1	gh School lult cograms	38	15,20	76	31.15	114	23.08
13 105 49 15 30 11	iversity rening illeges	32	12.80	49	20.08	81	16.40
105 4 49 1 15 30 1	operative ctension ervices	13	5.20	17	6.97	30	6.07
49 1 15 30 1 11	ned Services	105	42.00	ы	1.23	108	21.86
15 30 11 14	siness, Idustry	49	19.60	21	8.61	7.0	14.17
30 1 11	/ernment	15	00.9	5	2.05	20	4.05
11	nmercial olleges or rade Schools	30	12.00	30	12.30	09	12.15
ction 14	olic Lecture	11	4.40	31	12.70	42	8.50
- !!	rivate Instruction	14	5.60	29	11.89	43	8.70

Reasons For Not Going To College After High School Table 32.

	Mal	1e	Female	ale	To	Total
Reasons Named	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Tired of Going to School	55	22.00	6	3.60	64	12.94
Felt I Had Enough Educa- tion	24	9.60	23	1.23	27	5.47
Felt I Should Get Practical Experience	19	7.60	6	3.69	28	5.67
Could Get Job Desired With- out Going on to School	25	10.00	17	6.97	42	8.50
Military Service	e 77	30.80	П	.41	78	15.79
Desired to Get Married	18	7.20	38	15.57	26	11.34
Grades Not Good	40	16.00	ю	1.23	43	8.70
There Were Financial Problems	93	37.20	7.7	31.56	170	34.41

Table 32. (Continued)

	Ma1	1e	Female	ale	To	Total
Reasons Named	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
School Was Not						
Interesting	Š	07 10	c	000	<i>C y</i>	, C
ew or	4 4	00.12	×	97.6	70	17.33
Lack of Self-						
Confidence	40	16.00	19	7.79	59	11.94

factors is involved when students do not continue beyond high school. No attempt was made to identify such combinations. Each individual responding, however, could check more than one response.

Reasons for Dropping Out of College

In Table 33 somewhat similar reasons to those listed for not going on to college from high school were given for males and females as reasons for dropping out of college (most frequently named to least frequently named):

<u>Males</u>	<u>Females</u>	<u>Combined Reasons</u>
Financial Lack of interest Scholastic Military service Emotional problems Unhappiness Marriage Family responsibilities Did not like college or university	Marriage Financial Family responsibilities Lack of interest Emotional problems Unhappiness Scholastic Did not like college or university Inadequate college offerings	Financial Marriage Lack of interest Family responsibilities Scholastic Emotional problems Unhappiness Military service Did not like college or university
	•	

Finances and marriage were cited almost one-third and one-fourth of the time by college drop-outs. For the males, lack of interest, scholastic reasons, and military service were important; for the females marriage and family responsibilities, as well as lack of interest, were significant.

Reasons for dropping out of college may be somewhat complex. No attempt is made here to identify all of the factors involved for each individual. Each person responding, however, could check more than one response.

Table 33. Reasons for Dropping Out of College

	Ma	Male	Female	ale	To	Total
Reasons	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Financial	98	34.40	99	27.05	152	30.77
Scholastic	53	21.20	10	4.10	63	12.75
Lack of Interest	61	24.40	20	8.20	81	16.40
Military Service	39	15,60			39	7.89
Marriage	30	12,00	8 8	36.48	119	24.09
Family Responsibilities	30	12.00	44	18.03	74	14.98
Emotional Problems, Un- happiness	36	14.40	13	5.33	49	9.92
Did Not Like the College or Univer- sity	17	08.9	9	2,46	23	4.66

Table 33. (Continued)

	Mal	9	Fema1e	11e	To	Total
Reasons	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Inadequate Course Offer- ings	13	5.20	rv	2.05	18	3.64
Did Not Like the Social Life	M	1.20	2	.82	w	1.01

Factors Which Influenced Number of Years of Education Attained

Adults were asked to respond to five factors which may have influenced, negatively or positively, the number of years of education they attained. Having positive influence were: (1) attitude of spouse, 61.34 per cent; (2) attitude of parents, 56.28 per cent; (3) attitude of friends, 52.02 per cent; (4) attitude of relatives, 39.07 per cent; and (5) attitude of children, 29.15 per cent. Since many of the adults had young children, it must be presumed that 29.15 per cent does not reflect the full extent of approval by children, for in the case of the females, who were older as a group and whose children were older, children's approval was 43.03 per cent. The only notable negative influences were 11.54 per cent of parents' attitudes and 7.09 per cent of relatives' attitudes. The figures in Table 34 indicate the importance of attitudes of family members in the educational attainment of adult students. No attempt was made to include all of the possible factors which may influence the number of years of education attained by an individual.

Additional Factors Which Influenced Number of Years of Education Attained

In Table 35 other factors which influenced the number of years of education attained were very similar for males and females except for military service. The nearness or

Table 34. Factors Which Influenced Number of Years of Education Attained

		ges (of 494 R	
Attitude	Male	Female	Totals
Attitude of Parents			
Positively	58.40	54.10	56.28
Negatively	13.20	9.84	11.54
Attitude of Spouse			
Positively	60.40	62.30	61.34
Negatively	3.20	6.15	4.66
Attitude of Relatives			
Positively	42.80	35.25	39.07
Negatively	9.20	4.92	7.09
Attitude of Friends			
Positively	56.40	47.54	52.02
Negatively	6.00	2.05	4.05
Attitude of Children			
Positively	15.60	43.03	29.15
Negatively	5.60	2.87	4.25

Table 35. Additional Factors Which Influenced Number of Years of Education Attained

Factors	Percenta Male	ges (of 494 R Female	esponses) Totals
Availability of Money	· // / -		
Positively	36.80	34.02	35.43
Negatively	36.40	33.20	34.82
Nearness or Distance Away of Suitable Educational Institu- tion			
Positively	38.40	47.95	43.12
Negatively	16.00	13.93	14.98
Availability of Books and Cultural Media			
Positively	25.60	22.13	23.89
Negatively	10.00	5,74	7.89
Military Service			
Positively	38.80	1.23	20.24
Negatively	11.20	2.46	6.88

distance away of a suitable educational institution had a positive effect on 43.12 per cent of the group compared with a negative effect on 14.98 per cent. Availability of money had a positive influence on 35.43 per cent and a lack of money available on 34.82 per cent. The availability of books and cultural media was more positive (23.89 per cent) than negative (7.89 per cent), and military service was positive for 38.8 per cent of the males versus 1.23 per cent of the females and negative for 11.20 per cent of males and 2.46 per cent of the females (totals: 20.24 per cent positive, 6.88 per cent negative). Military service may have had a negative influence for the females because their husbands were involved rather than the females being directly involved themselves.

Reasons Adults Entered or Returned for Additional Education (Check List According to Sex)

The reasons given by adult men and women for entering or returning to the University (several reasons could be given by the same person) are given in this list:

	Reasons	Percentage (of 494)
1.	Get a degree Improve income notential	83.00 59.31
	Improve income potential Intellectual stimulation	53.85
4.	Continue an interrupted college career	44.74
5.	Prepare for a job	39.88
	Become more socially useful	37.65
7.	Secure a better job	27.33
8.	Prove I can do it	27.13
9.	Prepare for a different job	21.86

	Reasons	Percentage (of 494)
10.	Advancement in present job	19.23
	Supplement family income	17.21
	Provide leisure time activity	11.34
	Keep up with husband's or wife's	
	attainments	11.13
14.	Meet new people	10.12
	Keep up with children	6.28
16.	Friends interested me in	
	returning	5.47

The goal of getting a degree was the aim of most adults; a utilitarian aim was second and fourth, but intellectual stimulation was an important third, and becoming more socially useful an important sixth place.

Differences in male and female reasons are demonstrated in this comparison:

<u>Males</u>

1.	Degree
	Improve income potential
	Secure better job
4.	• • • • • • • • • • • • • • • • • • •
	college career
5.	Intellectual stimulation
6.	Prepare for job
7.	Become more socially useful
8.	Advancement on present job
9.	Prepare for different job
10.	To prove I can do it
	Meet new people
12.	Friends interested me in
	returning
13.	Supplement family income
14.	
	activity
15.	Keep up with wife's attain-
	ment
16.	Keep up with children

Females

- 1. Degree
- 2. Intellectual stimulation
- 3. Continue interrupted college career
- 4. Improve income potential
- 5. Prepare for job
- 6. Become more socially useful
- 7. Supplement family income
- 3. Prove I can do it
- 9. Keep up with husband's attainment
- 10. Provide leisure time activity
- 11. Prepare for a different job
- 12. Secure better job
- 13. Meet new people
- 14. Keep up with children
- 15. Advancement on present job
- 16. Friends interested me in returning

Though the reasons given by males and females were similar, six of the first seven being the same, the reasons were given different order. As might be expected, the male reasons were slightly more utilitarian, reflecting a breadwinner role for the male and a more supplementary vocational role for the female. Intellectual stimulation was the second place goal of females (Table 36).

Reasons Adults Entered or Returned for Additional Education (Check List According to Age)

Because this listing of reasons for resuming education seems to present a picture of life itself, it is included here. In younger age groups, the first five or six reasons were similar, but the spread of reasons was greater in the older age groups. Details on percentages are available at the Student Affairs Office, University College, Michigan State University. In the table presented, reasons were ranked from greatest to least importance.

It is evident from Table 37 that everyone wants a degree; intellectual stimulation is important at all ages, and becoming socially useful seems to become of greater consequence with age. Better jobs and increased income potential are stressed somewhat more in the earlier age groups. Improvement of income potential matters more at the age when one's children are or could be in college. The entire picture hints at an increasing standard of living and at increasing inflation. "Proving I can do it" is important - self-motivation is underlined.

Reasons Adults Entered or Returned For Additional Education Table 36.

	Ma	Male	Female	ale	To	Tota1
Reasons	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Get Degree	210	84.00	200	81.97	410	83.00
Continue Inter- rupted College Career	96	38.40	125	51.23	221	44.74
Prepare for a Job	84	33.60	113	46.34	197	39.88
Advancement in Present Job	69	27.60	26	10.66	95	19.23
Secure a Better Job	86	39,20	37	15,16	135	27.33
Prepare for a Different Job	64	25.60	44	18.03	108	21.86
Keep up with Husband's or Wife's Attain-ments		2,80	48	19.67	5.5	11.13
Keep up with Children	4	1.60	27	11.07	31	6.28
For Intellectual Stimulation	.1	36.80	174	71.31	266	53.85
Provide Leisure Time Activity	∞	3.20	48	19.67	26	11.34

Table 36. (Continued)

Reasons	Ma	Male Percentage (of 250)	Female Number P	ale Percentage (of 244)	Tor	Total Percentage (of 494)
To Improve Income Potential	175	70.00	118	48.36	293	59.31
To Supplement Family Income	10	4.00	7.5	30.74	85	17.21
To Become More Socially Useful	73	29.20	113	46.31	186	37.65
-To Prove I Can Do It	64	25.60	7.0	28.69	134	27.13
To Meet New People	17	08.9	33	13.52	20	10.12
Friends Inter- ested Me in Returning	14	5,60	13	5,33	27	5.47

Reasons Adults Entered or Returned for Additional Education (Check List According to Age) Table 37.

26-31	32-37	38-43	44-50	51 or Older	Total
Get a Degree Improve Income Potential	Get a Degree Intellectual Stimulation	Get a Degree Intellectual Stimulation	Get a Degree Improve Income Potential	Get a Degree Intellectual Stimulation	Get a Degree Improve Income Potential
Intellectual Stimulation	Improve Income Potential	Continue Interrupted College Career	Become More Socially Useful	Become More Socially Useful	Intellectual Stimulation
Continue Interrupted College Career	Continue Interrupted College Career	Become More Socially Useful	Intellectual Stimulation	Prepare for Job	Continue Interrupted College Career
Prepare for Job	Prepare for Job	Improve Income Potential	Continue Interrupted College Career	Improve Income Potential	Prepare for Job
Secure Better Job	Become More Socially Useful	Prepare for Job	Prepare for Job	Supplement Income	Become More Socially Useful
Become More Socially Useful	Supplement Income	Prove I Can Do It	Prepare for Different Job	Continue Interrupted College Career	Secure Better Job
Prove I Can Do It	Prove I Can Do It	Supplement Income	Prove I Can Do It	Leisure Activity	Prove I Can Do It

Table 37. (Continued)

26-31	32-37	38-43	44-50	51 or Older	Total
Prepare for Different Job	Prepare for Different Job	Leisure Activity	Secure Better Job	Keep up with Children	Prepare for Different Job
Advancement in Present Job	Advancement in Present Job	Prepare for Different Job	Supplement Income	Advancement in Present Job	Advancement in Present Job
Meet New People	Better Job	Advancement in Present	Meet New People	Prove I Can Do It	Supplement Income
Supplement Income	Keep up with Spouse	Prepare for Different Job	Keep up with Children	Keep up with Spouse	Leisure Activity
Keep up with Spouse	Leisure Activity	Keep up with Spouse	Advancement in Present Job	Secure Better Job	Keep up with Spouse
Leisure Activity	Meet New People	Meet New People	Leisure Activity	Meet New People	Meet New People
Friends Interested Me in Returning	Keep up with Children	Friends Interested Me In Returning	Keep up with Spouse	Prepare for Different Job	Keep up with Children
Keep up with Children	Friends Interested Me in Returning	Keep up with Children	Friends Interested Me in Returning		Friends Interested Me in Returning

Reasons Students Came to This University (By Sex)

The two determining factors most frequently mentioned for choice of the University were nearness and reputation; spouse working in area and expense less were other notable reasons (Table 38). For males, alone, the most influential factor was reputation (57.20 per cent) with proximity (45.20 per cent) and expense less (26 per cent) next in rank; females were heavily influenced by nearness (68.44 per cent) and spouse's working (32.38 per cent) or studying in the area (11.89 per cent) and reputation of the institution (31.56 per cent). (Responses could be made to more than one item)

The reasons (ranked according to frequency of mention) cited by adults for coming to Michigan State University

were:

All Adults

- 1. Nearby
- Reputation of institution
- 3. Spouse working in area
- 4. Expense less
- 5. Spouse studying at University
- 6. Scholarship aid
- 7. Family member attending University
- 8. Parent employed at University

Reasons Males

Reputation of institution
Nearby
Expense less
Spouse working

in area

Scholarship aid
*Spouse studying at

_Ûniversity

*Family member attending University Parent employed at University

Females

Nearby
Spouse working
in area
Reputation of
institution
Spouse studying at University
#Expense less
#Scholarship aid
Family member
attending University
Parent employed
at University

^{*}Equally *Equally

Reasons for Coming to This University (By Sex) Table 38.

	Male]e	Female	ale	To	Total
Reasons	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Nearby	113	45.20	167	68.44	280	56.68
Reputation of Institution	143	57.20	7.7	31.56	220	44.53
Expense Less	65	26.00	28	11.48	93	18.83
Scholarship Aid	19	7.60	16	6.56	35	7.09
Husband or Wife Working in Area	32	12.80	79	32,38	111	22.47
Husband or Wife Studying at the University	12	4.80	29	11.89	41	8.30
Other Family Member Attend- ing University	12	4.80	16	92,9	28	5.67
Parent Employed at the Univer- sity	2	. 80	2	.82	4	.81

Reasons Students Came to This University (By Age)

Nearness was the factor which became increasingly significant among each successive age group. The younger adults were more concerned with the reputation of the institution and, to some extent, with the cost and scholarship aid obtainable as is shown in Table 39. (Responses could be made to more than one item.)

Methods Preferred for Continuing Education

The adult undergraduates preferred enrollment in courses on campus: 85.22 per cent indicated an interest in this method; 25.10 per cent indicated an interest in extension courses; 22.87 per cent were interested in independent study, and 20.85 per cent in on-the-job courses. Only 10.93 per cent indicated an interest in correspondence courses and 9.72 per cent in educational television. A notable difference between males and females was that more females than males were interested in independent study (27.05 per cent to 18.80 per cent). It should be of significance to those planning for adult students that most of them seemed to prefer courses on campus according to information in Table 40. (It should be remembered that respondents could check several responses.)

Special Courses for Returning Adults (By Sex)

Adults were interested in courses in improvement in reading, how to study, how to take tests, improvement of

Table 39. Reasons for Coming to This University (By Age)

	Ages 26-31	Ages 32-37	Ages 38-43	Ages 44-50	Ages 51 or Older	Total
Reasons	Percentage (of 244)	Percentage (of 105)	Percentage (of 64)	Percentage (of 39)	Percentage (of 19)	Percentage (of 494)
Nearby	47.35	66.67	67.19	64.10	84.21	56.68
Reputation of Institution	51.53	39.05	31.25	43.25	38.89	44.81
Expense Less	23.11	14.29	17.19	10.26	10.53	18.83
Scholarship Aid	9.85	2.86	6.25	2.56	5.26	7.09
Husband or Wife Working in Area	17.80	26.67	31.25	23.08	26.32	22.27
Husband or Wife Studying at University	60.6	7.62	4.69	7.69	5.26	8.30
Other Family Member Attending University	4.55	3.81	3.13	15.38	21.05	5.67
Parent Employed at University	.76		1.56	2.56		.81

Methods Preferred for Continuing Education Table 40.

Wothod	Ma	Male	Female	ale	To	Total
Me criod	Namber	rercentage (of 250)	Number	rercentage (of 244)	Namber	rercentage (of 494)
Enrollment in Courses on Campus	211	84.40	210	86.07	421	85.22
Extension Courses	63	25.20	61	25,00	124	25.10
Independent Study	47	18.80	99	27.05	113	22.87
Correspondence Courses	26	10.40	28	11.48	54	10.93
Educational Television	17	6.80	31	12,70	48	9.72
On-the-job Courses	57	22.80	46	18.85	103	20.85

writing, improvement of speaking, "new math," and orientation to college courses. Males were slightly less confident than females of their ability in reading and their know-how in studying. Information in Table 41 should be of help in curriculum planning for adults.

Special Courses for Returning Adults (By Age)

In Table 42 the younger adults indicated more interest in improvement courses in reading, speaking, and writing. The older groups indicated greater concern in new mathematics and scientific developments. Slightly more anxiety seems to be shown about orientation to college, how to study and how to take tests by the 38-43 age group.

Interest in Refresher Courses (By Sex)

The "new math" is a magic field which seems to concern adults of all ages (Table 43). A refresher course in mathematics was important to both males and females. Some males, again, showed a lack of confidence in their reading ability while females felt they needed refreshers in literature and history.

Interest in Refresher Courses (By Age)

As in Table 43, a refresher course in mathematics was the most desired course by all ages; in second place was reading, then science and foreign language. The percentages were similar to those in Table 43. Differences in age did

Table 41. Interest in Special Courses for Returning Adults (By Sex)

Courses Number Improvement in Reading 91 Improvement in Speaking 51	lber			I.Cilia I.C	•	IOCAI
in in	,	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
in	Į.	36.40	74	30,33	165	33.40
	H	20.40	39	15.98	06	18.22
Improvement in Writing 69	ō.	27.60	64	26.23	133	26.92
New Math 44	4	17.60	46	18.85	06	18.22
New Scientific Development Course 29	6	11.60	34	13.93	63	12.75
Community Services Courses 18	œ	7.20	18	7.38	36	7.29
Orientation to College Course for Adults 43	2	17.20	47	19.26	06	18.22
How to Take Tests 80	0	32.00	7.7	31.56	157	31.78
How to Study 88	∞	35.20	7.5	30.74	163	33.00

Table 42. Interest in Special Courses for Returning Adults (By Age)

						Age Groups	sďno					
		26-31		32-37		38-43		44-50	51 or	51 or Older	Ī	Total
Course Interest	Num- ber	Per- centage										
Improvement in Reading	105	39.77	23	21.90	18	28.13	12	30.77	9	31.58	165	33.40
Improvement in Speak- ing	55	20.82	12	11.43	13	20.31	7	17.95	7	10.53	06	18.22
Improvement in Writing	84	31.82	19	18.10	14	21.88	12	30.77	က	15.79	133	26.92
The New Math	47	17.80	14	13.33	14	21.88	10	25.64	4	21.05	06	18.22
New Scien- tific Devel- opments	31	11.74	12	11.43	11	17.19	4	10.26	4	21.05	63	12.75
Community Services	21	7.95	4	3.81	9	9.38	2	5.13	က	15.79	38	7.29
Orientation to College Course	45	17.05	16	15.24	17	26.56	7	17.95	4	21.05	06	18.22

Table 42. (Continued)

						Age Groups	sdno					
		26-31		32-37		38-43		44-50	51 or 01der	01der		Total
Course	Num	Per-	Num	Per-	Num-	Per-	Num-	Per-	Num-	. 1	Num-	Per-
Interest	ber	ber centage (of 264)	ber	centage (of 105)	ber	centage (of 64)	ber	centage (of 39)	ber	centage ber (of 19)		centage (of 494)
How to												
Take Tests	82	31.06	30	28.57	24	37.50	13	33,33	9	31.58 157	157	31.78
How to Study	06	34.09	27	25.71	26	40.63	12	30.77	9	31.58	163	33.00

Table 43. Interest in Refresher Courses (By Sex)

	Male	le	Female	ale	To	Total
Courses	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Mathematics	88	35.20	61	25.00	149	30.16
Science	38	13.60	35	14.34	69	13.97
Agriculture	4	1.60			4	.81
Business	20	8.00	6	3.69	29	5.87
Communications	26	10.40	21	8.61	47	9.51
Reading	20	20.00	32	13.11	8.2	16.60
Arts	15	00.9	23	9.43	38	7.69
Literature and History	20	8.00	4 4	18.03	64	12.96
Foreign Language	27	10.80	31	12.70	28	11.74

not appear to be a factor in choices of refresher courses.

(Complete table available.)

Preference for Classes with Other Adults

In Table 44, 57.76 per cent of the adult students responding to the question did not care whether they were in classes with other adults or with younger students; only 16.93 per cent were firm in their desire for classes with other adults. Of the males, 19.45 per cent of the 257 responding indicated a desire to take classes with other adults; females seemed slightly more willing to participate in classes with younger students. This is interesting, since the females in the study were somewhat older than the males. See Table 1, page 43. (Responses do not indicate different individuals; each person could check more than one response.)

Preferred Times for Courses

Predictable differences were evident in the time adults could attend classes:

Male Choices

- 1. Regularly scheduled day courses
- 2. Night courses
- 3. Summer courses
- 4. Special courses once weekly, daytime, for two or three hour sessions
- 5. Courses meeting one hour weekly and providing for independent study
- 6. Late afternoon courses
- 7. Saturday courses
- 8 and 9. Day-long sessions two weeks/term and week-end seminars (equally favored)

Table 44. Preference for Classes with Other Adults

Preference For Classes	Ma	Male Percentage	Female Number P	ale Percentage	To. Number	Total Percentage
With Other Adults		(of 257 responses)		(of 245 re- sponses)		(of 502 re- sponses)
Yes	20	19.45	35	14.28	85	16.93
No	14	5.45	31	12.65	45	8.96
Some Separrately; Some Together	45	17.50	37	15,10	82	16.33
Makes No Difference	148	57.58	142	57.95	290	57.76
Total	257	86.66	245	86.66	502	86.66

Female Choices

- 1. Regularly scheduled day courses
- 2. Night courses
- 3. Special courses once weekly, daytime, for two or three hour sessions
- 4. Courses meeting one hour weekly and providing for independent study
- 5. Summer courses
- 6. Saturday courses
- 7. Day-long sessions, two weeks/term
- 8. Late afternoon courses
- 9. Week-end seminars

The importance of a good offering of night courses was evident when both men and women chose this time as their second choice for courses. Men found summer courses desirable while women had more family responsibilities in the summer. Both liked classes meeting once weekly for long sessions, or for shorter sessions and independent study. Late afternoon classes were more desirable for the males than for females who again had family responsibilities.

For pleasing the total group (494), first choice was regular day courses (61.13 per cent); second, night courses (34.62 per cent); third, special courses once weekly, for two or three hour sessions (26.72 per cent); fourth, summer courses (24.09 per cent); fifth, courses which meet one hour weekly and provide for independent study (20.24 per cent). (Responses in Table 45 do not indicate separate individuals; each person could check more than one response.)

Table 45. Preferred Times for Courses

		Male	Female	Female		Total
Preferred Times	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Regularly Scheduled Day Classes	165	00.99	137	56.15	302	61.13
Special Courses Offered Once Weekly, Day- time, for 2	ທ					
or s Hour Sessions	26	22.40	92	31.15	132	26.72
Night Courses	79	31.60	92	37.70	171	34.62
Summer Courses	64	25.60	55	22.54	119	24.09
Late Afternoon Classes	32	12.80	19	7.74	51	10.32
Saturday Classes	29	11.60	27	11.07	56	11.34
Week-end Seminars	14	5.60	11	4.51	25	5.06

Table 45. (Continued)

	Ma.	1e	Female	11e	To	Tota1
Preferred Times	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Courses Which Meet One Hour Weekly and Provide for Independent	37	14.80	63	25.82	100	20.24
Courses Which Meet for Day- Long Sessions Two Weeks Per Term	14	2.60	23	9.43	37	7.49
	490		503		993 Responses	ponses

Methods of Instruction Preferred

A summary of the methods of instruction preferred by adults follows in Table 46. A complete table of likes, dislikes and uncertainties is available. Percentages were based on the total number in the study. "Lecture and discussion" was the first choice of both males and females, and "lecture only" was the second choice of both. Males ranked "mostly discussion" in third place while females put it in fifth place. Females preferred more reading and writing papers. Both groups indicated a dislike of television classes, which may have been due, in part, to lack of experience with this form of instruction. The same lack of experience could have been true to some extent with programmed learning. (Responses do not indicate separate individuals; each person could check more than one response.)

Kinds of Examinations Preferred (By Sex)

In Table 47, the combined preferences of males and females indicated the following choices of examinations:

(1) multiple answer, (2) essay, (3) take-homes, (4) open book. Adult males liked multiple answer examinations better than females (64 per cent to 56.97 per cent), and females liked essay examinations (55.33 per cent to 48 per cent for males) and take-homes (32.28 per cent to 20.40 per cent for males). (Responses do not indicate different individuals; each person could check more than one response.)

Table 46. Methods of Instruction Preferred

Male Preferences]	Percentage (of 250)	Fem Preferences	Female s Percentage (of 244)	Total Preferences P	al Percentage (of 494)
Lecture and Discussion	86.80	Lecture and Discussion	90.16	Lecture and Discussion	88.46
Lecture Only	34.40	Lecture Only	36.89	Lecture Only	35.63
Mostly Discus-	0	Committees	33.61	Committees	31.98
sion Committees	34.00 30.40	Reading and Papers	22.54	Mostly Discussion	27.94
Programmed Learning	20.40	Mostly Discussion	21.72	Reading and Papers	21.05
Reading and Papers	19.60	Programmed Learning	16.80	Programmed Learning	18.62
Television Classes	13.60	Television Classes	9.84	Television Classes	11,74

Table 47. Kinds of Examinations Preferred (By Sex)

1	Male	le .	Female	ıle	To	Total
Exams	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Multiple						
Answer	160	64.00	139	56.97	299	60.53
Essay	120	48.00	135	55.33	255	51.62
Take Home Exams	51	20.40	79	32,28	130	26.32
Open Book Exams	40	16.00	37	15.16	7.7	15.59

Kinds of Examinations Preferred (By Age)

When kinds of examinations preferred were studied by age, Table 48, it was indicated that the younger students liked multiple answer examinations better than the older students: 68.56 per cent of age group 21-31 to 47.37 per cent of age group 51 or older and 43.59 per cent of the 44-50 group.

Comparatively, the older group preferred take-home examinations: 47.37 per cent of those 51 or older to 21.21 per cent of those 26-31 years of age. This correlates with a slowing in the rate of response which occurs with increasing age. Take-home examinations give adults more time to respond and an opportunity to use their many experiences and wide vocabulary effectively.

Preferred Types of Evaluation (By Sex)

Adults chose types of evaluations in this order:

(1) frequent examinations (55.87 per cent), (2) a mid-term and a final (27.13 per cent), (3) short papers (25.10 per cent), and examinations and a term paper (15.99 per cent). A "term paper only" or "a final examination only" were unpopular. The only differences noted between males and female preferences were a slight disposition of females to prefer papers and a slight tendency for males to prefer examinations, as shown in Table 49. (Responses do not necessarily indicate separate individuals; each person

Table 48. Kinds of Examinations Preferred (By Age)

Age In Age Caroups* Number Caroups* Cof Age Caroup) Number Caroups Percentage (of Age Caroup) Number Caroups Cof Age Caroup) Of Age Caroup)			Multiple	le Answer	Ħ	Essay	Ta	Take-Home	фO	Open Book
264 181 68.56 134 50.74 56 21.21 105 61 58.10 55 52.38 33 31.43 64 29 45.31 36 56.25 18 28.13 r 39 17 43.59 19 48.72 13 33.33 r 19 9 47.37 8 42.11 9 47.37 s 19 60.53 255 51.62 130 26.32	Age	Totals in Age Groups*	Number	Percentage (of Age Group)	Number	Percentage (of Age Group)		Percentage (of Age Group)	Number	Percentage (of Age Group)
105 61 58.10 55 52.38 33 31.43 64 29 45.31 36 56.25 18 28.13 739 17 43.59 19 48.72 13 33.33 8 47.37 8 42.11 9 47.37 8 255 51.62 130 26.32	26-31	264	181	68.56	134	50.74	56	21.21	41	15.53
64 29 45.31 36 56.25 18 28.13 39 17 43.59 19 48.72 13 33.33 19 9 47.37 8 42.11 9 47.37 299 60.53 255 51.62 130 26.32	32-37	105	61	58.10	55	52.38	33	31.43	13	12.38
39 17 43.59 19 48.72 13 33.33 19 9 47.37 8 42.11 9 47.37 299 60.53 255 51.62 130 26.32	38-43	64	29	45.31	36	56.25	18	28.13	13	20.31
19 9 47.37 8 42.11 9 47.37 299 60.53 255 51.62 130 26.32	44-50	39	17	43.59	19	48.72	13	33,33	œ	20.51
299 60.53 255 51.62 130 26.32	51 or Older	19	6	47.37	œ	42.11	6	47.37	2	10.53
	Totals		299	60.53	255	51.62	130	26.32	77	15.59

*Three individuals did not indicate their ages. Table 1, page 43.

Table 49. Preferred Types of Evaluation (By Sex)

Type of Evaluation	Ma Number	Male Percentage (of 250)	Female Number P	ale Percentage (of 244)	To	Total Percentage (of 494)
Frequent Ex- aminations	142	56.80	134	54.92	276	55.87
A Final Examination	14	5,60	ĸ	2.05	19	3,85
A Midterm and a Final Ex- amination	70	28.00	64	26,23	134	27.13
A Term Paper	19	7.60	26	10.66	45	9.11
Examinations and a Term Paper	30	12.00	49	20.08	62	15.99
Short Papers	52	20.80	7.2	29.51	124	25,10

could check more than one response.)

Preferred Types of Evaluation (By Age)

All age groups preferred "frequent examinations" (55.87 per cent), as Table 50 shows. The older groups chose "short papers" secondly, while the younger group selected a "mid-term and a final." Third choice for all was "examination and a term paper." A "term paper only" was less popular with the younger ages, and a "final only" was unpopular at any age.

Examinations for Credit and Examinations to Waive Courses

Approximately equal percentages of males and females would take advantage of examinations for credit: 62.40 per cent (156) of the males; 59.84 per cent (146) of the females. More men than women, 41.6 per cent (104) versus 32.7 per cent (80), would like to waive courses by taking examinations; the combined indication is that 37.25 per cent (184) are interested in waiving courses (without credit).

Plans to Continue Education

As shown in Table 51, adults working on bachelor's degrees numbered 46.56 per cent of the total, closely followed by master's degrees, 39.06 per cent of the total, and doctorates, 6.88 per cent. A few were non-degree or special certification candidates. As many males planned to get master's degrees as planned to get bachelor's

Table 50. Preferred Types of Evaluation (By Age)

	Fr	Frequent	Fina	Final Only	Midt	Midterm and	Term	Term Paper	Exam:	Examinations	Short	Short Papers
Age	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage
26-31	154	58.33 (of 264)*	12	4.55	74	28.14	21	7.95	38	14.39	61	23.11
32-37	63	60.00 (of 105)	ന	2.84	27	25.71	6	8.57	16	15.24	18	17.14
38-43	34	53.13 (of 64)	ო	69.4	17	26.54	∞	12.50	12	18.75	24	37.50
44-50	16	16 41.03 (of 39)			11	28.21	4	10.26	7	17.95	14	35.90
51 or Older	6	47.37 (of 19)	н	5.26	က	16.67	က	15.79	4	21.05	9	31.58
Totals	276	56.21 (of 491)	19	3.86	134	27.29	45	9.16	79	16.08	124	25.25

*All percentages are of the number indicated in the particular age group. See Table 1, page 43.

Table 51. Plans to Continue Education

Continu- ation	Male Number I	le Percentage (of 250)	Female Number P	ale Percentage (of 244)	ToNumber	Total Percentage (of 494)
Limited Number of Courses (Non-Degree)	10	4.00	7	2.86	17	3.44
Two-Year Credential	1	.40			П	.20
Bachelor's Degree	104	41.60	126	51.63	230	46.55
Master's Degree	104	41.60	89	36.47	193	39.06
Doctorate	26	10.40	∞	3.27	34	6.88
Other	S	2.00	9	2.45	11	2.22
No Response	1		∞	3.27	∞	1.61
Totals	250	100.00	244	99.95	494	99.95

(41.60 per cent) while more females planned to stop at the bachelor's level (51.63 per cent bachelor's compared with 36.47 per cent master's). Of the males, 10.40 per cent planned for doctorates contrasting with 3.27 per cent of the females.

How Students Were Financing Their Education

Table 52 shows that 54.25 per cent of the adults were working full or part-time; 43.32 per cent had financial aid from their spouses; 27.13 per cent were using savings; smaller percentages had loans or scholarships. Males, however, reported 69.60 per cent were working; 42.40 per cent were using government funds; 37.20 per cent were using savings and wives were paying or aiding in 31.20 per cent of the cases. For females, financial sources were: spouse is paying, 55.74 per cent; working, 38.52 per cent; 16.80 per cent used savings; 16.39 per cent used loans; 10.25 per cent scholarships, and less than 1 per cent government aid. More information about financial aids available to adults would be helpful, and greater interest in helping adults financially could be stimulated. Many adults who are not now able to afford a college education would be likely to return for additional education if finances were available. (Responses do not indicate separate individuals; each person could respond to more than one part of the question.)

How Students Were Financing Their Education Table 52.

Methods of Financing	Male Number	le Percentage (of 250)	Female Number P	ale Percentage (of 244)	Tot	Total Percentage (of 494)
Working Full or Part-Time	174	09.69	94	38.52	268	54.25
Savings	93	37.20	41	16.80	134	27.13
Spouse Is Paying	7.8	31.20	136	55.74	214	43.32
Loan	42	16.80	40	16.39	8.2	16.60
Scholarship	33	13.20	25	10.25	28	11.74
Government Aid	106	42.40	2	. 82	108	21.86

V. VOCATIONAL CHARACTERISTICS

This section depicts the vocational characteristics of adult undergraduates including number employed, necessity for employment, types of employment, length of time spent on a job, and future employment plans.

Number Employed

Of the adult undergraduates 329 (66.60 per cent) worked full-time, part-time or occasionally. Two hundred eight (83.20 per cent of 250) men worked as compared with 121 (49.59 per cent of 244) women. The adult males who worked full-time numbered 107 (42.80 per cent of the total 250); females who worked full-time numbered 50 (20.49 per cent of the total 244). These figures account in part for differences in student income in Table 7, page 52. (Differences in numbers working in Table 52 and this table may be due to the fact that "working occasionally" is included in Table 53.)

Necessity for Employment

In Table 54, employment was a financial necessity to 265 adults (53.64 per cent of the 494 studied). Almost three-fourths (181) of the adult males found working a necessity compared with about one-third (84) of the adult females. Fifty-nine adults did not answer the question.

Table 53. Number Employed

		.1e	Female	ale	To	Total
Time Employed	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Full-Time	107	42.80	50	20.49	157	31.78
Part-Time (1/4-3/4)	09	24.00	42	17.21	102	20.65
Occasionally	41	16.40	29	11.89	70	14.17
Tota1	208	83.20	121	49.59	329	09.99
	Mal Number	le Percentage (of 250)	Female Number P	ale Percentage (of 244)	Number	Total Percentage (of 494)
Yes	181	72.40	84	34.43	265	53.64
No	51	20.40	119	48.77	170	34.41
				No response	29	11.94



Occupations of Adult Undergraduate Students

Although each adult may have held several jobs, the category recorded was the highest status job each had In Table 55, most of the women were found in office, clerical and sales jobs (57.66 per cent). The only other category for women that was significantly large was professional work (32.22 per cent). None of the women listed themselves as housewives. On the other hand, men's jobs covered a variety of areas: military (28.29 per cent), service work (21.97 per cent), skilled labor (16.09 per cent), professional work (9.75 per cent), office, clerical and sales (8.29 per cent), and executive and managerial (7.80 per cent). (The figures given are on the basis of 205 male and 180 female respondents. The fact that 385 listed occupations as contrasted with 329 in Table 53 indicates they may have been employed in the past but were not necessarily employed at the time of answering the questionnaire.)

Number of Years at Various Occupations

Some indication of the number of years spent in various jobs is summarized in Table 56. When the adults were asked to indicate from "one" to "nine or longer" years spent on jobs they had held, it became evident that not too many had held a variety of jobs. Not shown in the table was Job IV to which only 83 responded. Most had held

Occupations of Adult Undergraduate Students Table 55.

Occupation	Males Number	es Percentage	Females Number P	les Percentage	Tota1
		(of 205)		(of 180)	
Manual Worker	6	4.29	2	1.11	11
Skilled Labor	33	16.09	7	3.88	40
Business Owner	1	.48	٢	.55	2
Farm Owner or Operator	9	2.92			9
Executive or Manager	16	7.80	1	.55	17
Office, Clerical and Sales	17	8.29	104	57.66	121
Professional Work	20	9.75	28	32.22	7.8
Service Work	45	21.97	9	3.33	51
Housewife	! ! !	!!!	 	1 1	1 1
Military Service	58	28.29	-	.55	59
Total	205	99.88	180	99.85	385

Table 56. Number of Years at Various Occupations

	Job 1	I	II dol	II	Job III	III
Years	Number	Percentage (of 415)	Number	Percentage (of 330)	Number	Percentage (of 208)
One	120	28.91	108	32,72	67	32.21
Two	82	19.75	7.5	22.72	48	23.07
Three	61	14.69	41	12.42	31	14.90
Four	46	11.08	40	12.12	18	8.65
Five	27	6.50	15	4.54	14	6.73
Six	18	4.33	14	4.24	9	2.88
Seven	9	1.44	4	1.21	7	3.36
Eight	10	2,40	6	2.72	7	3.36
Nine or Longer	45	10.84	24	7.27	10	4.80
Total	415	99.94	330	96.66	208	99.94

jobs from one to four years which probably reflected some employment during the university years for self or spouse, or employment preceding going to the university, or years spent in military service. The rise in percentages at "nine or longer" reflected older students who had long-time careers. Differences between males and females in number of years spent on specific jobs were insignificant.

Reasons for Changing Jobs

Table 57 shows that the most-named reason for changing jobs was for a better opportunity. Decided differences showed between males and females: for males - better opportunity (76.12 per cent of those responding), job unsatisfactory (21.29 per cent); for females - marriage or family interfered (34.67 per cent), better opportunity (30.65 per cent), spouse moved to different area (28.64 per cent). For females, jobs tended to be determined or changed by the job locations of their husbands.

Future Work Plans

In Table 58, it is indicated that 74.29 per cent (three-fourths) of the adults planned to work full-time in the future; another 16.40 per cent (about one-sixth) planned at least part-time work; only 7.89 per cent (about one-twelfth) were uncertain or thought they would not work. Almost all of the males who answered, 94.4 per cent, indicated definite plans to work full- or part-time in the future; more females,

Table 57. Reasons for Changing Jobs

	Ma	.1e	Female	ale		
Reasons	Number	Percentage (of 155)	Number	Percentage (of 199)	Total	Percentage (of 354)
Job Unsatis- factory	33	21.29	13	6.53	46	12,99
Better Opportunity	118	76.12	61	30.65	179	50.56
Spouse Moved to Different Area	2	1.29	56	28.14	28	16.38
Marriage or Family Interfered	2	1.29	69	34.67	71	20.05
Total	155	66.66	199	66.66	354	86.66

Table 58. Future Work Plans

	Ma	1e	Fema1e	a1e	To	Total
Plans to Work	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Yes, Full- Time	197	78.80	170	69.67	367	74.29
Yes, Part- Time	39	15.60	42	17.21	81	16.40
Probably Not	9	2,40	4	1.64	10	2,02
Uncertain	Ŋ	2.00	24	9.84	29	5.87
Total	247	98.80	240	98.36	487	98.58
				No response	7	1.41

9.84 per cent, were uncertain. It is notable, however, that 86.88 per cent of the females planned to work in the future. Of the 247 males who responded, 96 per cent indicated future work plans; of the 240 females who responded, 88 per cent indicated future work plans.

VI. PROBLEMS AND NEEDS OF ADULTS

Section VI develops the difficulties which adults had in coming or returning to the University, where they received assistance, and their needs as they saw them.

A. Data from Questionnaires Difficulties Encountered in Returning to the University

The most frequent difficulties which confronted adults were: courses given at times they could not attend, lack of time to study and read, insufficiency of courses at appropriate times, fear of exams, cannot afford cost, must make arrangements for family while away, transportation, courses uninteresting, lack of appropriate courses, and competition from adolescents.

Difficulties which were most frequently mentioned by male adults were insufficiency of courses at appropriate times, lack of time to study and read, courses given only at times they could not attend, inability to pay costs, fear of exams. On the other hand, most frequent difficulties encountered by the adult female were: courses given at times they could not attend, necessity to make arrange-

ments for family while away, insufficiency of courses at appropriate times, lack of time to study and read, and fear of exams.

The first five difficulties cited by males and females showed two outstanding differences: males classed finances in the group while females mentioned the difficulty in making arrangements for the family while they were away. Women mentioned cost in sixth place; men had apparently little worry about care of family while away. Both groups had difficulty with arranging transportation to classes. Those returning to jobs after classes were especially handicapped. In Table 59 judging from the percentage figures, women, on the whole, encountered more difficulties than men in coming or returning for more education. (Respondents could check more than one response.)

Difficulties Encountered in Coming or Returning to the University (By Age)

The same list of difficulties was studied according to age group in Table 60. Problems seemed magnified in the 32-37 age group. The oldest group had fewer problems in attendance times. The younger adults found courses less interesting, but as the groups grew older their interests were broader. The younger group experienced more difficulty with costs. Fear of examinations was heightened in the 38-43 age groups, but universally present. Arrangements for family were most difficult for those between 32 and 43

Difficulties Encountered in Returning to the University (By Sex) Table 59.

	Ma]e	Female	a 1 e	Total	[8]
Difficulties	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Lack of Appropriate Courses	27	10.80-	21	8.61	48	9.72
Courses Given at Times You Can't Attend	69	27,60	104	42.62	173	35.02
Insufficiency of Courses at Appropriate Times	70	28,00	7.7	31.56	147	29.76
Courses Unin- teresting	39	15.60 -	22	9.02	61	12.35
Too Tired to Go to Classes at Night	6	3.60	29	11.89	38	7.69
Lack of Time to Study and Read	70	28,00	7.7	31,56	147	29.76
Family Objects	10	4.00	6	3.69	19	3.85
Can't Afford Cost	48	19.20.	51	20.90	66	20.04
Too Old to Learn Easily	20	8.00	14	5.74	34	6.88

Table 59. (Continued)

	Ma]	၂	Fema1e	ale	To	Total
Difficulties	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Afraid of Exams	46	18,40 -	61	25.00	107	21.66
Must Make Arrangements for Family While Away	7	2,80	81	33.20	88	17.81
Transportation Difficult	22	8,80-	47	19.26	69	13.97
Can't Get Answers as to How to Get Started Again	19	7.60	12	4.92	31	6.28
No One Inter- ested in My Problems	18	7.20	14	5.74	32	6.48
Competition from Adoles- cents	25	10.00 -	23	9.43	48	9.72

Table 60. Difficulties Encountered in Coming or Returning to University (By Age)

Age Age 26–31 32–37	2	Age 26-31		Age 32-37	38	Age 38–43		Age Age 44–50 51 or 01	4 12 A 0	ه ا		Total
Difficulty Num- ber	Num- ber	Per- Num centage ber (of 264)		Per- centage (of 105)	Num-	Per- centage (of 64)	Num- ber	Per- centage (of 39)		Per- centage (of 19)	Num- ber	Per- centage* (of 491)**
Lack of Appro- priate Courses	22	8.33	14	13.33	7	10.94	4	10.26	н	5.25	84	9.77
Courses Given at Times Can- not Attend	83	31.44	47	44.74	20	31.25	14	35.90	7	36.84	173	35.23
Insuffici- ency of Courses at Appropri- ate Times	74	28.03	39	37.14	19	29.69	12	30.77	m	15.79	147	29.93
Courses Un- interest- ing	41	15.53	12	11.43	9	9.38	Н	2.56	н	5.26	61	12.42
Too Tired to Go to Classes at Night	14	5.30	∞	7.62	6	14.06	Ŋ	12.82	П	5.26	38	7.73

Table 60. (Continued)

Age 26-31 Difficulty Num- Per- Nu ber centage be (of 264)	2 Num- ber	Age 26-31 Per- Num centage ber		Age 32-37	34 Num- ber	Age 38-43 Per- centage (of 64)	/ Num- ber	Age 44-50 Per- centage (of 39)	A 51 o Num- ber	Age or Older Per- centage (of 19)	Num- ber	Total Per- centage* (of 491)**
Lack of Time to Study and Read	75	28.41	33	31.43	22	34.38	11	28.21	5	26.32	147	29.93
Family Objects	13	4.92	က	2.86	H	1.56			7	5.26	19	3.86
Cannot Afford Cost	59	22.35	22	20.95	11	17.19	ī	12.82	\vdash	5.26	66	20.16
Too Old to Learn Easily	15	5.68	7	3.81	7	10.94	4	10.26	4	21.05	34	6.92
Afraid of Examina- tions	48	18.18	24	22.86	22	34.38	∞	20.51	4	21.05	107	21.79
Must Make Arrange- ments for Family While Away	37	14.02	33	31,43	13	20.31	н	2.56	н	5.26	88	17.92

Table 60. (Continued)

	•	Age 26-31	ີຕ	Age 32-37	· m	Age 38-43	. 4	Age 44-50	A 51 o	Age 51 or Older		Total
Difficulty	Num- ber	Per- centage (of 264)		Per- centage (of 105)	Num- ber	Per- centage (of 64)	Num- ber	Per- centage (of 39)	Z ,	Per- centage (of 19)	Num- ber	Per- centage* (of 491)**
Transporta- tion Is Difficult	27	10.23	23	21.90	11	17.19	5	12.82	ဗ	15.79	69	14.05
Cannot Get Answers as to How to Get Started Again	1 21	7.95	7	6.67	н	1.56	Ħ	2.56	Ħ	5.26	31	6.31
No One Inter- ested in My Problems	20	7.58	4	3.81	'n	7.81	က	7.69			32	6.51
Competition from Ado- lescents	25	9.47	14	13.33	4	6.25	4	10.26	H	5.26	84	9.77

*Percentages are of numbers of adult undergraduates in each age group. Table 1, page 43.

** Three individuals did not give their ages. years of age. (Each respondent could check more than one response.)

Where Students Received Help in Coming or Returning to the University

Males turned to their friends for help and information about coming or returning to the University; females were more likely than males to use University agencies.

Table 61 shows that the sources of information for males and females in or of usage were: the Admissions Office, the Registrar's Office, friends, other people, and other University agencies. It would appear that more information available from a single source would be of benefit. (Respondents to this question were not limited to one answer.)

What Adults Need at the University (Check List)

information in the schedule book, 9.51 per cent.

Adults were in rather close agreement regarding their first ranked needs at the University, as shown in Table 62:
(1) special academic advisement and counseling, 56.28 per cent; (2) a recognized adult center, 45.55 per cent;
(3) scholarships and financial aids, 45.34 per cent;
(4) registration and advisement by telephone, 30.16 per cent; (5) special assistance in procedures, 21.86 per cent;
(6) more information in the catalogue, 17 per cent; (7) opportunity for a testing program, 16.60 per cent; (8) more

Where Students Received Help in Coming or Returning to the University Table 61.

	Ma	.1e	Fema1e	ale	To	Tota1
Agencies	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
Registrar's Office	62	24.80	29	27.46	129	26.11
Admissions Office	81	32.40	7.8	31.97	159	32.19
Other University Agencies	44	17.60	53	21.72	97	19.64
Friends	65	26.00	45	18.44	110	22.27
Others	5.5	22.00	64	26.23	119	24.09

What Adults Need at the University (Check List) Table 62.

	Ma]e	Female	ale	To	Total
Needs	Number	Percentage (of 250)	Number	Percentage (of 244)	Number	Percentage (of 494)
A Recognized Adult Center	66	39.60	126	51.64	225	45.55
Scholarships and Finan- cial Aids	105	42.00	119	48.77	225	45.34
Special Academic Advisement and Counseling	132	52.80	146	59.84	278	56.28
Special Assis- tance in Procedures	41	16.40	29	27.46	108	21.86
Opportunity for a Testing Program	29	11.60	53	21.72	8 2	16.60
More Informa- tion in Catalogue	38	15.20	46	18.85	84	17.00
More Informa- tion in Schedule Book	16	6.40	31	12.70	47	9.51
Registration and Advisement by Phone	t 56	22.40	93	38.11	149	30.16

At the time of this writing, more information has been added to the catalogue and to the schedule book.

B. Data from Open-ended Responses Suggestions for Improvement of Adult Educational Services for Undergraduates

Two hundred fifty-five adults responded by essay or letter to the open-ended question asking for comments or suggestions on how the University could improve its services to the mature adult coming or returning for additional education. Many used this means to express their appreciation at being asked for their opinions. The responses constitute an interesting document of 45 single-spaced pages. Because of their length, they have been analyzed and are presented in outline form. The complete responses are available at the Student Affairs Office, the University College, Michigan State University. The suggestions were tabulated in ten categories.

	Suggestions:	of Mention:
(1)	Housing 1. An undergraduate hall for adults 2. Rooms only - not board 3. Pay-as-you-go meal plan 4. Choice of room and board or room only 5. More information available to	6 3 1
	adults on off-campus housing 6. Give precedence to Michigan residents on married housing	$\frac{1}{13}$

(2)	Special Academic Advisement and Counseling	23
	Additional:	
	1. Improve adult counseling service for	
	all part-time students - day and	12
	evening 2. Advice on how to return	4
		3
	3 Aptitude tests to determine interests	3
	4. Special program coordinator to handle	2
	all details	2
	5. Help in scheduling classes for the	2
	working student	2
	6. Help in planning a degree program	1
	7. Help in learning how to study	1
	8. Check on progress of individual stu-	_
	dents who have problems	1
	9. Enforce academic advisement program	_
	in business	_1
	9	50
(7)	Charial Orientation for Adults	10
(3)	Special Orientation for Adults	10
	T	10
	1	10
(4)	Improve Enrollment and Registration	
(.)	Procedures	8
	1. Special adult registration	6
	2. Allow registration by mail	3
	3. Enroll and possibly register by	Ŭ
	phone	2
	4. More information available on pre-	_
	registration	2
	5. Assistance in registration in classes	
	to fit commuter's schedule	1
	6. Permit registration on special program	-
	basis (non-degree)	1
	7. Pay only for credits taken (eliminate	_
	1-3, 4-7, etc., set up)	1
	8. Have enrollment and registration	_
	materials available in the evening	
	(would require some offices open at	
		1
	night) 9. Reserve spaces for evening, part-time,	1
	, 0, 1	
	and transfer students who are re-	
	quired to take specific courses in a	1
	given period of time	1
	10. A central office where all adults may	-
	go who have schedule problems	1
	11. Simplify the admissions and readmis-	
	sions forms	1
	12. Eliminate applying for readmission	
	after one or two terms' absence	$\frac{1}{2}$
	12	29

(5)	Impro	ved Evening Program	2
	i.	Enlarge course selection	14
	_ •	a. More courses in foreign languages	2
		b. More courses in business	1
		c. More courses in Arts & Letters	1 1 1
		d. More courses on Saturdays	1
		e. More courses in Arts and Crafts	ī
	2.		_
		sections	6
	3.	Make it possible for one to attain a	·
	٠.	degree in Evening College	5
	4.	Schedule night classes so one may	J
	• •	take two classes the same evening	
		(6-8, 8-10, etc.)	4
	5.	Have advisers available in the evening	2
	6.	Night classes during summer	_ <u>ī</u>
	11	Wight Classes daring sammer	$4\overline{0}$
	**		70
(6)	Acade	mic and Curricular Improvement for	
	Adu		
	1.		12
		(Math specified by three)	
	2.		6
	3.		
		for adults	5
	4.		
		classes	4
	5.		
		of the professors of adults' needs	
		and responsibilities	4
	6.		4
	7.	More independent study courses	4
	8.	More extension courses in areas other	·
		than education	3
	9.	Greater respect for adults from gradu-	
	•	ate assistants	3
	10.	Greater variety of subjects offered	
		at times suitable for adults	3
	11.	Recognize that the many commitments of	
	•	adults leave less time for extensive	
		reading and term papers	3
	12.	Correspondence courses	3
		(especially in agriculture - 1)	
	13.	Extend the No Preference category	
		beyond 85 credits (suggesting possibly	
		a Bachelor of Liberal Studies degree)	2
	14.	More elective credits	2 2 2
	15.		2
	16.	A means of speeding up programs for	_
		adults	2
	17.	Offer more summer courses	ī

	18. Fewer mass lectures	1
	19. Integrate volunteer and field work	
	into the curriculum and credits	1
	20. Use programmed learning	1
	21. Revise the curriculum to reflect	
	modern trends	1
	* *	-
	tration	1
	23. Revise the curriculum in Landscape	
	Architecture	1
	23	69
(7)	Suggestions for Basic Courses	
` '	1. Permission to waive required courses	9
	2. Career-oriented courses instead of	•
	Basics	7
	3. Improve Basic courses	4
	4. Have Basics scaled for adults (perhaps	5
	an adult track)	3
	5. Allow substitute courses for Basics	1
	6. A minimum requirement in Basics and	
	languages	1
	7. Tests to determine the amount of	•
	Basics an adult needs to take	1
	8. Have more Basics available off-campus	1
	9. Have Basic courses begin at earlier	
	hours at night - off and on campus	1
	10. Arrange Basics in blocks - to meet	
	fewer times weekly	1
	11. Shorten summer Basics, i.e. five-	
	week or one half-term completion	1
	11	$\frac{1}{30}$
	11	30
(0)	B 1 1 0 1:	
(8)	Evaluation and Grading	_
	 Improve grading system 	6
	Use pass-fail grades for electives	4
	3. Minimize variations in grading among	
	instructors teaching the same course	1
	4. Use self-evaluation devices with	_
	programmed and computerized learning	1
	Programmed and computerized rearring	
	5. Revise testing procedures	1
	6. Have more frequent exams	1
	7. Have one exam to determine the grade	_1
	7	15
(9)	Financial Aids	
	1. Financial aids for adults	8
	2. Special scholarships and grants for	_
	adults	3
		2
	3. Financial aid for part-time students	
	3	13

(10)	Special Adult Facilities Physical		
	1.	Accommodations for commuters (check-room, coffee machines, etc.)	4
	2.	Study area (Morrill, Berkey, library	
	3.	or adult lounge) A coffee shop for adults	3 2 2
		Coffee machines in class buildings	2
		An adult center	1
	Social		_
		A way for adults to get acquainted Adult social activities	6 2
		A way for adults to express their	2
		opinions	2
	9.	A club for adults	1
	10.	Discussion groups An organized program of physical	1
	11.	education	1
	12.	More family recreational facilities	-
		modestly priced	1
	Library		
	$1\overline{3}$.	More books and publications	2
	14.	Special study area	1 1
	15.	Improved cross-reference section	1
	Language Labs		
	16.	Keep language labs open all day and evening	1
		Service	
	17.	Continue commuter bus service during	2
		spring and summer	2
	Parking		
	18.	Remove parking restrictions for adults (near classrooms or on	
		campus)	18
	Nursery		
	19.	Day care center	4
	$\frac{20.}{30.}$	Baby-sitting pool	$\frac{1}{\Gamma C}$
	20		56

Totals 102 suggestions

325 frequencies

The suggestions given by the adult undergraduates can be summarized as follows:

	reas	Frequencies	
1.	Housing	13	
2.	Special Advisement and Counseling	50	
3.	Special Orientation for Adults	10	
4.	Improved Enrollment and Registration		
	Procedures	29	
5.	Improved Evening Programs	40	
6.	Academic and Curricular Improvement		
	for Adults	69	
	Basic Courses	30	
8.	Evaluation and Grading Financial Aids	15	
9.	Financial Aids	13	
10.	Special Adult Facilities	56	

Academic and curricular improvement, special adult facilities, special advisement and counseling, and improved evening programs were the most pressing needs as judged from these responses.

Individual items most frequently mentioned were:

- 1. Special academic advisement and counseling.
- 2. Removal of parking restrictions for adults (especially those who are working and commuting).
- 3. Enlarged course selection available for adults (night, summer, blocks of time).
- 4. Refresher courses for adults.
- 5. Special orientation for adults.
- 6. Permission to waive required courses.
- 7. Improved enrollment and registration procedures.
- 8. Financial aid for adults.

Each of the ten categories had sub-items of significance for plans to meet the needs of this important portion of the undergraduate student body. Some of the most pressing needs here were:

- 1. Counseling and testing before readmission.
- 2. An enlarged evening program.
- 3. An enlarged summer program.
- 4. A degree program which can be completed on a part-time basis.
- 5. A special living area for older undergraduates.

- 6. A per credit fee instead of charges for 1-3 credits, 4-7, etc.
- 7. Out-of-state fees waived for spouse of full-time student.
- 8. Enroll and possibly register by phone and/or mail.
- 9. Have some offices open at night or week-ends.
- 10. Courses meeting once weekly in blocks of time.
- 11. Use of independent study.
- 12. An improved faculty attitude toward the older student.
- 13. Recognition that adults have financial needs scholarships, grants, etc.
- 14. A special building or facility for adult and commuter students.
- 15. An organization of and for mature students.
- 16. Special parking facilities for part-time, working, mature students.
- 17. A nursery or day-care center for children.

Chapter IV will summarize the research data which has been detailed in this chapter and will develop specific and general implications, as well as present some suggestions for further research.

CHAPTER IV

SUMMARY AND IMPLICATIONS

This study was designed to identify the numbers of adult undergraduates at Michigan State University in the fall term, 1966, and to study their characteristics and their needs. Computer records were used to determine the population to be studied; a questionnaire was developed to obtain the desired information, and an opportunity was given for open-ended responses from the group. One thousand ninety questionnaires were mailed to the adult students; five hundred twenty-five, or more than 48 per cent, replied; four hundred ninety-four responses were analyzed. Details of the methodology are outlined in Chapter Three, pp. 39-41. The data assembled may be used as a basis for the improvement and development of educational programs for adults. Chapter Four presents a summary of the findings regarding adult undergraduates and their problems and needs; some comparisons with other studies described in Chapter Two; suggestions for future related research; implications of the study, and a concluding statement.

I. SUMMARY OF FACTORS DESCRIBING ADULT UNDERGRADUATES

Personal Characteristics

A majority of the adults enrolled as undergraduates fall term, 1966, were males, almost three to two (61 per cent to 39 per cent) in the over-all group, and 51 per cent to 49 per cent in the 494 studied. In the study, the male group was significantly younger than the female group: 89 per cent of the males were 37 or less while 60 per cent of the females were 37 or less. The adults were primarily white, 96 per cent, and married, 76 per cent. About one-fourth (24 per cent) of the males were single as contrasted with almost one-tenth (9 per cent) of the females. More females were divorced or widowed, but this was a small percentage (11 per cent, about one-tenth) of the females. That the females were older as a group (39 per cent were 38 or more years of age) was probably a factor in the larger number of divorced or widowed females.

The adults studied were primarily from "non-urban" backgrounds with almost 70 per cent of the group born in population areas under 150,000; more than 41 per cent were from towns of less than 10,000. More than three-fourths were from midwest backgrounds (78 per cent) and had their early education there (79 per cent).

More than half (56 per cent) of the students in the study had incomes: 73 per cent of the males and 40 per Cent of the females. Government stipends to veterans were

probably a factor in adult incomes.

of 478 respondents, almost four-fifths (79 per cent) were very or moderately satisfied with their lives, females slightly more than males. Only three and one half per cent of the 478 were quite dissatisfied. It would appear from these percentages that dissatisfaction with life is not a major factor in the seeking of more education by adult undergraduates. Their satisfaction with life was very similar to their satisfaction with their current jobs: 82 per cent indicated "life satisfaction" and 74 per cent "job satisfaction." More males, 11 per cent, than females, 4 per cent, were dissatisfied with their jobs. It would appear from this and from the reasons for returning listed on pages 102 and 103 that job dissatisfaction is a somewhat more significant factor for males than for females in coming or returning for more education.

It was found that adult students read widely, and that while males participated in recreational and church activities, females, generally, participated not only in these but in club, community, volunteer and cultural activities.

Summary

In a capsule, then, it appeared that the undergraduate adults to be served by education in the particular institution studied included more males than females; younger males

than females; more married females than males; students coming mostly from small or moderately populated areas; "midwesterners" with modest income levels; people rather well-satisfied with life and jobs; widely read individuals interested especially in church and recreational activities, with the females a somewhat more civic-minded group than the males.

Family Background

The adult undergraduates tended to come from homes where their fathers were not college graduates. Only 22 per cent of the 494 studied indicated that their fathers had education beyond high school. More mothers than fathers had education beyond elementary school, 79 per cent versus 72 per cent; fewer mothers than fathers had education beyond high school, 19 per cent versus 22 per cent. However, the levels of education of mothers and fathers were quite similar.

An analysis of the occupations of the fathers of the students in the study showed that the students tended to come from middle class homes. The most-named occupations were: skilled laborer, business owner, executive or manager, manual worker, or farm owner or operator. About 42 per cent of the mothers had not worked outside the home at any time; the most usual time for work by the mothers outside the home was during or after their children's

college years or high school years; mothers worked least frequently when their children were pre-schoolers. The income level of their parents was thought by 58 per cent of the adults to be average. About one-fourth (26 per cent) thought their parents' income below average; less than one-fourth (21 per cent) thought it above average. This would tend to confirm a middle-class background. Ninety per cent of the adults believed that their parents' occupations had not influenced their career choices.

The largest percentage, 25 per cent, of the adults studied reported one sibling. However, 24 per cent reported four or more, and 21 per cent two siblings. That almost one-fourth of the group studied came from large families may have been a factor in their non-completion of college soon after finishing high school. Twenty-six per cent of the siblings reported were in college or had gone to college; 74 per cent had not gone to college. The figures reported did not include young siblings who had not yet reached college age. There seems to be an indication from the above and from personal experiences of the writer to have a number of "first of the family to go to college" students at the University.

More than 52 per cent of the spouses of adult students had some college education; more husbands than wives had done graduate work; more wives had completed high school and had begun but not finished college. The figures confirm

the tendency of wives to "put their husbands through" college first and to resume their own education at a later date.

Seventy-seven per cent (380) of the adult students classified their spouses' occupations. Of the 494 adults, 30 per cent were engaged in professional work; 15 per cent were in office, clerical and sales work; 12 per cent were classified by their spouses as housewives; other smaller percentages were spread throughout the remaining categories. It appeared that more male spouses were in higher status occupations, in professional, and executive and manager categories.

Male spouses of adult students had higher incomes, \$5,000 or less to \$15,000, than female spouses who had \$5,000 or less to \$10,000. This finding agreed with the higher status jobs reported above.

That the children of the adult males were younger than the children of the adult females studied is confirmed in Table 23. The finding correlates with the higher age level of the females in the study. About 3 per cent of the adult students reported dependents other than children.

Summary

Summarizing information about family background, it

Can be stated that a majority of the adult undergraduates

Came from "non-college" parental backgrounds where the levels

of education of their parents were quite similar; they tended to come from middle-class homes on the basis of parental occupation and income; there was no particular pattern in the number of siblings, although the fact that one-fourth of those responding indicated four or more siblings may have influenced the amount of education possible for some of them; a majority of the spouses of the adult students had some college education, but more male spouses had done graduate work; male spouses tended to be in higher status occupations than females.

Educational Characteristics

More than half (54 per cent) of the adults were full-time students. More males were full-time (68 per cent); more females were part-time (59 per cent). Most of the adults planned to attend the University regularly (89 per cent).

Approximately three-fourths (78 per cent) of the males enrolled in social science, business, agriculture, engineering and education; almost nine-tenths (86 per cent) of the females enrolled in the traditional curricula: education, arts and letters, no preference, social studies and home economics. Education enrolled 10 per cent of the males and 41 per cent of the females.

Almost three-fourths (74 per cent) of the adults were juniors or seniors which can be accounted for, in part, by

transfer students and returning drop-outs. Seventy adults (14 per cent) indicated that they had no college experience prior to fall of 1966. Of this group, the males had finished high school more recently than the females. There was some discrepancy, however, in class rankings due, probably, to uncertainty as to number of credits necessary for each class level and to a time lapse in answering the questionnaire.

Of the entire group studied, more than one-fourth (27 per cent) had over two years of college work since coming or returning to the University; one-fifth (20 per cent) had more than one to two years; almost one-half (47 per cent) had a year or less. There were no responses from 27 students. Only 23 per cent of the group studied had not attended another college indicating, again, a high number of transfer students and a tendency to take courses at a number of institutions as location and time permitted.

Many adults had taken non-credit courses, especially through high school adult programs, the armed services, university evening colleges, business and industry offerings, and commercial colleges or trade schools.

The most frequently mentioned reasons for not going on to college after high school were: financial problems, military service, tired of going to school, school was not interesting, lack of confidence, wanted to get married, grades not good. Military service and lack of interest were more important reasons for males in limiting educational

attainment; financial problems were greater for males than for females; marriage was a more important factor for women than for men. There was no attempt to study the combination of factors which may have been involved in individual cases.

Reasons listed frequently by the adults for dropping out of college were: financial, marriage, lack of interest, family responsibilities, scholastic, emotional problems, unhappiness, military service, did not like college or university. For the males, lack of interest, scholastic reasons, and military service were important; for the females, marriage and family responsibilities as well as lack of interest were important.

A positive influence on the number of years of education attained by adult students was the attitude of family members. Only a few of the adults (12 per cent) felt that parental attitudes and 7 per cent that relatives' attitudes had negative influences. Additional factors influencing positively the number of years of education attained by the adults studied were nearness of a suitable educational institution, availability of books, and military service. Availability of money had almost equally positive and negative effects. Some adults were deterred by the lack of a nearby educational institution.

The most-named reasons by adult students for entering or returning to the University for additional education were:

to get a degree, to improve income potential, for intellectual stimulation, to continue an interrupted college career, to prepare for a job, to become more socially useful, to secure a better job, for advancement on the job, and to supplement family income. Male reasons for enter-/ing or returning to the University tended to be more utilitarian than those of the females. Becoming more socially useful grew more important with increasing age. Increasing income potential was significant to the younger adults and to those whose children may have been of college age.

Nearness and reputation were the most significant factors in adults' choosing this University. For males and younger students reputation was most important; for females and older students, proximity. Certain special programs brought adults to this University, such as the Education Intern Program, Police Administration, Hotel, Restaurant and Institutional Management, and Packaging.

Adults overwhelmingly preferred courses on campus: 85.22 per cent gave their approval to this method of continuing one's education. Some interest was indicated in extension courses and independent study.

It is significant for curriculum planners that adults were interested in courses in improvement of reading, how to study, how to take tests, improvement in writing and speaking, "new math," and orientation to college, as well

as refresher courses in mathematics, literature, history, foreign language and science. More males and younger adults were concerned with reading and studying; more of the older adults were concerned with new mathematics and scientific developments. Interest was indicated in refresher courses for credit.

Most of the adults were satisfied in classes with younger students. About 20 per cent of the adult males preferred classes with other adults.

The adults reporting liked regular day courses, 61 per cent; night courses, 35 per cent; long sessions once weekly, 1 27 per cent; summer courses, 24 per cent; once weekly courses with independent study, 20 per cent. More night, summer, and late afternoon classes were desired by adults.

"Lecture and discussion" was the most preferred method of instruction followed by "lecture only." "Mostly discussion" was more acceptable to males than to females; females liked "reading and writing of papers" better than males.

Adults generally were unreceptive toward TV classes and

Hollis Farnum, Director of Advisory Services, University of Rhode Island, found that "college students may learn more in one three-hour class a week than in three one-hour classes." This was true of students with comparable ability as judged by scores on achievement tests. The advantage may come from the "opportunity to go into greater depth in discussion without interruption. The advantage of the long class was greater in literature and philosophy than in calculus." Phi Delta Kappan, Vol. XLIX, June, 1967, 538.

programmed learning. This may be due to some extent to lack of exposure to these methods.

Males liked multiple answer examinations (64 per cent) better than females who liked to write essay (55.33 per cent) or take-home examinations (32.38 per cent) better than males. Essay and multiple answer examinations had almost equal votes from women. Also, younger adults preferred multiple answer examinations while older adults tended to choose take-home examinations.²

For evaluation adults preferred "frequent examinations." Less popular were "a mid-term and a final," and
"short papers." Males preferred examinations; females
liked writing papers somewhat better than males. All age
groups preferred frequent examinations. In second place,
according to age, were "short papers" for the older student,
"a mid-term and a final" for the younger students. "Finals
only" were unpopular at any age. More than 61 per cent of
the adults were disposed toward taking examinations for
credit; more than 37 per cent indicated an interest in
waiving courses without credit (more males than females).

Of the adults, 47 per cent were planning for bachelor's degrees, 39 per cent for master's and about 7 per cent for doctorates. As many males planned to get master's as

²There is recent evidence that essay examinations provide the most valuable insights. "Student-Faculty Dialogue on Courses," Phi Delta Kappan, Vol. XLIX, February 1967, 267.

planned to get bachelor's. Fewer females planned master's. Doctoral plans were made by 10 per cent of the males versus 3 per cent of the females.

More than half of the adults (54 per cent) indicated that they worked full- or part-time to make it possible to go to the University: 43 per cent had aid from spouses; 27 per cent were using savings; small percentages had loans and scholarships. Differences in male and female support were notable: more males were working, more were using government funds and savings; more females indicated that their spouses were paying (55 per cent versus 31 per cent for males).

Summary

Summarizing briefly: more adult undergraduates were full-time than part-time by a small margin; they planned to attend the University regularly; most of the group were following the traditional majors; fewer men were in science than one might expect; many of the adults were in professional education; a majority were upperclassmen; females coming to the University for the first time had been out of high school longer than their male counterparts; almost three-fourths of the adults had attended another college or university; many of the adult students had taken non-credit courses at some time; military service and lack of interest were important reasons that males did not

go to college directly from high school whereas marriage was the most significant reason for females; similar reasons to the above were given for dropping out of college except that males also named lack of interest and scholastic reasons as important, and females also named family responsibilities and lack of interest; attitudes of family members were generally positive influences on the number of years of education attained by the students as were proximity of a suitable educational institution, availability of books, and military service; the mostnamed reasons for coming or returning to the University were to get a degree, to improve income potential, for intellectual stimulation, to continue an interrupted college career, to prepare for a job, to become socially useful; the students chose this University because of nearness and reputation; they preferred courses taught on campus; they asked for certain "aid" and "refresher" courses; the group expressed a desire for more night, summer, and later afternoon classes as well as long sessions once weekly; "lecture and discussion" was the mostpreferred method of instruction; examinations preferred were multiple answer, essay, and take-homes with males liking multiple answer examinations better and females preferring essay examinations; "frequent examinations" were preferred by most students, followed by "a mid-term and a final" and "short papers"; most adult undergraduates were

planning for either a bachelor's degree or a master's degree and fewer women were planning advanced degrees; much of their financial support was from working, aid from spouses, or savings.

Vocational Characteristics

When asked about their employment, 67 per cent of the adult undergraduates said they worked full-time, part-time, or occasionally: 83 per cent of the males and 50 per cent of the females. This contrasts with 54 per cent who indicated they worked full- or part-time to finance their education. More males, 43 per cent, worked full-time than females who worked full-time, 21 per cent. Of the adults, 54 per cent felt working was a necessity; about three-fourths (72 per cent) of the males compared with one-third (34 per cent) of the females.

The males in the study were engaged in a variety of occupations (listed in order of frequency): military, service work, skilled labor, professional work, office, clerical and sales, and executive or manager; most of the females were in office, clerical and sales jobs (58 per cent) or in professional work (32 per cent). (It should be noted that the highest status job was the one used in this occupational report.)

The number of years spent at various occupations differed little for males and females. Younger groups

stayed with specific jobs for shorter periods; older groups spent longer periods in career occupations. Early jobs were somewhat temporary while these individuals were in military service, going to school, or finding the way toward more permanent employment.

Although "better opportunity" was the most frequently named reason for adults changing jobs, the reasons for changing differed sharply for males and females: for males-better opportunity, 76 per cent, and job unsatisfactory, 21 per cent; for females-marriage or family interfered, 35 per cent; better opportunity, 31 per cent, and spouse moved to a different area, 29 per cent.

Three-fourths (74 per cent) of the adults planned to work full-time in the future; only one-twelfth (8 per cent) were uncertain or thought they would not work. Of the 247 males who responded, 96 per cent indicated future work plans compared with 88 per cent of the 240 females who responded.

Summary

More than two-thirds of adult undergraduates worked full-time, part-time or occasionally; more men than women worked; a majority of the adults found working a necessity; the males in the study were engaged in a variety of occupations while the females were mostly in office, clerical and sales, or professional work (such as nursing, teaching);

early jobs of the students were somewhat temporary and older students had worked for longer periods at a given job; jobs were changed for a better opportunity most frequently, but for females marriage and family responsibilities and spouse's moving to a new job were important factors; generally, the adults planned to work in the future, with males indicating that 96 per cent planned to work and females indicating that 88 per cent planned to work.

II. PROBLEMS AND NEEDS OF ADULTS Summary from Questionnaires

The most-mentioned difficulties of adults in returning to the University were: courses given at times they could not attend, lack of time to study and read; not enough courses at appropriate times, fear of exams, cost too great, difficulty in making arrangements for family while away, transportation problems, courses uninteresting, lack of appropriate courses, and great competition from adolescents. Males had greater difficulty with finances; females had greater difficulty in arranging for their families while they were away. Transportation-getting to classes and back to work or home--presented problems for males and females.

Younger adults experienced more difficulty with costs and lack of interest. Fear of exams was greater in the older groups. Difficulties seemed to reach their highest

percentage for the 32-37 age group, and family arrangements were most difficult for those between 32 and 43 years of age.

Adults indicated a lack of information and sources for it when attempting to come or return to the University, or perhaps they did not know where to get the desired information. They gleaned some information from the Admissions Office, the Registrar's Office, other University agencies and from friends.

The needs of this group as adults reported them were: special advisement and counseling, a recognized adult "home" or office or center, scholarships and financial aids, registration and advisement by telephone, special assistance in learning about procedures, more information in the catalogue and schedule book, and an opportunity for a testing program before readmission and enrollment.

Summary from Open-Ended Data

It was significant that 255 (about 52 per cent) of the students in the study were concerned enough to write paragraphs or letters in addition to the structured responses. Many used this means to express appreciation that someone had bothered to ask for an expression of their opinions.

Judged from the open-ended responses, the most pressing needs were: academic and curricular improvement, special adult facilities, special advisement and counseling;

improved evening and summer programs, special track general education courses; improved enrollment and registration procedures; changes in evaluation and grading; financial aids; improved housing plans, and special orientation for adults.

Specific suggestions important to planning for adults are listed in Chapter III, pages 153-159. Particular emphasis was given to changes in parking restrictions for adults, having some offices open at night or week-ends, and a special organization of and for mature students.

III. SOME COMPARISONS

It should be stated again that no studies were found in a search of the literature which were confined to adult undergraduates taking on-campus credit courses. Some peripheral studies were summarized in Chapter II. Following are notable similarities to the present study.

A predominant vocational reason for adults continuing their education was mentioned by Liveright and Miller.

Other reasons were to continue an interrupted college career, to complete a degree, for promotion on the job, and for teachers' certification and promotion. In the present study vocational reasons were less significant than in

³A. A. Liveright and Harry L. Miller, Adult Education in Colleges and Universities (Brookline, Massachusetts: The Center for The Study of Liberal Education for Adults, 1960), pp. 14-15.

Liveright and Miller's study. Whipple stressed the complex motivations of adult students, and Dyer mentioned the heterogeneity of evening college students. He indicated a median age of thirty-plus for that group.

Phyllis Sensor in discussing difficulties of women in returning to colleges and universities indicated that they have fewer financial problems than men but have great difficulty with lack of time for home duties and study. She stressed their need for longer classes which meet less often.

Frances DeLisle indicated a need for a centralized facility, a recognized individual to make decisions for adults, and great flexibility in programs.⁷

Undergraduate students resemble to some extent the entire spectrum of adults interested in continuing education, on both a credit and non-credit basis, as reported by Johnstone and Rivera. These adults came from the smaller popu-

James E. Whipple, <u>Especially for Adults</u> (Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1957), p. 9.

⁵John Dyer in Liveright and Miller, loc. cit.

⁶Phyllis Sensor, "A Study of the Mature Women Students Attending Day Classes at Riverside College During the Spring Semester, 1964," Research in Education (Washington, D.C.: Educational Research Information Center), Vol. VII (July 1967), 41.

⁷Frances DeLisle, A Study of Academic Advising of Undergraduate Students (East Lansing, Michigan: Office of Institutional Research, Michigan State University, May 1965), p. 10.

lation areas; they had more education than the average adult; the younger adults and males had more of an occupational orientation while the older group and females were more interested in general knowledge and expansion of social horizons. All seemed to prefer classroom work. The authors found more dissatisfaction in the all-inclusive group they studied than was found in this research.

Christie found that "the greatest contributing factors to a student's success are the encouragement and enthusiasm of his or her spouse." These were also positive factors in a high proportion of cases in this study. Christie found too that adult students are engaged in a wide variety of occupations.

Knox reported that a majority of the students he studied were men, married, lived in a city, were between 25 and 45, and were employed full-time. Many (though a smaller proportion than in the present study) were returning for a degree; vocational reasons were most often mentioned, but cultural and social reasons were in second and third place. Of the older students studied, more were

⁸ John W. C. Johnstone and Ramon J. Rivera, Volunteers for Learning (Chicago: Aldine Publishing Company, 1965), passim.

⁹Richard Christie in Articulated Instructional Media Newsletter, Madison, Wisconsin: University of Wisconsin Extension Service, 1967, p. 1.

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married, with older children and higher occupational status, and with higher intellectual and social reasons for returning. The adults planned to attend regularly (four-fifths had attended the previous year). One-eighth (12.5 per cent) in his group had no previous college experience which compared closely with about 14 per cent in the present study. 10

IV. SUGGESTIONS FOR FUTURE RESEARCH

"The development of university level educational programs for adults can be materially improved and facilitated by a modest but continuing program of clientele analysis." 11

The present writer would underline the above statement and suggest periodic studies of the adult undergraduate group at this University as well as at other institutions.
By sharing information and working cooperatively, programs for this segment of adults could be developed on the basis of knowledge of student numbers, characteristics, and needs. Cooperative research and development of programs by several institutions would demonstrate the importance of special planning for the group, minimize overlapping of programs,

¹⁰ Alan B. Knox, A Summary Report on Adult College Students (Syracuse, New York: University College Adult Education Division of Syracuse University, 1959), passim.

^{11 &}lt;u>Ibid</u>., p. 12.

curtail costs, and improve the quality of education available. Such programs, unhampered by vested interests, would provide an especially fertile ground for educational innovation and research.

It would be important to know through periodic inquiry the numbers of adults desiring degrees, the <u>motivations of</u> the group, the stability of their characteristics and needs, the suggestions and advice emanating from the adult students.

It would be helpful to learn from periodic studies the numbers of adults in the community and in surrounding areas who would be potential adult undergraduates. Information on the number of commuters in the group and the distances they commute would be desirable. The development of a commuter map or chart would be useful.

Other information which would be desirable in a future study includes grade point averages of those responding and the number of those responding who were first in the family, immediate or extended, to go to college. A follow-up study of the adult undergraduates in this research could be of value, including the percentage who completed their degrees.

It would be appropriate to discover how a better base of communication could be established in the community between potential students and educational agencies, and how appropriate information about programs and opportunities might become public.

V. IMPLICATIONS OF THE STUDY

The adult undergraduates at Michigan State University represent only a portion of the total adult program.

Kellogg Center for Continuing Education offers an outstanding program of non-credit courses, a number of offcampus "extension" courses for credit, and specialized courses such as "University of the Air" programs. However, it was evident from the questionnaires and openended responses that there are needs of adult undergraduates which are not being met. Information about the characteristics and motivations of these students can be used to develop a program to meet their needs in a given institution and in similar institutions.

There are several additional considerations. Does an educational center have an obligation to serve the community? In this case the community involves large outlying areas as well as the more immediate environs. Secondly, is there an important public relations value in meeting the needs of adults? Over long periods of time, public support is likely to come from satisfactions derived from benefits received.

Much of the chapter to follow is concerned with

(1) specific implications for changes which result directly
from the study, and (2) more generalized implications for
the education of adult undergraduates.

Focus on Specific Implications

Scheduling. It was evident that most of the students desired degrees. Many of them who were working or were part-time students were not offered a continuing program at hours which enabled them to achieve a degree at night or on a part-time basis. One student reported attending eleven years at night and was still unable to find a field in which to get a degree from night-course offerings.

Another reported desperately hunting a final 38 credits to graduate. Special scheduling is imperative: sequential night classes; once-per-week classes (where attendance is permitted, encouraged, and financed by many employers); fewer class meetings with provision for independent study; a more adequate summer program with day and night classes; examinations for credit, and waiver examinations for independent study or for experience.

Included in the data was a plea by those who worked on campus for an opportunity to take at least one class per term during the day. Two well-paid technicians were refused opportunities to go to one class per term for courses necessary to proceed with a degree. In the name of humanitarianism, education, or labor relations, such opportunities should be commonplace.

Admissions and Registration. Many returning adults spoke of their "shock" at the registration site. (Efforts have been made to simplify the registration process.) Some

of the helps asked for included; special letters for adults with information at the adult level ("present letters are intended for adolescents"); simpler application and readmission forms (the forms have been revised); making it easier to return to the University after being out for a term; more information by mail; advisement by telephone; section reservations by telephone; payment of fees by mail; calendars of academic events to be available since adults usually do not get to campus at appropriate times to obtain newspapers; pre-admission brochures on how to get financial assistance; and assurance that reservations will be made for adults to get into specific classes when there are no alternative courses possible.

Orientation. Many adults felt they needed a separate orientation program from the one devised for eighteen-year-olds. The typical orientation program was labelled a "farce" for many of the older students. The tests taken at orientation were not considered valid for an adult who has been away from academics for a period of years. They were considered tests of information which is common to recent high school students. One adult reported failing all of the orientation tests except one, but later having a 3.5 average at the University.

Counseling and Advising. Many adults asked for a recognized place to which they could turn for extensive help before or at the time they submitted an admissions or

readmissions request. They underlined, "Please stress the importance of better high school guidance" or "Somewhere - give us help before and during a university education." One student said, "I was bounced from one office to another. It was ridiculous. My friends have had the same experience." They asked for individualized programs, for flexibility, for someone who has authority to make adjustments and who is identifiable. Many times they turned to friends or students whose information though well-intended was no longer current or was misleading. Lack of adequate help was expressed by some of the students whose questionnaires were not included in the study because they had graduated. They felt a need for advising which might have helped them choose a different degree, or teacher certification, or the proper courses for graduating with minimum credits. Other pleas heard were: "Don't use graduate students for advisers" and "Please look beyond our G.P.A. (grade point average) - we need help."

Through counseling, the fears common to adult students can be alleviated: fear of examinations, of inability to study or to read, of class discussion, of being out-of-date, and of competition from adolescents.

<u>Instruction</u>. Faculty who recognize the problems of adult students, who are sympathetic, understanding, and cooperative are especially important. A request was made for faculty "who know how to teach," who "speak English,"

who "recognize that group projects are difficult for working students." "Why sit through a mass lecture when you can get the same thing out of a book?" The adults were asking for materials and methods which give cognizance to differences characteristic of mature students. They asked for refresher courses, a "lecture and discussion" method, and frequent examinations.

Living Accommodations. While many adults live off-campus and many commute great distances, there are those who try living on-campus. One respondent in her middle thirties who had left her five-year-old child with her mother, and who was recently divorced, returned for six terms to finish a degree. She was housed in a four-student suite with a roommate of eighteen who was on the "mod" side. The variety of conflicts can be imagined. An effort should be made to plan a living area for those adults who return to on-campus living. They surely would be better situated in graduate dorms than with eighteen-year-old freshmen.

<u>Finances</u>. It is still not adequately realized that adults may need financial aid. More scholarship aid should be available to them, and more information on financial aids should be given to them - to the public, generally, and to those applying for admission or readmission. It is likely that more adults would be in regular attendance at institutions of higher education if they could afford the costs involved.

If husband and wife or several family members are attending a university, a joint fee schedule should be available. It is especially difficult for out-of-state students to pay double fees for husband and wife. This study indicated that the males had greater financial problems than the females, many of whom were older and had the support of their husbands. Divorced and widowed females tended to have major financial problems, however. One-third of the wives were supporting their husbands, frequently by nursing, teaching, or secretarial work.

Transportation. For those who may work fifty miles or greater distances from the University, transportation is a critical problem. For others, such as a nurse who came to morning classes on a part-time basis, the cost of campus bus tickets for a few rides weekly was excessive. For those with physical handicaps, or increasing age, adjustments need to be made. To whom does the adult undergraduate turn - or has it become such a hurdle at this point as to end further efforts toward a degree?

Again the commuting adult must carry from great distances where his car is parked all the regalia and paraphernalia necessary to a student - perhaps lunch included. Where can he deposit this burden during the day or half-day he walks or busses from area to area? Some centralized facility would appear to be a haven.

One adult suggested his need as "being able to drive on campus, damn it!" Time is an important factor for adults who must hurry to job and/or family obligations.

Miscellaneous Suggestions. Perhaps an indication of the relevance of studies of this kind can be found in the numbers of students who said, "Thanks for asking my opinion," or "This is the first time anyone has bothered to ask my opinion on anything." Others gave names and addresses asking for a report or summary of the study.

Do we not need to seek the advice of these important adults in planning University programs? Have there been representatives from this group on Spartan Round Table, in decision-making groups, or involved in program planning? Have activities or courses or facilities or programs been devised with a knowledge of or recognition of their needs? Many of them say, "I wish I had finished college. . . ."

They have many reasons for expressing that wish.

That the adults felt appreciative of the opportunity given them by the questionnaire was evident, also, in many margin responses. The questionnaire became a sort of friendly dialogue between student and University. When asked for reasons they did not go on to college after high school, these comments were offered: "Only boys went on for an education; girls were secretaries"; "Nineteen thirtyfour depression, World War II, children to put through college - now it is my turn"; "And so, married instead,

divorced - and after five years and three children . . ."

Whether honesty, modernity, or flippancy, one student
named his recreational activities as "sport cars and sex."

When asked about satisfaction with present life, these
responses were made: "The strain seems to be on my wife";

"College is largely a disease. I don't like being sick."

And when asked about satisfaction with present job, one
answer was: "Very satisfied - just quit." They have not
lost a sense of humor.

Some Generalized Implications

Universities and colleges need to recognize many changing patterns in education. More people want and need more education. Greater numbers of adults have educational needs. They have not asserted them as yet. It appears that if colleges and universities do not meet the educational needs of adults, other agencies, business, industry will take over this function and develop heterogeneous programs within their own institutions. Adults, looking for degrees, are gently knocking at the door now.

"Life-space" motivations 12 should be significant to institutions of higher education. Older students are more socially and culturally motivated - and less concerned with vocational reasons - in continuing their educations. Even

¹² John Dyer in Liveright and Miller, loc. cit.

those adults who indicate primary vocational interests have strong secondary social and intellectual motivations. It would seem, therefore, of importance to develop at least one program, one degree, obtainable on a part-time basis, that would meet the "life-space" demand.

Such a program, whether it is a Liberal Studies Degree or another name, would enable an adult to move clearly, carefully, and rapidly toward the degree goal, whether employed full-time, a housewife, a drop-out, underprivileged, or merely desirous of an education. Thus, a specially designed liberal education program would serve to complement a vocationally-oriented plan and would stand alone for those desiring intellectual stimulation, cultural development, and socially useful orientations.

At the present time there is a tendency toward developing separate programs, "Orientation Programs," for women. Such programs are useful for they provide the orientation, assistance and diagnostic services which are helpful and needed by adults who have been out of high school or college for a period of time. However, it should be recognized that returning males need a similar program. If one accepts the thesis that women are underprivileged and that the underprivileged need more of everything, then excluding males might possibly be justifiable. Women are paid less for their work; they do have lower status occupations, and fewer do have advanced degrees. Nevertheless, a program should

be designed which will be available to all adults, male - and female, desiring to go to college or to return to college in pursuit of an undergraduate degree. Women should be encouraged to go into higher status jobs, to take more master's degrees and doctorates, and should have very flexible programs as they follow their husbands from college to college or job to job.

Statistics in the study show an extremely small per-, centage of Negroes who come or return for continuing education as adults. Programs should aid, serve, and appeal to all of our citizens.

Since the adult undergraduates in this area tend to come from medium and small cities as well as rural back-grounds, programs for them could well consider their characteristics and needs.

The adult students can also be identified as tending to come from middle class or middle income homes, a factor which has educational import. While most of the students felt their parents' occupations had not influenced their own choices, a drive and motivation from parental ambition seemed a strong undercurrent. Noteworthy, too, was the high correlation between the educational levels of father and mother, and between student and spouse.

The study brings into focus the increasing numbers of women who are working. Eighty-seven per cent of the enrolled adult women indicated plans to work. Some factors

leading to the increased work plans of females are the increased costs in educating one's children, the desire to make a social contribution, the need for continuing intellectual stimulation, the changing role of women, and the tendency for high percentages of college-educated women to work. Included in the educational pattern for women should be plans to work outside the home at various times during their lives. It would be helpful to have this philosophy built into our educational plans.

A current trend toward interest in the social sciences and humanities was evident in the college enrollments of both males and females. Developing programs should consider the changing motivations of the adult students.

With the advent of compulsory military training, followed by a great increase in numbers of males in mili-tary service, men began coming to the universities and colleges with G.E.D.'s - certifications of high school equivalencies - obtained by some while in service. This group especially needs counseling and assistance prior to enrollment in university programs. Additionally, the veterans returning to complete degrees are faced with unbelievable adjustments. One recently-returned veteran went from the battlefront to classwork in the University in one week's time. Early and continuous help is important to these adults.

Females tend to stay out of college longer than males before beginning or resuming education due to their family responsibilities. For potential students in this category, a nursery for young children may be essential.

Because many of the adults have attended one or several other colleges, a number of problems arise needing special care: transfer of credits, information on procedures, adjustment to new methods, and the shock of examinations and grades at a new institution.

It is significant to a college or university that most of the adult students indicated a preference for taking courses on campus. To them the atmosphere, students, faculty, activities, facilities, are an important part of continuing education.

CONCLUDING STATEMENT

Quoting again from Berniece Neugarten of the University of Chicago and referring especially to the adult undergraduate:

We are operating with expectations of adolescence in an institution that has been geared to adolescence, and it is very clear today that we must worry about how to fit an educational system to adults when the system hasn't been built for adults before. 13

¹³Berniece Neugarten in Sarah E. Sagoff, Adults in Transition (Summary of a Conference at Chagham, Massachusetts, May, 1965. Winchester, Massachusetts: New England Board of Higher Education, and Brookline, Massachusetts: Center for the Study of Liberal Education for Adults, 1965), p. 8.

Crimi adds:

If there are unmet "college-level" educational needs among adults in the community, and if meeting such needs would violate no important element of institutional policy or philosophy, and if such actions can also bring significant values to the college, is it not both expedient and appropriate for each college to examine carefully its opportunities and possible obligation in the field of adult education? 14

And Donald Michael concludes:

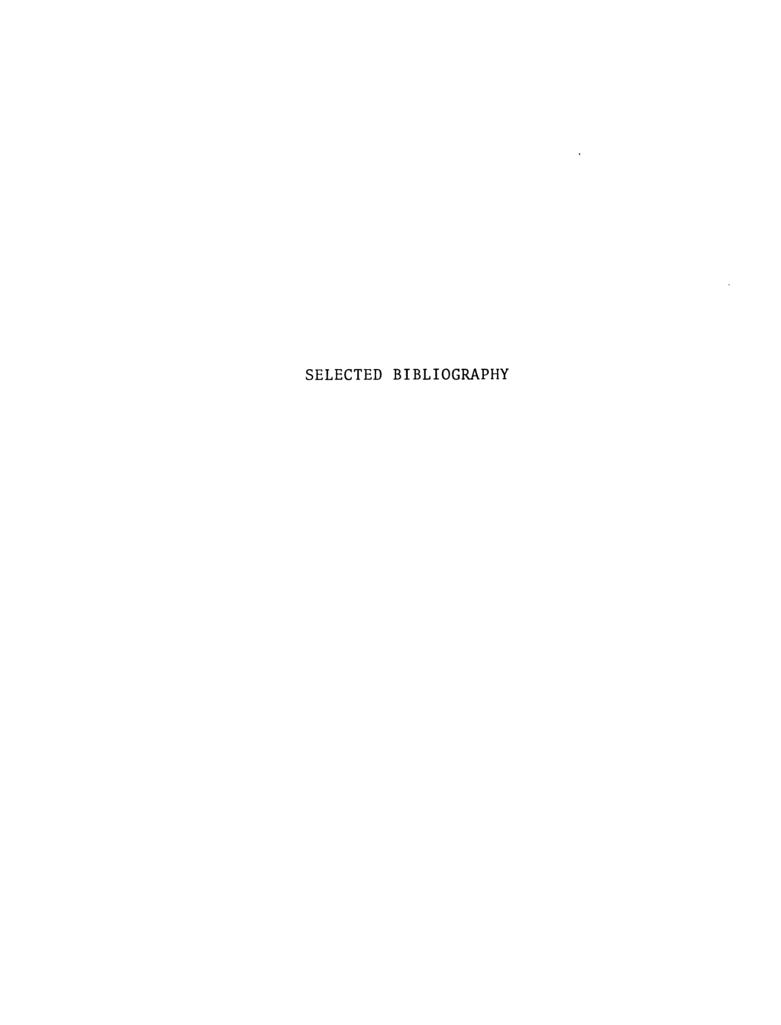
The inexorable pressures to innovate fundamentally and wisely in the substance and methods of guiding, teaching, and counseling, and in those of administration, will be enormous and unending—and we will be desperately short of wise men to implement these fundamental changes. Indeed the most important lesson pivotal institutions will have to learn is how to change rapidly and frequently. This will be exceedingly difficult to do, but the degree to which the challenge is met will determine the extent to which, twenty years from now, we have a society that gives meaning to the individual. 15

If this study has focused attention on a neglected group and has identified characteristics and needs of adult students which will serve as a foundation on which to begin the development of more effective programs for adult undergraduates, the purpose of the dissertation will have been

James E. Crimi, Adult Education in the Liberal Arts Colleges (Chicago: Center for the Study of Liberal Education for Adults, 1957), p. 38.

¹⁵ Donald Michael in Sarah E. Sagoff, op. cit., p. 25.

achieved, and some contribution may have been made toward a society interested in "giving meaning to the individual."



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APPENDIX A

QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY UNIVERSITY COLLEGE EAST LANSING, MICHIGAN

February 24, 1967

The Student Affairs Office of the University College believes that the needs of mature adult students at Michigan State University differ from those of students coming directly from high schools. We hope through this questionnaire to determine the characteristics, desires, needs and suggestions of your group. How can the University better serve you?

Your cooperation in this study may provide information which will stimulate the University to establish facilities for aiding mature adults who are coming to the University for credit courses. Your opinions and suggestions are important.

Please answer the following questions to the best of your ability. If you prefer not to be identified, do not sign the questionnaire. If there are items which you prefer not to answer, omit them. Any information given is strictly confidential and the questionnaire will be read only by me.

Mildred B. Erickson, Counselor 170 Bessey Hall

Check (\checkmark) on the line in front of the numbers the appropriate response or responses. Use the back of the questionnaire if more space is desired for comments.

Part I

1.	Are you returning to the University 1. full-time (10 or more cr./term) 2. part-time (no. cr. usually carried)
2.	Do you plan to attend regularly
3.	For what reasons did you enter or return to the University for additional education (check all that apply) 1. to get a degree 2. to continue an interrupted college career 3. to prepare for a job 4. for advancement in my present job

	- 5. - 6. - 7. - 8. - 9. - 10. - 11. - 12. - 13. - 14. - 15. - 16. - 17.	to keep up with my husband's (or attainments to keep up with my children	·
4.	In whice	ch college and department are you	
5.	Have you would it. or: 2. in: 3. are 4. pre	ou changed your mind about the are like to pursue iginal area chosen itial area changed to ea changed again to esent area chosen iil undecided	eas of study you
6.	"adults all who had all who had all who had all who had all all all all all all all all all a		
7.	1.	special courses offered once week for two or three hour sessions	

		summer courses late afternoon courses Saturday courses week-end seminars courses which meet one hour weekly and provide for independent study courses which meet for day-long sessions for two weeks per term other arrangements (specify)
8.	apply)	kinds of exams do you prefer (check all which multiple answer objective essay take home exams open book exams others (specify)
9.	1	aluation of your work, do you prefer frequent examinations a final examination only a midterm and a final exam a term paper examinations and a term paper short papers others (specify)
<u>(0)</u>	Would 7	you desire to take examinations for credit in areas where your experience or previous study qualify you take examinations to waive courses where your experience or previous study qualify you
Ŋ.	(check	ethods do you prefer for continuing your education all which apply) enrollment in courses on campus extension courses independent study correspondence courses educational television on the job courses others (specify)

12.	Evaluate the following method to your preference	ds of in	nstruction	according
	 lecture only lecture and discussion mostly discussion 	Like	Dislike	Not Certain
	 4. division into committees to pursue areas of interest 5. mostly reading and papers 6. T.V. classes 7. programmed learning 8. other 	s		
13)	Have you taken non-credit corapply)	grams	·	11 that
14.	Where did you get help in plant university (check all that appears of the property of the prop	pply)		n to the
19.	Did you encounter difficultie university (check those which	h apply) ourses	nnot atte	nd

	$ \begin{array}{c} -10. \\ -11. \\ -12. \\ -13. \\ -14. \\ -15. \\ -16. \end{array} $	transportation is difficult can't get answers to how to get started again no one interested in my problems competition from adolescents
(16)	should	feel that adults returning to the university have (check those which apply) a recognized adult center for assistance scholarship and financial aids special academic advisement and counseling special assistance in procedures opportunity for testing program more information in catalogue more information in schedule book registration and advisement by phone others (specify)
17.	For wha	at reasons did you choose to come to this sity (check those which apply) nearby reputation of institution expense less scholarship aid husband or wife working in the area husband or wife studying at the University other family member attending the University (specify)
18.	Are you adults 123456789.	interested in these special courses for returning (check all which apply) improvement in reading improvement in speaking
19.	credit - 1 2 3.	interested in "refresher" courses either for or no-credit in math science agriculture business

	5. communications6. reading7. arts8. literature and history9. foreign language10. others
20.	How would you evaluate or assess the University College courses you have taken 1. excellent2. good3. average4. below average5. comments:
21.	How would you evaluate or assess the courses which you have taken in your major area 1. excellent2. good3. average4. below average5. comments:
22.	How would you evaluate or assess the elective courses you have taken 1. excellent2. good3. average4. below average5. comments:
23.	Your educational level fall term 1966
24.	If you had no previous college experience prior to fall 1966, how long had it been since you were enrolled in high school

25.	1966 s:	licable, the number of ince you were enrolled one or less two to five six to ten ten to twenty more than twenty	years prior in college f	to fall or credit
26.	How man	ny credits have you ear iversity less than fifteen fifteen to thirty thirty-one to forty-fi forty-six to eighty-fi eighty-six or more		turning to
27.	attende	ny other colleges or uned none one two three more than three	niversities h	ave you
28.		of these factors influe cation you have attaine		ber of years
		attitude of parents attitude of spouse attitude of relatives attitude of friends attitude of children	Positively ————————————————————————————————————	Negatively
29.		of these factors influe cation you attained	enced the num	ber of years
	- 1. - 2.	availability of money nearness or distance- away of a suitable educational insti- tution	Positively	Negatively
	3.	availability of books and cul- tural media		
	$\frac{4}{5}$.	military service others - explain		

30.	If applicable, what were the reasons you did not go on to college after high school (check all that apply) 1. tired of going to school 2. felt I had enough education 3. felt I should get practical experience 4. could get the job I desired without going on to school 5. military service 6. desired to get married 7. grades were not good 8. there were financial problems 9. school wasn't interesting to me 10. lack of self-confidence 11. other (please specify)
31.	If you went to college and stopped before completing it, what were the reasons (check all that apply) 1. financial 2. scholastic 3. lack of interest 4. military service 5. marriage 6. family responsibilities 7. emotional problems, unhappiness 8. didn't like the college or university 9. inadequate course offerings 10. didn't like social life 11. other (please specify)
32.	How are you financing your education (check all that apply) 1. working full or part time 2. savings 3. spouse is paying 4. loan 5. scholarship 6. government V.A. Bill
33.	<pre>In general, are you satisfied with your present life 1. very satisfied 2. moderately satisfied 3. a little dissatisfied 4. very dissatisfied 5. comments:</pre>

34.	$-\frac{1}{2}$. $-\frac{3}{4}$.	very satisfied with your present job very satisfied moderately satisfied a little dissatisfied very dissatisfied comments:
35.	$ \begin{array}{r} -1. \\ -2. \\ -3. \\ -4. \\ -5. \end{array} $	at extent do you plan to continue your education limited number of courses (non-degree) two year credential bachelor's degree master's degree doctorate other (specify)
36.	1.	plan to work in the future yes, full-time yes, part-time probably not uncertain
Part	II	
37.		sex male female
38.	Your :	age 26-31 32-37 38-43 44-50 51 or older
39.	Your :	race white negro oriental specify other
40.	$-\frac{1}{2}$. $-\frac{3}{4}$.	marital status single married divorced separated spouse deceased

41.	Your place of birth
42.	Your place of birth 1. east2. midwest3. west4. south5. other
43.	Region where you had the major portion of your elementary education 1. east 2. midwest 3. west 4. south 5. other
44.	Your father's level of education 1. attended high school but did not graduate2. completed high school3. attended college but did not graduate4. has college degree5. other (specify)
45.	Your father's occupation 1. manual worker - no special training required2. skilled laborer3. business owner4. farm owner or operator5. executive or manager6. office, clerical, and sales worker7. professional worker8. service worker
46.	Your mother's level of education 1. attended high school but did not finish 2. completed high school 3. attended college but did not finish 4. completed college 5. other (specify)

47.	Did your parents' occupations influence your choice of career 1. decidedly 2. very little 3. not at all 4. comment:
48.	Did your mother work outside your home (answer all that apply) 1. while you were pre-school 2. during your elementary school education 3. during your high school education 4. during your college education 5. after 4 above or presently working 6. has never worked outside the home
49.	In your opinion was the income level of your parents (while you were one to 25 years of age) 1. below average 2. average 3. above average 4. don't know
50.	Number of sisters and brothers
51.	The number of your sisters and/or brothers of 19 years of age or older who 1. did not complete high school 2. completed high school 3. did not go to college 4. are in college 5. graduated from college 6. has done graduate work 7. other (specify)
52.	Educational level of spouse, if applicable (answer all that apply)

53.	Occupation of spouse (now)
54.	If married, your spouse's income level (now)
55.	Your dependents, if any 1. children ages 1-5 2. children ages 6-13 3. children ages 14-17 4. children ages 18 or older 5. other dependents
56.	The number of your children eighteen years of age or older (if any) who Number did not graduate from high school were graduated from high school attended college but did not graduate were graduated from college have done graduate work
	Are you employed 1. full-time2. part-time (1/4 - 3/4)3. occasionally
58.	<pre>Is employment a financial necessity to you 1. yes 2. no</pre>

59.	Your personal income level now (if employed)
60.	Your occupational history 1. job 1 length of time 2. job 2 length of time 3. job 3 length of time 4. job 4 length of time 5. others length of time
61.	If you have had several jobs, what were your reasons for changing jobs
62.	Which of the following do you read regularly (check all that apply) 1. newspapers 2. magazines 3. books (not assigned for courses)
63.	In which of these activities do you participate regularly (check all that apply) 1. church 2. club 3. community 4. volunteer 5. cultural 6. recreational (specify favorites) 7. others
64.	It would be very helpful to have additional comments and suggestions from you on how Michigan State Univer sity can improve its service to you as a mature adult returning for additional education.



