ABSTRACT

AN ANALYSIS OF THE CHARACTERISTICS OF THE RETURNING/NONRETURNING OLDER ADULT STUDENT IN A COMMUNITY COLLEGE SETTING

By

MaryRose Lamb Hart

This study examined the characteristics of the older adult student in a community college setting as compared to the characteristics of the average older adult in Michigan. Differences in characteristics could help the administrator in a community college determine what type of older adult the institution was attracting. This information could then be used to determine new recruitment procedures, if desired, or to determine if present goals are being met.

The study also examined the characteristics of the returning older adult student as compared to the nonreturning older adult student. Differences in characteristics could aid the administrator in determining what were factors in the retention rate of older adult students.

The survey population included all Lansing Community College students who were the age of 60 or over at the time of registration for the class during the six terms, Summer 1974-Fall 1975. All classifications of students were included in the population. For the purposes of this research, it was determined that the entire population of older

adult students, 256 nonduplicated students, was a small enough population to be handled effectively. Of the original target population of 256, 159 responded with usable responses.

The instrument used to collect the data to test the hypotheses in this study was a revised, condensed form of the questionnaire used by the Michigan Offices of Services to the Aging in the 1975 Michigan Older Adult Survey.

The data were collected by a mailed questionnaire. Additional information from the Registrar's Office at Lansing Community College was included at this point.

The hypothesis 1 and subhypotheses, which involved the comparison of the older adult student sample with the sample of older adults in Michigan, were tested using the Chi-square test for goodness of fit. The hypothesis 2 and subhypotheses, which involved the comparison of the returning older adult students with the nonreturning older adult students, were tested using the Chi-square test for differences in probabilities.

Conclusions of the Study

Hypothesis 1

The older adult student at Lansing Community College has characteristics statistically different from the average older adult in Michigan.

The older adult students are younger, better educated, more apt to be working, wealthier, feel healthier and more apt to be married and living with spouse. They also are less likely to consider themselves

senior citizens and enjoy associating with all ages of people. They are less likely to go to senior/recreation centers.

They are much less likely to watch television or read for leisure. They are more apt to spend their leisure on shopping, hobbies or attending lectures/entertainment.

In other words, the older adult students present a picture not unlike that of the average middle class adult. They view themselves as still part of the main stream, not as a segregated group. Education was the normal way for them. They felt comfortable in a learning environment.

Hypothesis 2

The returning older adult student evidenced few significant differences in characteristics tested from the nonreturning older adult student.

The returning older adult students included twice the number of widows as the nonreturning students. They were also more likely to live in the city/suburbs, make less money, visit friends less and eat out more.

Statistically there was not much difference between the returning and the nonreturning older adult student. However, there appeared to be a trend that could not accurately be measured by this study. The returning students seemed to use the community college for social contacts and needs not just cognitive skills, whereas the non-returning student used the community college to obtain a desired set of cognitive skills and then left.

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DEDICATION

to:

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CHAPTER I

THE PROBLEM

Introduction to the Study

In today's American society, one of the fastest growing segments of the nation's population is the older adult citizen. At the present time one out of every ten people is over 60. By the year 2000 this proportion is expected to increase even further; one out of every nine Americans will be over 60 (U.S. Bureau of Census, 1972). Recent interest in the older population has been spurred by this growth. The retired population has grown faster still. The question of the 1930s "what to do with the older worker," has resurfaced (Donahue, 1975). The government is becoming more and more actively involved with the aging. The community college is now becoming aware of the over-sixty segment of the population.

The increasing odds of reaching 60+ years are the dividend of our society. There are two new periods in aging--young old (60 to 75 years) and old age (over 75) (McClusky, 1975). At no other time in American history has there been this large a number of older Americans. And yet, less is known about this group than any other group of Americans. The whole question of aging, until recently, has been ignored by both the biological and social sciences. "Everyone" though

has had an idea of what was meant by the term, aging. The question of aging or growing old has occupied people's minds long before the biological and social sciences were really interested scientifically in the area of aging. This first scientific interest was just in the physical aspect of growing old. Studies on the intelligence, etc. of old people started in the 1920s and 1930s. These studies focused on the individuals. In 1929 Lillian Martin opened an old age counseling center. The term gerontology was first used in the 1930s; social gerontology emerged in the late 1950s. Thus the most advanced research on aging is in the biological areas. The social sciences are still formulating their theories about aging. The Disengagement Theory of Aging is the first real theory for the twentieth century, but it does not transcend cultures or take personalities into account (Friis, 1968).

One of the problems appears to be that, not only must a new body of knowledge be developed, but many of the formally held ideas about aging must be discarded. Michel Philibert, a French gerontologist and philosopher sums up the western perspective on aging in four main points: (1) aging is a biological rather than a spiritual, social and cultural process; (2) aging is unfavorable; (3) aging is universal and eternal rather than differential and variable; and (4) aging is unmanageable (Philibert, 1975). Though gerontologists now accept the above points as myths, our general population has not. Almost no one wants to consider himself as elderly.

As these myths of aging are shattered, the tremendous need for education among the older Americans is being revealed. This was

strongly pointed up by the recommendations of the White House Conference on Aging, 1971 (McClusky, 1971). The state of the elderly was viewed as serious. A list of priorities coming from this conference pushed for integration of the older American back into the main stream of decision-making for the solution of the elderly's problems. Education is needed to prepare them to do this. There is also a strong need for the training of personnel working with elderly or in the aging field. A need also exists to view aging as a lifelong process. Aging has positive aspects. The myths that pervade our society must be weeded out. As more and more senior citizens realize these myths don't apply to them, they seek out educational institutions to help them cope with the realities of their world.

In a recent survey completed by the Michigan Area Agency on Aging (Area Plan for Programs in Aging, 1975), education ranked fifth among the expressed needs of the elderly themselves, while among the pre-sixty population it ranked eleventh. The seniors are more aware than the general population of their need to be helped by education.

The seniors' need to cope with their real world is but one side of the need for education of the elderly. The other side is to help the educational institutions. The size and needs of the senior population become even more important to the school administrator as the trend toward zero population growth continues. Already the elementary schools are facing declining enrollments and all the implications that brings. Now is the time for community colleges to develop their programs to help both the elderly and themselves

as the declining enrollments become evident through the traditional grades (Gleazer, 1974). Andrew Korim, at a seminar for community college administrators, stressed that the institutions themselves need to be educated to the needs of the older adult. If good programs can be established now, then credibility with the older adult will be there when needed in the future (Korim, 1974).

Need

During the past five years there has been a proliferation of materials on the older adult. The need for education to change the negative image of the older adult and to help her cope with the changing world has been stressed (DeCrow, 1974). Research has been conducted to determine the "needs" of the older adult and general information on the older adult population. The whole question of how to attract the older adult to the educational scene has been explored from many different points of view (DeCrow, 1974; Goodrow, 1975; Manney, 1975; Moody, 1976; Peterson, 1976) and yet no current studies have taken place on what are the characteristics of an older adult student at a community college.

Before the administrators can act intelligently on designing programs for older adults, they should know the characteristics of the older adult students who are already attending the available programs. Determination of these characteristics will enable the administrators to judge from where the population of older adult students is presently being drawn, and perhaps, to make some conjectures

as to why this population is being drawn to the community college. The need exists for this groundwork to be laid by research, not guesswork.

A very important part of this research is the study of the characteristics of the older adult student in the community college setting. It is necessary for the administrators to see if their image of who the older adult is and why she is there, is the same image the older adult students hold of themselves. Only by exploring and comparing the expectations of students and institutions can the administrators fairly and accurately judge their programs and make changes if needed. At present, not enough baseline data exists on expectations, characteristics and viewpoint of the older adult student to allow the administrators to incorporate this necessary data in planning.

The Problem

In order for an administrator to adapt a program to meet the needs of the older student, she must first determine the type of older student that has been in attendance at the college. In this way the administrator can determine which, and what proportion of the older adult population is attracted to the community college. With this information the administrator can then proceed to view the college's current older adult population in relationship to the total service district's older adult population. She can then decide if or where the differences or discrepancies lie. The administration can also use the information to see why some older adult students don't return

to the community college. The program can then be evaluated in light of these findings.

The Purpose

The purpose of this study is to try to determine the characteristics of the older adult student in a community college setting, more specifically, Lansing Community College. This information will then be used to make two different types of comparisons: (1) characteristics which differentiate the older adult student from the average older adult and (2) characteristics which differentiate the returning older adult student from the nonreturning older adult student. This information will be of importance since it will form the baseline data for the Center for Aging Education (CAE). The population chosen for this study was the last group of students over sixty to attend Lansing Community College before the Center for Aging Education was established. The Center was established in September 1975 as a coordinating center at Lansing Community College in matters for and about aging. Using the information provided from this study the Center can make comparisons with its present population to see the impact of the Center.

Definition of Terms

The definition of terms which follow are presented to aid in the interpretation and clarification of this study and to facilitate any future replications of this study that may be initiated.

Older adult, senior, senior citizen, elderly: Any person sixty years old or over.

Average older adult: The norm as determined by a Michigan survey of older adults conducted by Market Opinion Research Co., Inc., for the Office of Services to the Aging.

Social needs: Perceived need to extend human contact beyond close knit associates.

Educational experiences: May consist of either formal or informal contact with an educational institution.

Educational institution: As utilized in this study, it pertains to any organized structure that offers events; the primary purpose of which, is instructional in nature, i.e., schools, churches, youth groups, community organizations, etc.

Socio-Economic Status (SES): For the purpose of this study, the SES will be determined by a combination of income and subject's self-perception of her social status.

Administrator: The individual designated by a higher authority for the responsibility of operational functions of a community college.

Older adult student: An individual, sixty years of age or older, who enrolled for at least one course at Lansing Community College.

a. *Returning older adult student:* An older adult student who subsequently re-enrolled in a structured educational experience at Lansing Community College.

b. *Nonreturning older adult student:* An older adult student who did not re-enroll in a structured educational experience at Lansing Community College.

Community college: "A two-year institution of higher education, generally public, offering instruction adopted in content, level, and schedule to the needs of the community in which it is located. Offerings usually include a transfer curriculum, occupational curriculums, general education and adult education" (Handbook of Data and Definitions in Higher Education, 1972).

Limitations and Scope of the Study

The study will be limited to one community college, Lansing Community College. The college serves a divergent population, such as, rural, suburban and urban. The study will be limited by the sample that responds. The study is further limited by the subjects' willingness both to participate and to complete the questionnaire accurately and honestly. The validity of the results is also limited by the extent to which some of the people asked did not answer all of the questions.

Research Questions

This study was designed to answer the following research questions:

1. What selective characteristics does an older adult student have?
2. Does the older adult student have significantly different, definable, selected characteristics from the average older adult?
   a. What are these characteristics?
   b. How do they differ?
3. Does the returning adult student have significantly different, definable, selected characteristics from the nonreturning older adult student?
   a. On which selected characteristics do they differ?
   b. How do they differ?

Chapter III contains the detailed hypotheses to be studied.

Overview of the Study

This study is divided into five chapters. The setting for the study is presented in Chapter I. It includes an introduction to the study, the statement of need and the purpose of the study, limitations of the study, the statement of the hypotheses to be tested and definitions of terms used in this study.

The review of the literature is contained in Chapter II. This review is divided into three general areas: (1) adult education, (2) community college and (3) gerontology. The review includes sources since 1960 with emphasis on the period since 1970.

A description of the research design and procedure is found in Chapter III. Included in this description is information relating to: (1) the sample, (2) the instrument used, (3) collection of the data and (4) statistical methods used.

The in-depth analysis of the data is found in Chapter IV. Each hypothesis is presented followed by the pertinent data.

A summary of significant findings, conclusions, implications and recommendations for future studies is presented in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

The literature was reviewed in this chapter to provide a background necessary to understand more fully the position of an older adult in a community college setting. This review is divided into three main conceptual areas: (1) gerontology, (2) adult education as it is related to the older adult, and (3) community colleges as they are related to the older adult.

Two factors have influenced the literature found in these areas. The first was the relative newness of recognition of the older adult as a distinct group and the second factor was the increase of both state and federal funding available for work in these areas. The result has been an outpouring of nonscientific or "critical" articles and a proliferation of descriptions of programs and "successes." This review incorporated both the "critical" and the scientific literature that was most pertinent to this study. Howard McClusky (1971) best summarized the state of the art by writing:

> When we search the world of scholarship for "hard data" related to the education of older people, we emerge from our inquiry with several substantial impressions. First, such data on the education of older persons is extremely limited: obviously, this is a domain much neglected by educational research. Second, with respect to the amount

> of formal education attained, older persons are extremely disadvantaged. Third, rates of participation by the aging in activities designed for the education of adults are very low, in fact the lowest for all age segments of the population. Fourth, the ability of older people to learn continues at a high functional level well into the later years, age, therefore, in itself, being no barrier to learning.
>
> In brief, then, older people are for the most part seriously deficient in formal education, generally non-participant in educational activities, but at the same time capable of an educational response far greater than that offered by existing opportunities and presumably expected by the society. (p. 9)

Gerontology

The section on gerontology is divided into three subsections. The development of gerontology is the theme of the first subsection. The second subsection contains the main theories of aging. Literature on some myths of aging that influence educators is presented in the third subsection.

Gerontology has been broken down into five stages by Leonard Breen (1971). Although each stage is considered separately, they are not mutually exclusive and, in fact, are interrelated. The five stages developed approximately in the order presented but are overlapping and may all still be in existence.

Philosophical Stage

The first stage was the philosophical stage. Early writers, including the Greeks and Romans, discussed the time of aging as lessening of passion and control of the intellect. This stressed the long term importance of aging.

Biological Stage

The next stage was the biological stage. This was a concern for the causes of aging. "Cures" were searched for. It was hoped industry and science could provide the reversal of the aging process. The first people scientifically interested in aging were biologists and medical doctors. The interest was just in the physical aspects of aging (Donahue, 1975).

Psychological Stage

Studies on the intelligence of old people started in the 1920s and 1930s. This ushered in the psychological stage. In 1929 Lillian Martin opened an old age counseling center. The term gerontology was first used in the 1930s.

Social Stage

The start of Breen's next stage, the social stage, is disputed by several known gerontologists. Clark Tibbitts placed the start of scientific social gerontology as late as the 1950s (Tibbitts, 1960). It was he who coined the phrase "social gerontology" in the late 1950s (Donahue, 1975). Strieb and Orbach (1967) date the beginning much earlier. They felt interest in gerontology was started with Francis Bacon's History of Life and Death (1645). Attempts were made in the nineteenth century to systematically study aging. Burgess (1960) and Hanighurst (1957) place the start with the industrial revolution. It was recognized by all that things begin to advance in the field of gerontology toward the end of the 1950s. Wilma Donahue (1975) became the first gerontologist listed in Who's Who.

Political Stage

The growth of the older population not only has spurred recent interest, but has ushered in the last stage, the political stage. Both state and federal governments are becoming more and more involved with the question of aging. There is an increased number of people who have worked with problems of aging and are now in influential positions in the government; i.e., Vice President Walter Mondale and Juanita Krepps, Secretary of Commerce.

Theories of Aging

Because the area of aging encompasses the entire man, the theories of aging also deal with different aspects of man aging. Ewald W. Busse (1969) grouped the theories into three main aspects of aging: the biological, the psychological and the sociological.

The biological theories are divided into three components. The first component of theories concerns the central idea that cells multiply throughout the life span. Theories that deal with this area focus on the idea that new cells in old animals are not as good as new cells in a young animal (Busse, 1969; Smith & Smith, 1965; Sonneborn, 1957; Hayflick, 1968).

The second component of theories centers on cells that are incapable of division. These theories focus on the idea that this type of cell is totally lost or declines in function as an organism ages (Busse, 1969; Hayflick, 1968; Curtis, 1966).

The third component of theories centers on the noncellular or interstitial material. These theories (Barrows & Strehler, 1968; Shock, 1962; Kallman & Jarnik, 1959; Busse, 1969) focus on the idea that damage "occurs in the noncellular material of the body, interfering with nutrition, respiration, and excretion" (Busse, 1969, p. 17).

Although the biological aspects of aging are important, the main emphasis of this review is on the psychological and the sociological theories of aging. The adherence to a theory or set of theories in these two areas will determine the type of strategies an administrator will use in older adult course planning.

Henning Friis et al. (1968) suggested that the underlying question for all theories of social gerontology was: "Are old people integrated into society or are they separated from it" (p. 3)? According to Friis et al. the theories of social gerontology break down into three areas of interest: (1) the historical perspective, (2) the individual aging within a life span and (3) relationships between the aged and the young (Friis et al., 1968).

The first group of theories is concerned with historical changes in the relationships, roles and attitudes of the elderly. Much of the early sociological theories alleged the disruptive effects of industrialization on the rural communities and extended families. Friis et al. (1968) disputed this idea:

> Just as the family unit was said to have diminished in size, so also the functions of the family were said to have diminished in number and importance. In consequence the elderly were assumed to be losing their function and to be largely isolated. . . . Really good information on the family life of older people in the past is lacking. What information is available does not, in general, support the theories that old people in the family have been isolated as a result of industrialization. Evidence for pre-industrial periods suggest that three-generation households were rare in the past in both the United States and Great Britain and that a great number of old people lived alone in towns and villages alike. (pp. 3-4)

Two important ideas must be considered when comparing the life of the aged in industrial societies to the life of the aged in preindustrial societies. "First, old people tend to be rare in pre-industrial but not in industrial societies. Second, in both pre-industrial and industrial societies a differentiation is made between relatively active and relative infirm old age which has been ignored by family theorists" (Friis et al., 1968, p. 4).

The group of theories that has received the most attention in recent years is the individual aging within a lifespan. Two key theories in this group are the disengagement theory and the activity or atrophy of disuse theory.

The disengagement theory was proposed by E. Cummings and W. Henry (1961). In essence, the disengagement theory is two theories in one. One concerns society's gradual disengagement from the individual in order to maintain continuity as the chance of death increases and to eliminate inefficient members. The other relates to the individual, who at the same time, is disengaging from society. This is occurring from an inner need to reflect on self.

These conclusions were drawn from a cross-sectional study in Kansas City over a five year period.

Newell (1961), who contributed to the Cumming and Henry theory of disengagement, conducted a study to measure the amount of social disengagement. He determined the variety of roles an individual plays decreases with age. He further concluded that the density of interaction decreased with age.

A number of other investigators have attempted to explore the patterns of personality in middle and late life. S. Richard et al. conducted a study of 87 older men, half retired and half working. The study indicated the "real personality crisis comes before, not after, retirement" (Tunstall, 1966, p. 235). The study reported five main patterns of adjustment. Of these, two were considered successful. One of the successful "rocking-chair" men fits very closely to the disengagement theory (Richard, Linson & Peterson, 1967).

Neugartin and associates, using the developmental approach, determined there was an increasing separation from the environment as age increased (Neugarten et al., 1964). They further concluded that sixty-year olds, where compared to forty-year olds, seemed to see the environment as more complex and dangerous.

The disengagement theory stirred up considerable controversy. Jeremy Tunstall pointed out the problems arising from the conclusions of Growing Old and Aging and Personality (Tunstall, 1966). Current social trends suggest that disengagement, while an attractive option for some older people, is by no means inevitable (Manney, 1975). The

main challenge to the disengagement theory is the activity theory. According to Busse (1969), the activity or atrophy of disuse theory holds the maintenance of activities is important to most individuals as a basis for obtaining and maintaining satisfaction, self-esteem and health. "In one study the change in activities and attitudes of 127 aged subjects were studied over a span of 10 years. It was found there was no significant overall decrease in activities or alternation in attitudes among men, while there was a slight decrease among women" (Maddox, 1963, p. 195). Robert Atchley (1972) extends the activity theory by stating the activity theory "holds that the norms for old age are the same as those for middle age" (p. 34).

Atchley then proceeds to explain the prime difficulty with this theory is that it says nothing about what happens to people who cannot maintain the standards of the middle-aged. It is at this stage the two theories work together. The theory of societal disengagement would explain why older adults may not be successful, but the activity theory would explain why they keep trying.

A minor theory developed by Stephen Miller (1965) and discussed by Manney (1975), is the identity crisis theory. This theory focuses on people whose primary self-identity is as a worker, and who are unable to rebuild an identity in leisure pursuits. As a response, they withdrew.

So far the research has not produced an all encompassing theory of life span aging.

The last group of theories deal with the relationship between the aged and the young. Within this group the major theories that are contributing to the growth of a third are the developmental and the historical theories. Irving Rosow (1967) best described these two as follows:

> The developmental would assume generic processes of growth and change which are fairly common to all people as they traverse the life span. Therefore, there should be few differences between generations when they are compared at similar points in their life cycles. Consequently, apparent differences between age groups at any given time are essentially a function of their different stages in their life cycle (aging). On the other hand, the historical emphasizes differential socialization of successive generations in the culture. The historical identifies them (differences between age groups) with differential socialization or coming to maturity at different times under different social influences and explains them by social change. (p. 11)

The merger of the developmental and the historical theories is the continuity theory. The continuity theory holds that "the individual's reaction to aging can be explained by examining the complex interrelationships among biological and psychological changes; the person's habit, preferences, and associations; situational opportunities for continuity; and actual experience" (Atchley, 1972, p. 26). Research on the continuity theory is just beginning so it probably will be awhile before the full impact of the theory will be felt on social gerontology.

Two other theories which should be mentioned but which have not generated much research are: the subculture of aging (Rose, 1965) and aged as a minority group (Strich, 1965).

The subculture of aging theory holds that by virtue of their characteristic old age, older people are being forced to interact with each other. At present this does not appear to be occurring across social class lines.

The other theory holds that older people are being discriminated against because they share a common biological trait. The main flaw in this theory appears to be the lack of explanation of why this happens in some situations and not others (Atchley, 1972).

To the casual observer, there may be a question as to why no one theory for aging has been found. David Gutmore (1975) proposed that it was for these reasons: (a) researchers lack concepts definite to aging; (b) researchers relate losses to youthful ideals; whereas, the question of priority for the aged may be different from the young. The problem is the aged can become the stranger to his society. Then why hasn't society studied the aged to develop an understanding? The main reasons for this are irrational but include: (a) fashion--no thought was given it; (b) covert fear of aged; (c) developmental psychology looks for younger ideas; (d) psychologists want the unique ideas and differences and older adults are governed by normatives; and (e) psychologists only study what can be measured. What is needed is more longitudinal studies. The researcher must watch that society's impact on the person; i.e., "act your age," is filtered out.

Tunstall (1966) suggested that "any social theory of old age must recognize these two basic complexities; first, patterns of aging stretch far back into the individual's past and secondly there is great variety in social relations in old age" (p. 268).

Myths of Aging

Presented in this section are thirteen common myths about aging and evidence that challenges these ideas. These myths have been divided into two sections: environment and self. The section on the environment contains myths about the surroundings of older adults. The section on self contains two parts: the section on the physical aspects and the section on the mental aspects; i.e., attitudes and intelligence.

The first myth that was challenged was that all old people are isolated from their families. Corollaries to this myth are the myth that all old people are lonely, should not live alone, and want to live with their families. Researchers have shown all these to be myths. McClusky (1974) reported that according to a recent survey of 70,000 older people in 50 states "87 percent said they were pleased with thier life style and pleased with relationships with families and other persons" (p. 344). Palmore (1969) reported that 87 percent of the older adults in the United States saw one or more relatives during a week. Shanas (1968) concluded: ". . . persons aged 65 and over are more strongly integrated into industrial society than is often assumed either by the general public or by social theorists . . . in the frequency of their contacts with children and other relatives, most older people are fairly securely knitted into the social structure" (p. 425). Tunstall (1966) added that the idea of functional detachment of the family is not the same as the family disintegration. He referred

to Rosenmaye and Koskeis' idea of "intimacy at a distance." Zena Smith Blau (1973) maintained that one contemporary was worth twelve family members for the promotion of the feeling of well-being. Rosow (1967) at an earlier date stated there was little specific research on friendships. Despite this, "most investigators consistently report that life satisfaction and psychological well-being in later life is positively associated with high social interaction rather than withdrawal" (p. 26). "Furthermore, working class people are systematically more dependent on neighbors as a source of friends than members of the middle class" (p. 28).

The second myth was that older adults expected to receive or wanted financial support from their children. McClusky (1974) reported that they are not dependent nor do they want to be. Blau (1973) found that most older people when asked whether money should be given to them, or saved for their grandchildren, felt their children should use the money on the grandchildren. Atchley (1973) stressed the high value placed on independence by older people.

The third myth that was challenged was that older adults move to warmer climates. In fact, according to Time Magazine (1970), less than 1 percent of the elderly leave their own states. Riley (1969) found most retired people do not move away from their place of long term residence. This was further pointed out by interviews on a public broadcasting system series, "Images of Aging" (1975).

The next myth to be challenged was the idea that older people are poorly housed. The problem with this myth is that the term "poorly

housed" is relative. The standards are set by younger people. Hoffman (1974) reported that middle age children complain that their mother's places are messy or their yards are full of weeds. Atchley (1975) reported that older people tend to live in dwellings that are slightly older than average, that have lower values and that are more often dilapidated. Despite this, McClusky (1974) reported the Peterson and LeBlanc (1973) survey showed 88 percent were satisfied with their housing arrangements. Even 80 percent of those who had an annual income below $3,000 expressed contentment.

The fifth and last environmental idea to be challenged was the idea that a sick older adult should be moved to a hospital or nursing home. Researchers reported that it was an aid to keep an older person in familiar surroundings as long as possible (Hoffman, 1974; Blenkner, 1967; Kasl, 1972; Lawton, 1970). This was achieved by cooperative effects of family, friends, neighbors and community services.

The sixth through eighth ideas involved mainly the physical aspects of self aging.

The sixth idea that has been challenged is the idea that elderly need different types of food than younger people. This idea has been challenged by Dr. Cederquist (1974). She stressed the need for the same types of nutritional food but with a slight decrease in calories and increase in protein. This has been backed by the independent research of Dr. Olaf Mickelsen (1976). Hoffman (1974) concurred.

The seventh idea that was challenged was the notion that older adults are sickly. The corollaries to this idea, old people shouldn't see doctors, senility is common, operations shouldn't be discussed with older people and sickness is caused by age were also challenged. Simon (1976) and Butler (1973) reported the negative attitude of the doctors toward older adults ("crocks" is the "medical" term used to describe them). Bettinghaus (1976) reported that this carried over into the treatment. The older person was treated as an object or talked down to.

The idea seemed to be that old people are sick because they are old and nothing can be done about that. In reality, less than 6 percent of people 65 and over are in care facilities or homebound and only 13 percent have a major limitation of activity (McClusky, 1974; Hoffman, 1974; Riley & Forner, 1969). The Duke longitudinal study found no decline in physical functioning in over 50 percent of the returning people and in some cases there was an improvement. Palmore (1969) reported a study in which a "one year program of exercise for men 70 and over that so improved their health and fitness that their body reactions became similar to those 30 years younger" (p. 49). Time (1970) summed it up by saying: "a man is as sick as his arteries, and that sickness is caused by diet and stress not age" (p. 50). Dr. Swartz (1975) stressed that there are no diseases of aging only birth. A person is predisposed to the ailments, he doesn't get them because he ages. Atchley (1973) reported that on the average, the older person is less likely to be afflicted with an acute condition. Most older people have chronic conditions. Palmore (1969) reported

that the percentage "was only one-half more times those aged 17 to 64 and included such minor conditions as needing glasses, mild hearing loss and allergies" (p. 48). Butler (1973) concluded: "Until 1960 most of the medical, psychological, psychiatric and social work literature on the aged was based on experience with the sick and the institutionalized even though only 5 percent of the elderly were confined to institutions. A few research studies that have concentrated on the healthy aged give indications of positive potential for the entire age group. But the general almost phobic dislike of aging remains the norm, with healthy old people being ignored and the chronically ill receiving half-hearted custodial care (p. 18)."

The eighth idea not only involved misconceptions about the topic but also strong taboos. The idea is that sexual activities and interest decline sharply with age. This idea has been strongly challenged by all researchers that have interviewed old people. Pfeiffer (1969) reviewed the major research studies in the area: Kinsey, Masters and Johnson and the Duke University longitudinal publications. However, the information still lags behind other age groups. Essentially the taboo against sex in old age has not been broken down as in the other age groups. The conclusions of the researchers have been that most older adults can function sexually presuming both reasonably good health and an interested and desirable partner (Hoffman, 1974; Butler, 1973; Time, 1970; Pfeiffer, 1969; Masters & Johnson, 1966; Bergston, 1974; Felstein, 1973).

As a corollary to the eighth idea, was the idea that marriages in later years are a mistake. Hoffman (1974) reported a study of older adults who had married after the age of sixty-five. After five years three-fourths of them were still happy.

The ninth through the thirteenth ideas involved mainly the mental aspects of self aging. These are broken down into attitudes (ideas nine through twelve) and intelligence (idea thirteen).

The ninth idea that was challenged was that older adults should be discouraged from dwelling in the past. Hoffman (1974) and Butler (1973) suggested that reminiscing about the past is important to the older adult's happiness. Erik Erickson in Hoffman (1974) calls the final stage of life "ego integrity." To achieve it the person must first review and understand his life. The older adult is the keeper of the past.

The tenth idea that was challenged was the idea that it is cruel to talk about death with an old person. Jeffers (1969) reported the conclusions of different studies show the opposite. Older people need to work out their idea of death. Dr. Leon J. Epstern of Langley-Porter Neuropsychiatric Institute (Hoffman, 1974) said: "In my experience the older person often wants to talk about death; the younger person doesn't want to hear because it makes him feel anxious and uncomfortable" (p. 175). Butler (1973) said that in a National Institute of Mental Health study, 55 percent of old people in good health seemed to have resolved the problems of their death, 30 percent manifested denial, and 15 percent candidly expressed fear. There is a

growing interest in the area of death and dying. One of the key researchers in the area is Dr. Kübler-Ross (1973). Her work has opened doors for future studies. She is best known for the five stages of dying. The concensus of opinion of the researchers was that talking about dying is necessary for the older person if he wants to discuss it (Hoffman, 1974; Atchley, 1972; Butler, 1973; Kübler-Ross, 1973; Jeffers & Verwoerdt, 1969).

The eleventh idea that was challenged was really a combination of false notions about retirement. Some of the various forms of these notions are: life is less satisfying after retirement; the older a person is the more unproductive he is; older people have loads of time on their hands; older people are "tranquil." Researchers have shown productivity of the older worker and the older adult (Palmore, 1969; Hoffman, 1974; Butler, 1973; Hanighurst, 1970; Boyack, 1973; Wass, 1977). The amount of time and attitude of the older adult is not dependent on the age but rather on the previous behavior of the older adult. "If you've enjoyed life before retirement, you'll enjoy it afterwards" (Hoffman, 1974, p. 175).

The twelfth idea that was challenged was the idea that people grow more conservative the older they get. Bergtson (1974) has disproved this by his own research into generational continuities and differences in three-generation families. McClusky (1974) pointed out the small amount of difference in priorities of problems between the youth and the elderly. Butler (1973) pointed out that "the adult

character structure is remarkably stable, but the ability to change depends more on previous and lifelong personality traits than anything inherent in old age. Often when conservatism occurs it derives not from aging, but from socioeconomic pressures" (pp. 22-23).

The last idea is one that can most influence the behavior of an educator. The idea, that older people can't learn because intelligence decreases as a person ages, has been dismissed by researchers in the field of gerontology. Dr. Ruth Glick emphasized that "studies show that general intellectual decline as a function of normalizing is pretty much a myth" (Glick, 1976, p. 13). This was reiterated by Carl Eisdorfer (1969): "The findings from long-term longitudinal investigations of middle-aged and aged persons have raised doubts about the validity of the simple hypothesis that there is a progressive, generalized loss of intellectual and learning ability in all older persons" (p. 237). Alexander Simon (1976) reported that "the better the education and the social and cultural background, the greater the resistance to mental impairment with age" (p. 39).

Roger DeCrow (1974) went even further in support of the older learner:

> The older learner is often the best learner. In general, older people have more and better organized experience which provides a meaningful context into which new information can be assimilated. They know themselves better and more clearly perceive what new learning will be truly useful to them. Being under no compulsion, they shun learning things that seem irrelevant. (p. 12)

Woodruff and Walsh (1975) reported the opposite: "Older cohorts have repeatedly been found to be poorer learners than young cohorts even when noncognitive factors have been controlled" (p. 430).

Hulicka and Wheeler (1976) gave limited support to Woodruff by concluding: "Because of a general slowing of the central nervous system with advanced age, old people may need more time for information processing rather than simply want more time because of cautiousness and a desire for certitude" (p. 371).

Baltes and Schair (1974) speculated about the reasons for generational differences in intelligence. Their conclusions were that the answer lies in the substance, method and length of education received by the different generations. Their overall conclusions supported the idea that "intelligence does not slide downhill from adulthood through old age. By many measures, it increases as time goes by" (p. 35).

Okun and Siegler (1977) suggested that the reason for poor performance by the older adults was lack of persistence at a task. Their study showed that "younger men perceived that effort is an important determinant of outcome. In contrast, older men perceive that outcome and effort expenditure are only weakly related" (p. 30).

Two recent comprehensive reviews of the studies done in the areas of intelligence were done by Baltes and Labouvie (1973) and Labouvie-Vief (1976). Baltes and Labouvie concluded their review stating "that intellectual ontogeny is alterable and that cross-sectional performance decrements are largely due to environmental deficits" (p. 205). Labouvie-Vief summarized: "As evidence is accumulated showing that intellectual performance of the older person responds favorably to a variety of ecological, training and motivational

conditions, it is argued that intellectual development in later life is characterized by plasticity rather than universal decline" (p. 75).

The general trend of intellectual research in the literature appeared to reflect the conclusions reached by Lorge in 1955:

> Age as age probably does little to affect his power to learn or to think. Aging brings different values, goals, self-concepts, and responsibilities. Such changes in values together with the physiological changes may affect performance but not power. Adults learn much less than they might partly because of the self-underestimations of their power and wisdom, and partly because of their own anxieties that their learning behavior will bring unfavorable criticism. Failure to keep on learning may affect performance more than power itself. (p. 49)

Adult Education and the Older Adult

The literature in this area is divided into two main sections: research and practice. The research section is composed of two overlapping subsections: (1) theory as to why there should be adult education for older adults and how adult education for older adults should be conducted and (2) studies conducted in the area of older adult education. The practice section consists of types of educational experiences offered older adults.

The basis for the knowledge of education for older adults has been Dr. Donahue's book, Education for Later Maturity (1955). It was the first book of its kind. Experts were gathered from all fields and asked to contribute ideas. According to Peterson (1976) little has changed since that time. Activities have been added ad hoc rather than being based on a "comprehensive, philosophical framework" (p. 62). DeMott (1975) supported Peterson's view, "lifelong learning cries out

for a philosophy that's adequate to its elements of uniqueness and to its potential as a social force. And no such philosophy can emerge from those who continue to treat 'adult ed' as a stopgap, a filler, a way of staving off Doomsday for one more brief season" (p. 29).

The theories that have emerged express different views of the purpose of education of the older adult. Heyman (1969), DeCrow (1974), and Boyack (1973) were representative of the idea that education becomes a "work substitute." Educational program planners that follow this theory offer courses in ceramics, arts and crafts, jewelry making, painting, literature study, etc. (London, 1970). Other scholars in the field feel that use of leisure time should not be the main purpose of education. Peterson (1975), Londoner (1971), London (1970), and McClusky (1971) represented the idea that new competencies, that are needed by the older adults to cope with their world, should be obtained through education. McClusky (1971) went further to state that "education for Old Persons is an investment by society in resource development" (p. 8). Londoner stressed the advantages of instrumental over expressive education for older adults. Education in this light is the means of growth for older adults.

Kidd (1959), state (Toward A National Policy on Aging: A Report on Michigan's Preparations for the White House Conference on Aging, 1971) and federal agencies (DeCrow, 1974) have supported the theories that education should implement and expand the use of leisure and help the older adult with the present world.

Moody (1976) has proposed a philosophical justification for educating older adults incorporating all the above theories. He maintained that there are four stages in elderly education development. Stage I, rejection, was the rejection of education for older people. Stage II, social services, "could best be described as entertainment or 'keeping busy.' Older people are still outside society" (p. 5). Stage III of the educational setting "should be designed to avoid the unhealthy aspects of disengagement and instead should focus on second careers and on the discovery of new ways of participating more vigorously in society" (p. 6). This is the stage he saw Peterson (1975), Londoner (1971), etc. were at. Moody's Stage IV is to "make available to older people the great ideas of the humanities and the social sciences that can nourish (humanistic) psychological development in old age" (p. 11). The direction of Stage IV should be inner directed according to Moody.

Despite the theories as to why there should be education for the older adult, researchers have found a low level of concern and an underrepresentation of older adults in the educational system (Peterson, 1975; Robinson, 1972; Arbeiter, 1976; Wasserman, 1976; and Carp, 1974). Heimstra (1976) found learning activity occurring in older adults but that experts were not often used as a source of information or content. Arbeiter (1976) reported James Broschart's study which concluded the major pool of adult would be learners is made up of middle income individuals. Goodrow (1975) suggested six recommendations for practitioner as a result of his Knox County study:

1. Educational opportunities designed for older adults should be offered within the immediate neighborhood.
2. Older adult learning programs should be designed to encourage active participation from each person with little emphasis placed on evaluation procedures.
3. Academic goals of older adults differ greatly from that of the younger student. Therefore, differing evaluative procedures should be employed for each group.
4. Initial attempts to organize older adults should relate to overcoming past apprehensions and provide the participant with positive experiences relevant to present needs and interests.
5. Well-designed learning programs should be scheduled around the time periods desired by the population to be served, not the educational institution.
6. Written materials should be selected with consideration for the visual limitations of the older person.

Sweeney (1975) expanded on the ideas presented by Goodrow. He presented a range of variables that might be encountered in an older adult class. The work on adult learners by Carp (1974) and Broschart (1976) found that: (1) the pool of adult learners was made up of middle income individuals. "The better off a person is financially, the more likely he or she is to be involved in learning" (Arbeiter, 1976, p. 24); (2) that adults who engaged in learning

activities tended to be relatively well educated and the use of formal educational systems increases with the education level of the learner; and (3) more urban than rural residents prefer educational institutions for study. Rural residents prefer self study.

Examples of the adult education classes for the older adult abound in the literature. Some representative types were reported by Maeroff (1975), Gage (1975), Glick (1976), DeGabriele (1967), and "Adult Education Classes in Pittsfield" (1977). These classes covered a range of different types from "academic" to "leisure." Gage discussed the adult education in Scandinavia. An unbelievably high proportion of adults take part in adult education. His discussion opened the door to American educators to look closely at our educational system.

McClusky (1976) summed up the status of adult education for older adults by saying: "Adult education is a stepchild of the educational establishment. Education for older people is an orphan living in the stepchild's attic" (p. 13).

Community College and the Older Adult

The literature in this area is divided into two main sections: research and practice. The research section is composed of two overlapping subsections: (1) theory pertaining to the place of older adults in a community college setting and how higher education should conduct classes for older adults and (2) studies conducted in the area of higher education for older adults. The practice section consists of types of classes that were conducted for older adults.

Research

The researchers have basically decried the lack of theory or philosophy present in the community college scene. Moody (1976) stated: "The problem, very simply, is that as educators, we have no clear idea of why older adults should be educated, and this absence of fundamental philosophical reflection is ultimately dangerous for the whole enterprise" (p. 14). Peterson (1976) expanded this complaint by writing: "Evaluation of teaching techniques, instructional formats, curricular materials, or participant achievement has generally not been addressed; rather, when evaluation is reported at all, it typically consists of a more subjective, client satisfaction scale or an enumeration of attendance pattern of participants" (p. 63). Ehrlich (1976), disgruntled by the lack of coordination of federal and state monies for education of the elderly, stated: "As is frequently the case, seed-money-stimulated growth is characterized by uneven development. Neither an acceptable philosophy nor an operational framework for higher education has resulted" (p. 252).

Stetar (1974) offered a theory on what a community college should not be. He asserted that: "The college which relinquishes its role as a teaching/educational institution and assumes the function of a social agency loses a measure of its value to the community. The risk is that public perception of a community college may have changed from one of an institution of higher education to one of a social service agency, a role which the college cannot hope to fulfill adequately" (p. 720).

Ehrlich (1976) suggested four specific roles that higher educational institutions are responsible to provide to the older adults: (1) provide appropriate learning opportunities for elderly consumers to broaden options in late life; (2) provide education on the life cycle and the meaning of aging; (3) provide continuing education to all service practitioners; and (4) develop new knowledge, initiate new services and raise standards within the service community. Trent (1977) stated, "A major purpose of education is to provide all individuals with the capacity to participate in society" (p. 231).

In order to collect enough information to establish a baseline data, it was necessary for researchers to conduct varying types of studies. Theorists could then review this data and attempt to derive a comprehensive philosophy for community colleges in the area of aging.

At present, the literature is composed of conflicting studies. Daniel (1977) reported the persons aged 60+ were social-culturally oriented toward education. Graney (1976) reported that most older people were interested in liberal arts courses. He further stated that a "substantial minority of older people expressed interest in taking college classes" (p. 357). In a survey conducted for Schoolcraft College District, Elizabeth Andrews (1972) found most older adults were not interested in attending college classes.

One of the problems with the available study is the lack of uniformity of definitions. Who is the older adult? What is a course? etc. Peterson (1976) also decried the lack of application of insights

that have been gained by research. Aldridge (1976) further expanded this complaint by writing: "At present, such programs are being established with little or no knowledge of comparable developments elsewhere. . . . Although a few nationwide studies have been carried out by educational organizations, there is no agency or association, educational and/or governmental to collect, assess and disseminate information about experimental projects on a continuing basis" (p. 200).

In an effort to counteract the problem posed by Aldridge in the above paragraph, different community colleges are banning together in consortia to share information. One such example is the Aging and Retirement Consortium. The consortium publishes a monthly newsletter that shares programs that are being used by different community/four-year colleges (Hart, 1975).

Practice

The types of programs or classes offered by colleges can be divided into three types: (1) straight leisure, (2) academic, and (3) a mix of leisure and academic. These courses may be offered for seniors only or be all-ages class. They may be for credit or non-credit. The college may or may not offer free tuition or tuition assistance. DeCrow (1975), Korim (1974b), Grabowski (1974), Jacobs (1970), Hendrickson (1964), and Hart (1975) reviewed different types of programs and classes. Some, such as Hawaii, believed in social service (Amor, 1973). Others, such as the Third Age College of France ("White Hair College," 1974), have a mix of classes just for seniors.

Summary

The literature reviewed contained both nonscientific articles and highly technical articles pertinent to a post-secondary educator. The section on gerontology contained: (1) a historical perspective on the development of social gerontology; (2) a refutation of common myths of aging (among these was the notion that intelligence declines with age which researchers have proven to be false); and (3) common theories of aging. The three most current theories are: (1) disengagement, (2) activity, and (3) continuity.

The sections on adult education and the older adult and community college and the older adult contained: (1) research in these areas and (2) types of classes and programs used in these areas.

In essence, the researchers pointed out that an older adult should be treated as a regular student. However, it should be recognized that older adults set their own goals and needs. The majority of older adults do not view formal education as a means to solve their problems. This may change as more formally educated people become older adults.

Ruth Glick (1977) recently summed up the spirit of education for older adults when she wrote:

> A professor of philosophy once asked me in great perplexity, "But what is the point of it?" In a setting intended to encourage human beings to think, to solve problems, to create, and to discover, older people can demonstrate their capacity for intellectual stability, lifelong development and perhaps even the flowering of wisdom. We believe that for many people education can become the functional equivalent of work. That, professor, is the point of it. (p. 10)

CHAPTER III

DESIGN OF THE STUDY

Introduction

The purpose of this study was to determine the characteristics of the older adult student in a community college setting as compared to the older adult in Michigan. The secondary purpose was to try to define, if possible, the characteristics that differentiate the returning older adult student from the nonreturning older adult student in a community college setting. The following questions were asked: "In what characteristics does the older adult student differ from the average Michigan older adult?" And, "In what characteristics does the older adult returning student differ from the older adult non-returning student?" To gather information on these questions, Michigan data on older adults were studied and facts related to older adult students at Lansing Community College were gathered. This chapter includes: a description of setting for the study (of the metropolitan area Lansing and Lansing Community College), a description of the sample, a description of the questionnaire, a description of the data collection process, a restatement of the hypotheses and a statement of the statistical analysis employed.

Setting

Lansing, the capitol of the State of Michigan, is the fourth largest city in the State and ranks 76th in size among the nation's 231 standard metropolitan statistical areas. Total square miles encompassed are 3,377. Lansing is located in the northeast corner of Ingham County, 80 miles west-northwest of Detroit. Because of the excellent network of expressways connecting it to the North, South, East and West, Lansing is within two hours of 90 percent of Michigan's population (Facts and Figures on the Greater Lansing Metropolitan Area, 1971).

The City of Lansing has a population of 131,403. The 1973 metropolitan population had climbed sharply to 438,000, an increase of 26 percent since 1960. The labor force is a mix of government, industry and agriculture. Almost 50 percent of the non-agrarian work force is employed by either government or educational facilities (U.S. Bureau of the Census, 1975). This has worked to the benefit of the economic condition of the city in times of automobile industry cutbacks. The median family income for Lansing is slightly higher than the median for the State of Michigan ($11,211 vs. $11,029), but the median income per capita for Lansing is slightly lower than the median income per capita for the State of Michigan ($3,343 vs. $3,357) (U.S. Bureau of the Census, 1973).

Lansing is then, a metropolitan area of almost a half-million people, the government seat for the State of Michigan, and yet it retains a small town flavor. Founding families are still prominent

names. It is possible to get from one side of the town to the other during the rush hour in less than 15 minutes. People feel as if they are in the "town" (Lansing Centennial, 1959). In the midst of this change and growth is Lansing Community College.

Lansing Community College, serving the Tri-County area, is located in the heart of downtown Lansing. A commuter's college with a wide diversity of programs and offerings, Lansing Community College offers a post-secondary experience to the community at one of the lowest costs per student in the State of Michigan. Present tuition rate is $8.50 per credit hour, as compared to other community college rates as high as $14 per credit hour and state university rates of $19.50 per credit hour.

Because of the close proximity to a larger state university (Michigan State University--45,000 students), Lansing Community College can avail itself of the qualified and varied faculty and staff present in its service area. (See Appendix E for a map of the service district.)

Lansing Community College opened its doors in 1957 to 224 students. At the time classes were held in a few modernized rooms of Lansing Central High School. Seven faculty and staff were employed. Since then, it has grown to over 15 downtown campus buildings and more than 20 off-campus locations with 17,000 students, a full-time faculty and staff of over 400.

The recognized primer mover behind the growth and direction is its president, Philip J. Gannon. President Gannon stresses that

the future of the community college is directly related to the future of the community. "It is through the use of community advisory committees, involving the expertise of over 500 individuals, that Lansing Community College remains aware of the needs of the people and the kinds of offerings that are required by a changing society" (Open Letter from the President, 1975).

The goals of Lansing Community College are best summed up in the opening paragraphs of its catalog.

> The College measures its vitality by how well it responds to the educational needs of the individual and the community. Its flexible programs and instructional techniques reflect the basic assumptions that learning is a lifelong process and that learners are individuals with different degrees of preparedness, different reasons for seeking instruction and different modes of learning.
>
> The College is committed to community service programs, college transfer programs, and career training programs. The College believes that both the individual and his community are best served when the programs allow the student to integrate his learning with his experiences. The programs are designed to support and guide the student in his achievement of career, social and personal identity through his mastery of skills and his search for meaning and belief. Confronted by the values of his contemporaries and their heritage, he gains insight into his own values.
>
> Consequently, the College is committed by purpose and process to a learning environment built on individualized instruction, a student-oriented faculty, an urban campus, and flexible programs. By maintaining open admissions, a relatively low cost tuition and fee structure, and an awareness of special group needs, the College endeavors to provide equal educational opportunity for all in its service district.

Population

The survey population included all Lansing Community College students who were the age of sixty or over at the time of registration for the class and who registered for a class during the six terms, Summer 1974-Fall 1975.

These six terms were chosen for the following reasons: (1) Lansing Community College was starting an active program to recruit older adults and Fall term 1975 was the last term before the Center for Aging Education started its program and (2) because of the variation among terms (i.e., winter--bad weather, different type of enrollment), it was determined at least four terms should be included. Six were chosen to allow a comparison of the same term, different year (Summer terms 1974-75, Fall terms 1974-75).

The age of sixty was chosen for two reasons: (1) It is the age used by Michigan survey of older adults (Beck, 1975b) and (2) increased gerontological research writing, including Howard McClusky's (1975) define young-old as 60-75 years.

The demographic data requested from the Registrar's Office, Lansing Community College included name, student number, home address, birth date, sex, marital status, curriculum, classes taken, grades, and high school degree. Since this information was available it was eliminated from the questionnaire, except as a reliability check, but will be included in the analysis.

All classifications of students were included in the population. For the purposes of this research, it was determined that the entire population of older adult students, 256 nonduplicated students, was a small enough population to be handled effectively. Of the original target population of 256, 159 responded with usable responses. The 97 unusable responses included the following:

4 returned unanswered

2 returned--student had died

15 returned by U.S. Post Office as undeliverable

76 nonrespondents

159 usable responses

256 Total Population

The total return was 70.3 percent. The 159 returns (62.1 percent) were usable in this study. From this point on, whenever the term sample is used, it will refer to the 159 usable responses.

Of this sample 54 percent were women and 46 percent were men. They ranged in age from sixty to seventy-nine, with 92 percent in their sixties. Over 94 percent of the sample had completed high school.

Instrument

The instrument, used to collect the data to test the hypotheses in this study, was a portion of the questionnaire used by the Michigan Office of Services to the Aging in the 1975 Michigan Older Adult Survey. This questionnaire was developed by the Michigan Office of Services to the Aging with the assistance of Market Opinion Research Corporation of

Detroit and was based on a prototype instrument developed by RMC Corporation of Washington, D.C. for the United States Administration on Aging (Beck, 1975). See Appendix A for revised questionnaire. For the original questionnaire refer to Beck (1975b).

The decision to use part of this questionnaire was made so that direct comparisons could be made between the responses of this study's sample and responses of the Michigan survey. Some modifications were made and were as follows:

1. The method used for data collection was changed from interview to mailed questionnaire. Time, number and cost were the factors which made personal interviews impossible.

2. Because of the focus of this study, not all questions asked on the Michigan survey were pertinent to this study. Therefore, the number of questions were reduced. This was accomplished through discussions with Dr. A. Beck who directed the Michigan Survey. Dr. Beck suggested the best questions to be retained and gave permission to use parts of the Michigan questionnaire.

3. Detailed knowledge of the Lansing Community College experience was desired to compare the returning older adult student with the nonreturning older adult student. This necessitated the addition of questions pertinent to the older adult student's experiences at Lansing Community College. The questions were constructed with the help of the Center for Aging Education at Lansing Community College.

The composite questionnaire was then reviewed to determine the readibility, flow, and the validity of the new instrument. The questionnaire was given to an independent group for suggestions. This group consisted of (1) three professors in the Administration and Higher Education Department at Michigan State University and (2) four administrators in the Student Personnel Services Department at Lansing Community College.

As a result of this critique, several changes were made. These included: (1) a shorter version was adopted and (2) ambiguous questions were honed. The revised questionnaire was resubmitted to the group. The group approved the changes and a field test on ten senior adults was conducted. The field test was deemed satisfactory and the questionnaire was put in final form to be mailed out to the population of senior adult students.

Data Collection Process

Data for this study were collected during the late spring and early summer of 1976. This time was chosen primarily because more of the older adults are apt to be home during spring and summer. The questionnaires were numbered and then mailed to each older adult student. Included in the mailing was a cover letter (see Appendix B) explaining the purpose of the questionnaire and a self-addressed, stamped return envelope. The subjects were asked to return the questionnaires within a three-week period. This was done to allow each time for mailing and completing the questionnaire, without giving

a surplus of time which might cause the subject to postpone and eventually forget answering the questionnaire.

Since the desired 60 percent return was not achieved by this initial mailing, a second mailing was done to the nonrespondents. The second mailing included another copy of the questionnaire, a follow-up cover letter (see Appendix C) and a self-addressed, stamped return envelope. A time of three weeks was maintained for the second mailing. A desired return rate of 60 percent was achieved by the two mailings.

Information from these questionnaires along with the information provided by the Registrar's Office (see Appendix D) at Lansing Community College was coded and then keypunched on data cards so that appropriate computer analysis could be accomplished.

Statement of Hypotheses

This study was designed to test the following hypotheses. All hypotheses will be tested at .05 level.

Hypothesis 1:

Older adult student at Lansing Community College will show no measurable difference in characteristics from the average older adult.

Hypothesis 1A:

There is no difference in sex distribution between the older adult student and the average older adult.

Hypothesis 1B:

There is no difference in marital status between the older adult student and the average older adult.

Hypothesis 1C:

There is no difference in living arrangements between the older adult student and the average older adult.

Hypothesis 1D:

There is no difference in educational level between the older adult student and the average older adult.

Hypothesis 1E:

There is no difference in age between the older adult student and the average older adult.

Hypothesis 1F:

There is no difference in residency (time or place) between the older adult student and average older adult.

Hypothesis 1G:

There is no difference in income between the older adult student and the average older adult.

Hypothesis 1H:

There is no difference in employment status between the older adult student and the average older adult.

Hypothesis 1J:

There is no difference in the subject's health as perceived by the subject between the older adult student and the average older adult.

Hypothesis 1K:

There is no difference in social need as perceived by the subject between the older adult student and the older adult.

Hypothesis 1L:

There is no difference in self-perceived attitudes toward aging between the older adult student and the average older adult.

Hypothesis 1M:

There is no difference in attitudes toward desire to associate with her own age group as an older adult between the older adult student and the average older adult.

Hypothesis 1N:

There is no difference in attitudes toward transportation problems as an older adult between the older adult student and the average older adult.

Hypothesis 1O:

There is no difference in perception of senior problems between the older adult student and the average older adult.

Hypothesis 2:

There are no differences in characteristics between the returning and nonreturning older adult student at Lansing Community College.

Hypothesis 2A:

There is no difference in the sex distribution between the returning and nonreturning older adult student.

Hypothesis 2B:

There is no difference in marital status between the returning and nonreturning older adult student.

Hypothesis 2C:

There is no difference in living arrangements between the returning and nonreturning older adult student.

Hypothesis 2D:

There is no difference in educational level between the returning and nonreturning student.

Hypothesis 2E:

There is no difference in educational experiences between the returning and nonreturning older adult student.

Hypothesis 2F:

There is no difference in residency (time or place) between the returning and nonreturning older adult student.

Hypothesis 2G:

There is no difference in income level between the returning and nonreturning older adult student.

Hypothesis 2H:

There is no difference in the employment status between the returning and nonreturning older adult student.

Hypothesis 2I:

There is no difference in self-perceived health between the returning and nonreturning older adult student.

Hypothesis 2J:

There is no difference in use of leisure time between the returning and nonreturning older adult student.

Hypothesis 2K:

There is no difference in goals between the returning and nonreturning older adult student.

Hypothesis 2L:

There is no difference in community involvement between the returning and nonreturning older adult student.

Hypothesis 2M:

There is no difference in perception of transportation as a personal problem between the returning and nonreturning older adult student.

Hypothesis 2N:

There is no difference in self-perceived view of aging between the returning and nonreturning older adult student.

Hypothesis 2O:

There is no difference in desire to associate with own age group between the returning and nonreturning older adult student.

Statistical Analysis

Hypothesis 1 and subhypotheses, which involved the comparison of the older adult student sample with the sample of older adults in Michigan, were tested using the Chi-square test for goodness of fit.

The expected χ^2 for comparison with the older adult student sample were obtained by using the responses from the Michigan Survey. The percentage of each cell was converted back into numbers using 159 as N.

Hypothesis 2 and subhypotheses, which involved the comparison of the returning older adult students with the nonreturning older adult students, were tested using the Chi-square test for differences in probabilities. The Pearson product moment correlation was used to test for significant linear relationships between responses to scaled questions on the questionnaire.

Summary

In summation, this chapter provided a description of the development of study design.

The population was obtained from Lansing Community College.

The questionnaire was based on a questionnaire used by the Michigan Office of Services to the Aging. Modifications were made by the researcher with the assistance of an interested group and the Office of Research Consultation at Michigan State University.

The hypotheses were developed by the researcher with the assistance and advice of the guidance committee and the Center for Aging Education, Lansing Community College.

The statistical procedures were determined with the aid of the Office of Research Consultation at Michigan State University.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The purpose of this study was to determine the characteristics of the older adult student in a community college setting as compared to the older adult in Michigan. The secondary purpose was to try to define, if possible, the characteristics that differentiate the returning older adult student from the nonreturning older adult student in a community college setting. The population was composed of 256 older adult students who had registered for a class at Lansing Community College during one of six terms, Summer 1974 through Fall 1975. Of the original target population, 159 older adults returned usable samples.

The basis of the instrument used to test the hypotheses in this study was a questionnaire used by the Michigan Office of Services to the Aging in the 1975 Michigan Older Adult Survey. This questionnaire was developed by the Michigan Office of Services to the Aging with the assistance of Market Opinion Research Corporation of Detroit and was based on a prototype instrument developed by RMC Corporation of Washington, D.C. for the U.S. Administration on Aging.

The decision to use part of this questionnaire was made so that direct comparisons could be made between the responses of this

study's sample and responses of the Michigan survey. Some modifications were made as follows:

1. The method used for data collection was changed from interview to mailed questionnaire. Time, number and cost were the factors which made personal interviews impossible.
2. Because of the focus of this study, not all questions asked on the Michigan survey were pertinent to this study. Therefore the number of questions were reduced.
3. Detailed knowledge of the Lansing Community College experience was desired to compare the returning older adult student with the nonreturning older adult student. This necessitated the addition of questions pertinent to the older adult student's experiences at Lansing Community College.

Two main hypotheses were formulated to compare: (1) the older adult student with the Michigan Older Adult and (2) the returning older adult student with the nonreturning older adult student. Fifteen sub-hypotheses were formulated for the first major hypothesis in order to test for significant differences in characteristics between the sample and the Michigan Survey. Fifteen subhypotheses were formulated for the second major hypothesis in order to test for significant differences in characteristics between the returning older adult student and the non-returning older adult student.

The Chi-square test for goodness of fit was used for the first major group of hypotheses to compare the older adult student sample with the Michigan older adult sample. The expected χ^2 for comparison

with the older adult student sample were obtained by using the responses from the Michigan Survey. The percentage of each cell was converted back into numbers using 159 as N. For the second major group of hypotheses, Chi-square test for independence was used to compare the returning and nonreturning older adult students. The Pearson product-moment correlation was used to test for significant linear relationships between responses to specific questions on the questionnaire.

All hypotheses were tested at .05 level for appropriateness of significance. The N value for each hypothesis may change since not all subjects answered all questions.

Presentation of Data

The study produced a number of significant findings. The null hypotheses and the results of the hypothesis tests are presented below.

Hypothesis 1:

The older adult student at Lansing Community College will show no measurable difference in characteristics from the average older adult.

Hypothesis 1A:

There is no difference in sex distribution between the older adult student and the average older adult.

Data to test hypothesis 1A were gathered from information provided by the Registrar, Lansing Community College and checked with responses to question 23 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.28. Therefore, H_{1A} was not

rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 1).

Table 1. Data on Sex Distribution

	Male	Female	Total
Observed χ^2	72	87	159
Expected χ^2	65	94	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 1.28; $\therefore$ do not reject H_{1A}.

Hypothesis 1B:

There is no difference in marital status between the older adult student and the average older adult.

Data to test hypothesis 1_B were gathered from responses to question 6 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 9.488 with four degrees of freedom. The test statistic t was 18.731. Therefore, H_{1B} was rejected since the test statistic t exceeded the .95 quantile of Chi-square random variable with four degrees of freedom (see Table 2).

Table 2. Data on Marital Status

	Single	Married	Divorced	Separated	Widowed	Total
Observed χ^2	15	98	13	1	31	158
Expected χ^2	8	82	6	2	60	158

Tabled T = 9.488; α = .05; df = 4; test statistic = 18.731; $\therefore$ reject H_{1B}.

Hypothesis 1C:

There is no difference in living arrangements between the older adult student and the average older adult.

Data to test hypothesis 1_C were gathered from responses to question 7 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 9.968. Therefore, H_{1C} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 3).

Table 3. Data on Living Arrangements

	Live Alone	Live With Others	Live With Spouse	Total
Observed χ^2	50	8	101	159
Expected χ^2	50	21	88	159

Table T = 5.991; α = .05; df = 2; test statistic = 9.968; $\therefore$ reject H_{1C}.

When the data were reorganized by collapsing cells 1 and 2 to reflect those who live with spouse and those who do not, the hypothesis 1C was still rejected. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 4.334 (see Table 4).

Table 4. Data on Living With Spouses

	Living Without Spouses	Living With Spouse	Total
Observed χ^2	57	101	158
Expected χ^2	70	88	158

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 4.334;
$\therefore$ reject H_{1C}.

Hypothesis 1D:

There is no difference in educational level between the older adult student and the average older adult.

Data to test the hypothesis 1_D were gathered from question 9 on the questionnaire which asked the last grade of school completed (see Appendix A). The table T which marked the rejection point was 14.067 with seven degrees of freedom. The test statistic t was 459.621. Therefore, H_{1D} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with seven degrees of freedom (see Table 5).

Table 5. Data on the Educational Level

	Observed χ^2	Expected χ^2
No schooling	1	3
First to eighth grade	2	35
Completed eighth grade	6	37
Ninth to twelfth grade	11	33
Completed twelfth grade	30	29
Some college	44	11
College graduate	38	8
Advanced degree	27	3
Total	159	159

Tabled T = 14.067; α = .05; df = 7; test statistic = 459.621; $\therefore$ reject H_{1D}.

Hypothesis 1E:

There is no difference in age between the older adult student and the average older adult.

Data to test the hypothesis 1E were gathered from information provided by the Registrar, Lansing Community College and checked with responses to question 8 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 11.070 with five degrees of freedom. The test statistic t was 51.896. Therefore, H_{1E} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with five degrees of freedom (see Table 6).

Table 6. Data on Age

	60-64	65-69	70-74	75-79	80-84	85+	Total
Observed χ^2	86	56	10	3	0	0	155
Expected χ^2	35	40	33	25	16	6	155

Tabled T = 11.070; α = .05; df = 5; test statistic = 51.896; $\therefore$ reject H_{1E}.

When the data were reorganized by collapsing the last three cells into one (75+), the hypothesis 1E was rejected by an even greater number. The last three cells were collapsed because the observed cells had no members in the last two cells. The tabled T which marked the rejection point was 7.815 with three degrees of freedom. The test statistic t was 132.06 (see Table 7).

Table 7. Reorganized Data on Age

	60-64	65-69	70-74	75+	Total
Observed χ^2	86	56	10	3	155
Expected χ^2	35	40	33	47	155

Tabled T = 7.815; α = .05; df = 3; test statistic = 132.06; $\therefore$ reject H_{1E}.

Hypothesis 1F:

There is no difference in residency (time or place) between the older adult student and the average older adult.

Data to test the hypothesis 1F were gathered from responses to questions 1 and 2 on the questionnaire (see Appendix A). Question 1 asked about time in neighborhood. The tabled T which marked the rejection point was 12.592 with six degrees of freedom. The test statistic t was 37.84. Therefore, H_{1F} (time) was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with six degrees of freedom (see Table 8).

Table 8. Data on Time in Neighborhood

	Less than 1 yr.	1-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20+ yrs.	All My Life	Total
Observed χ^2	2	22	30	17	27	50	10	158
Expected χ^2	6	16	19	17	14	78	8	158

Tabled T = 12.592; $\alpha = .05$; df = 6; test statistic = 37.84; $\therefore$ reject H_{1F} (time).

Question 2B concerned type of neighborhood the older adult now lives in. The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 8.774. Therefore, H_{1F} (place) was rejected since the test statistic exceeded the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 9).

Table 9. Data on Place of Residence

	City	Suburb	Rural	Total
Observed χ^2	78	32	45	155
Expected χ^2	93	31	31	155

Tabled T = 5.991; α = .05; df = 2; test statistic = 8.774; $\therefore$ reject H_{1F} (place).

Hypothesis 1G:

There is no difference in income between the older adult student and the average older adult.

Data to test hypothesis 1G were gathered from responses to questions 24 and 30 on the questionnaire (see Appendix A). Question 24 included responses from both retired and working respondents. The tabled T which marked the rejection point was 11.070 with five degrees of freedom. The test statistic t was 464.461. Therefore, H_{1G} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with five degrees of freedom (see Table 10).

Table 10. Data on Income (Working and Retired)

	0-$999	$1,000-2,999	$3,000-5,999	$6,000-8,999	$10,000 14,999	$15,000 and Over	Total
Observed χ^2	1	6	14	35	42	52	150
Expected χ^2	8	47	52	26	10	7	150

Tabled T = 11.070; α = .05; df = 5; test statistic = 464.461; $\therefore$ reject H_{1G}.

When the data were reorganized to show income less than $6,000, the hypothesis 1G was still rejected. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 241.12 (see Table 11).

Table 11. Reorganized Data on Income (Working and Retired)

	$5,999 or Less	$6,000 or More	Total
Observed χ^2	21	129	150
Expected χ^2	107	43	150

Table T = 3.81; $\alpha = .05$; df = 1; test statistic = 241.12; $\therefore$ reject H_{1G}.

Hypothesis 1H:

There is no difference in employment status between the older adult student and the average older adults.

Data to test hypothesis 1H were gathered from responses to question 31 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 12.592 with six degrees of freedom. The test statistic t was 372.72. Therefore, H_{1H} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with six degrees of freedom (see Table 12).

Table 12. Data on Employment Status

	Observed χ^2	Expected χ^2
Working full time	57	8
Working part time	4	3
Retired working full time	4	2
Retired working part time	19	5
Retired	52	85
Unemployed disabled	5	3
Homemaker	14	49
Total	155	155

Tabled T = 12.592; $\alpha = .05$; df = 6; test statistic = 372.72; $\therefore$ reject H_{1H}.

When the data were reorganized to show all working, the hypothesis 1_H was still rejected. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 274.34 (see Table 13).

Table 13. Data on Employment Status

	Working	Not Working	Total
Observed χ^2	84	71	155
Expected χ^2	18	135	155

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 274.34; $\therefore$ reject H_{1H}.

Hypothesis 1I:

There is no difference in use of leisure time between the older adult student and the average older adult.

Data to test hypothesis 1I were gathered from responses to question 27A on the questionnaire (see Appendix A). There were twenty different areas of leisure that were compared.

1. Watch television. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 285.766. Therefore, H_{1H} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 14).

Table 14. Data on Television Watching

	Didn't Watch	Watched	Total
Observed χ^2	152	7	159
Expected χ^2	52	107	159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 285.766; $\therefore$ reject H_{1I}.

2. Visit friends and relatives. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.089. Therefore, H_{1I2} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 15).

Table 15. Data on Visiting

	Didn't Visit	Visited	Total
Observed χ^2	101	58	159
Expected χ^2	92	67	159

Tabled T = 3.821; α = .05; df = 1; test statistic = 2.089;
$\therefore$ do not reject H_{1I2}.

3. Read. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 23.315. Therefore, H_{1I2} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 16).

Table 16. Data on Reading

	Didn't Read	Read	Total
Observed χ^2	126	33	159
Expected χ^2	97	62	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 23.315;
$\therefore$ reject H_{1I3}.

4. Hobbies. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 4.045. Therefore, H_{1I4} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 17).

Table 17. Data on Hobbies

	Don't Spend Time on Hobbies	Do Hobbies	Total
Observed χ^2	108	51	159
Expected χ^2	119	40	159

Tabled T = 3.481; α = .05; df = 1; test statistic = 4.045;
$\therefore$ reject H_{1I4}.

5. Travel. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.790. Therefore, H_{1I5} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom.

Table 18. Data on Travel

	Didn't Travel	Traveled	Total
Observed χ^2	117	42	159
Expected χ^2	121	38	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 2.790;
$\therefore$ do not reject H_{1I5}.

6. Church. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 3.61. Therefore, H_{1I6} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 19).

Table 19. Data on Church as Leisure Activity

	Church Not as Leisure	Church as Leisure	Total
Observed χ^2	123	36	159
Expected χ^2	132	27	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 3.61;
$\therefore$ do not reject H_{1I6}.

7. Cards and Bingo. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.70. Therefore, H_{1I7} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 20).

Table 20. Data on Cards and Bingo

	Don't Play	Do Play	Total
Observed χ^2	140	19	159
Expected χ^2	134	25	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 1.70;
$\therefore$ do not reject H_{1I7}.

8. Walking. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 15.9. Therefore, H_{1I8} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 21).

Table 21. Data on Walking

	Didn't Walk	Did Walk	Total
Observed χ^2	153	6	159
Expected χ^2	135	24	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 15.9;
$\therefore$ reject H_{1I8}.

9. Outdoor sports. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 0.475. Therefore, H_{1I9} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 22).

Table 22. Data on Outdoor Sports

	Don't Do Outdoor Sports	Do Do Outdoor Sports	Total
Observed χ^2	134	25	159
Expected χ^2	137	22	159

Tabled T = 3.841; α = .05; df = 1; test statistic = .475;
$\therefore$ do not reject H_{1I9}.

10. Taking a drive. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 13.37. Therefore, H_{1I10} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 23).

Table 23. Data on Taking a Drive

	Don't Take a Drive	Do Take a Drive	Total
Observed χ^2	157	2	159
Expected χ^2	143	16	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 13.37;
$\therefore$ reject H_{1I10}.

11. Club and group activities. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .08. Therefore, H_{1111} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 24).

Table 24. Data on Club and Group Activities

	Don't Participate	Do Participate	Total
Observed χ^2	146	13	159
Expected χ^2	145	14	159

Tabled T = 3.841; α = .05; df = 1; test statistic = .08;
$\therefore$ do not reject H_{1111}.

12. Eating out. The tabled T which marked the rejection joint was 3.841 with one degree of freedom. The test statistic t was 5.01. Therefore, H_{1112} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 25).

Table 25. Data on Eating Out

	Don't Eat Out	Do Eat Out	Total
Observed χ^2	152	6	158
Expected χ^2	144	14	158

Tabled T = 3.841; α = .05; df = 1; test statistic = 5.01;
$\therefore$ reject H_{1I12}.

13. Shopping. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 8.38. Therefore, H_{1I13} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 26).

Table 26. Data on Shopping

	Don't Shop	Do Shop	Total
Observed χ^2	135	23	158
Expected χ^2	145	13	158

Tabled T = 3.841; α = .05; df = 1; test statistic = 8.38;
$\therefore$ reject H_{1I13}.

14. Recreation center. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 10.671. Therefore, H_{1I14} was rejected since the test statistic t

exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 27).

Table 27. Data on Recreation Center

	Don't Use	Do Use	Total
Observed χ^2	159	0	159
Expected χ^2	149	10	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 10.671;
$\therefore$ reject H_{1I14}.

15. Lectures/Entertainment. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 42.65. Therefore, H_{1I15} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 28).

Table 28. Data on Lecture/Entertainment

	Don't Attend	Do Attend	Total
Observed χ^2	133	26	159
Expected χ^2	151	8	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 42.65;
$\therefore$ reject H_{1I15}.

16. Indoor sports. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .000. Therefore, H_{1116} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 29).

Table 29. Data on Indoor Sports

	Don't Participate	Do Participate	Total
Observed χ^2	151	8	159
Expected χ^2	151	8	159

Tabled T = 3.841; α = .05; df = 1; test statistic = .000;
$\therefore$ do not reject H_{1116}.

17. Volunteer activities. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.11. Therefore, H_{1117} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 30).

Table 30. Data on Volunteer Activities

	Don't Volunteer	Do Volunteer	Total
Observed χ^2	147	12	159
Expected χ^2	151	8	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 2.11;
$\therefore$ do not reject H_{1117}.

18. Sports events. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 3.291. Therefore, H_{1118} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 31).

Table 31. Data on Sport Events

	Don't Watch	Do Watch	Total
Observed χ^2	155	4	159
Expected χ^2	151	8	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 3.291;
$\therefore$ do not reject H_{1118}.

19. Movies. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.77. Therefore, H_{1I19} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 32).

Table 32. Data on Movies

	Don't Attend	Do Attend	Total
Observed χ^2	149	10	159
Expected χ^2	153	6	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 2.77;
$\therefore$ do not reject H_{1I19}.

20. Bar/Tavern. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .70. Therefore, H_{1I20} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 33).

Table 33. Data on Bars/Taverns

	Don't Attend	Do Attend	Total
Observed χ^2	155	4	159
Expected χ^2	153	6	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 0.70; $\therefore$ do not reject H_{1I20}.

Hypothesis 1J:

There is no difference in the subject's health as perceived by the subject between the older adult student and the average older adult.

The data for hypothesis 1J were collected from responses to question 4 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 9.488 with four degrees of freedom. The test statistic t was 16.652. Therefore, H_{1J} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with four degrees of freedom (see Table 34).

Table 34. Data on Health

	Much Better	Somewhat Better	Same	Somewhat Worse	Much Worse	Total
Observed χ^2	64	41	44	6	3	158
Expected χ^2	44	40	57	14	3	158

Tabled T = 9.488; α = .05; df = 4; test statistic = 16.652; $\therefore$ reject H_{1J}.

Hypothesis 1K:

There is no difference in social need as perceived by the subjects between the older adult student and the older adult.

The data used to test hypothesis 1K were collected from the responses to question 34 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 12.592 with six degrees of freedom. The test statistic t was 47.25. Therefore, H_{1K} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with six degrees of freedom (see Table 35).

Table 35. Data on Social Need (Visiting Friend)

	Observed χ^2	Expected χ^2
Every day	30	40
Several a week	59	44
Once a week	20	24
Once every two weeks	12	9
Once a month	10	18
Less often	15	12
Never	4	3
Total	150	150

Tabled T = 12.592; $\alpha = .05$; df = 6; test statistic = 47.25; $\therefore$ reject H_{1K}.

If the data were reorganized to lessen the choices possible, there was a different result. The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 0.8. Therefore, H_{1K} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 36).

Table 36. Data on Social Need (Visiting Friends)

	More than Once a Week	More than Once Every Two Weeks	Once a Month or Less	Total
Observed χ^2	89	32	29	150
Expected χ^2	84	33	33	150

Tabled T = 5.991; α = .05; df = 2; test statistic = 0.8; $\therefore$ do not reject H_{1K}.

Hypothesis 1L:

There is no difference in attitudes toward self aging between the older adult student and the averaged older adult.

The data to test hypothesis 1L were gathered from the responses to question 5 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 37.337. Therefore, H_{1L} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 37).

Table 37. Data on Whether Older Adults Consider Self a Senior Citizen

	Yes	No	Total
Observed χ^2	50	107	157
Expected χ^2	88	69	157

Tabled T = 3.841; α = .05; df = 1; test statistic = 37.337; $\therefore$ reject H_{1L}.

Hypothesis 1M:

There is no difference in desire to associate with own age group between the older adult student and the average older adult.

The data to test hypothesis 1M were collected from responses to question 12 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 28.945. Therefore, H_{1M} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 38).

Table 38. Data on Joining Groups of Various Ages

	Only 55 Years or Older	Makes No Difference	All Ages	Total
Observed χ^2	11	39	107	157
Expected χ^2	35	45	77	157

Tabled T = 5.991; α = .05; df = 2; test statistic = 28.945; $\therefore$ reject H_{1M}.

Hypothesis 1N:

There is no difference in attitudes toward transportation problems as an older adult between the older adult student and the average older adult.

The data to test hypothesis 1N were collected from the responses to questions 3A and 20D on the questionnaire (see Appendix A). For question 3A the tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .956. Therefore,

H_{1N} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 39).

Table 39. Data on Transportation Problems for Self

	No Problem	Problem	Total
Observed χ^2	144	15	159
Expected χ^2	140	19	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 0.956;
$\therefore$ do not reject H_{1N}.

For question 20D the tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 0. Therefore, H_{1N} was not rejected since the test statistic t did not exceed the .95 percentile of a Chi-square random variable with one degree of freedom (see Table 40).

Table 40. Data on Transportation Problems for Older Adults

	No Problem	Problem	Total
Observed χ^2	128	31	159
Expected χ^2	128	31	159

Tabled T = 3.841; α = .05; df = 1; test statistic = 0;
$\therefore$ do not reject H_{1N}.

Hypothesis 2:

There is no difference in characteristics between the returning and nonreturning older adult student at Lansing Community College.

Hypothesis 2A:

There is no difference in the sex distribution between the returning and nonreturning older adult student.

Data on test hypothesis 2A were gathered from information provided by the Registrar, Lansing Community College and rechecked with responses to question 23 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .003. Therefore, H_{2A} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 41).

Table 41. Data on Sex Distribution

	Male	Female	Total
Returning	37	44	81
Nonreturning	35	43	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .003;
$\therefore$ do not reject H_{2A}.

Hypothesis 2B:

There is no difference in marital status between the returning and nonreturning older adult student.

Data to test hypothesis 2B were gathered from responses to question 6 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 9.488 with four degrees of freedom. The test statistic t was 9.75. Therefore, H_{2B} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with four degrees of freedom (see Table 42).

Table 42. Data on Marital Status

	Single	Married	Divorced	Separated	Widowed	Total
Returning	4	48	5	1	22	80
Nonreturning	10	50	8	0	10	78
Total						158

Tabled T = 9.488; $\alpha = .05$; df = 4; test statistic = 9.75; $\therefore$ reject H_{2B}.

Hypothesis 2C:

There is no difference in living arrangements between the returning and nonreturning older adult student.

Data to test hypothesis 2C were gathered from responses to question 7 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 1.471. Therefore, H_{2C} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 43).

Table 43. Data on Living Arrangements

	Live Alone	Live With Others	Live With Spouse	Total
Returning	29	4	48	81
Nonreturning	21	4	53	78
				159

Tabled T = 5.991; α = .05; df = 2; test statistic = 1.471; $\therefore$ do not reject H_{2C}.

Hypothesis 2D:

There is no difference in educational level between the returning and nonreturning older adult student.

Data to test hypothesis 2D were gathered from responses to question 9 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 14.067 with seven degrees of freedom. The test statistic t was 7.540. Therefore, H_{2D} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with seven degrees of freedom (see Table 44).

Table 44. Data on Educational Level

	Returning	Nonreturning
No schooling	0	1
First to eighth grade	1	1
Completed eighth grade	1	5
Ninth to twelfth grade	3	8
Completed twelfth grade	16	14
Some college	27	17
College graduate	20	18
Advanced degree	13	14
Total N = 159	81	78

Tabled T = 14.067; $\alpha = .05$; df = 7; test statistic = 7.54; $\therefore$ do not reject H_{2D}.

Hypothesis 2E:

There is no difference in educational experiences between the returning and nonreturning older adult student.

Data to test hypothesis 2E were gathered from responses to question 10 on the questionnaire (see Appendix A). Ten different types of educational experiences were examined. The tabled T which marked the rejection point for each of the ten experiences was 3.841 with one degree of freedom.

The test statistic t for 10_a--Adult Education--was .006. Therefore, H_{2E1} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 45).

Table 45. Data on Adult Education

	Yes	No	Total
Returning	39	42	81
Nonreturning	39	39	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .006;
$\therefore$ do not reject H_{2E1}.

The test statistic t for 10_b--High School Classes--was .258. Therefore, H_{2E2} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 46).

Table 46. Data on High School Classes

	Yes	No	Total
Returning	8	73	81
Nonreturning	5	73	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .258;
$\therefore$ do not reject H_{2E2}.

The test statistic t for 10_c--College/University Course--was .467. Therefore, H_{2E3} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 47).

Table 47. Data on College/University Courses

	Yes	No	Total
Returning	50	31	81
Nonreturning	43	35	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .467;
$\therefore$ do not reject H_{2E3}.

The test statistic t for 10_d--Craft/Sewing/Hobby Course--was .708. Therefore, H_{2E4} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 48).

Table 48. Data on Craft/Sewing/Hobby Courses

	Yes	No	Total
Returning	29	52	81
Nonreturning	34	44	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .708;
$\therefore$ do not reject H_{2E4}.

The test statistic t for 10_e--Discussion Groups--was 1.273. Therefore, H_{2E5} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 49).

Table 49. Data on Discussion Groups

	Yes	No	Total
Returning	12	69	81
Nonreturning	18	60	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.273;
$\therefore$ do not reject H_{2E5}.

The test statistic t for 10_f--Bible Study Groups--was .122. Therefore, H_{2E6} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 50).

Table 50. Data on Bible Groups

	Yes	No	Total
Returning	29	52	81
Nonreturning	31	47	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .122;
$\therefore$ do not reject H_{2E6}.

The test statistic t for 10_g--Vocational Courses--was .017. Therefore, H_{2E7} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 51).

Table 51. Data on Vocational Courses

	Yes	No	Total
Returning	18	63	81
Nonreturning	19	59	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .017;
$\therefore$ do not reject H_{2E7}.

The test statistic for 10_h--Pre-Retirement Program--was .560. Therefore, H_{2E8} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 52).

Table 52. Data on Pre-Retirement Programs

	Yes	No	Total
Returning	11	70	81
Nonreturning	15	63	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .560;
$\therefore$ do not reject H_{2E8}.

The test statistic for 10_i--Library Programs--was .042. Therefore, H_{2E9} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 53).

Table 53. Data on Library Programs

	Yes	No	Total
Returning	8	73	81
Nonreturning	6	72	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .042;
$\therefore$ do not reject H_{2E9}.

The test statistic 10_j--Consumer Buying/Protection Classes--was .003. Therefore, H_{2E10} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 54).

Table 54. Data on Consumer Buying Classes

	Yes	No	Total
Returning	4	77	81
Nonreturning	3	75	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .003;
$\therefore$ do not reject H_{2E10}.

The test statistic 10_k--Other Experiences--was 3.112. Therefore, H_{2E11} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 55).

Table 55. Data on Other Experiences

	Yes	No	Total
Returning	19	62	81
Nonreturning	9	69	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = 3.112;
$\therefore$ do not reject H_{2E11}.

Hypothesis 2F:

There is no difference in residency (time or place) between the returning and nonreturning older adult student.

Data to test hypothesis 2F were gathered from responses to questions 1, 2A and 2B on the questionnaire (see Appendix A). Question 1 asked about time in neighborhood. The tabled T which marked the rejection point was 14.067 with seven degrees of freedom. The test statistic t was 8.826. Therefore, H_{2F} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with seven degrees of freedom (see Table 56).

Table 56. Data on Time in Neighborhood

	Returning	Nonreturning
1 year	1	7
1-2 years	3	29
3-4 years	7	10
5-9 years	17	6
10-14 years	11	13
15-19 years	17	7
20+ years	22	5
All of life	3	0
Total N = 158	81	77

Tabled T = 14.067; $\alpha = .05$; df = 7; test statistic = 8.826;
$\therefore$ do not reject H_{2F1}.

Question 2A concerned the type of neighborhood the older adult grew up in. The tabled T which marked the rejection point was 7.815 with three degrees of freedom. The test statistic t was 5.027. Therefore, H_{2F2} was not rejected since the test statistic t did not

exceed the .95 quantile of a Chi-square random variable with three degrees of freedom (see Table 57).

Table 57. Data on Neighborhood Grew Up In

	City	Suburb	Small Town	Country	Total
Returning	38	4	19	19	80
Nonreturning	25	4	24	25	78
Total					158

Tabled T = 7.815; α = .05; df = 3; test statistic = 5.027; $\therefore$ do not reject H_{2F2}.

Question 2B concerned type of neighborhood the older adult now lives in. The tabled T which marked the rejection point was 7.815 with three degrees of freedom. The test statistic t was 15.673. Therefore, H_{2F3} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with three degrees of freedom (see Table 58).

Table 58. Data on Neighborhood Now Live In

	City	Suburb	Small Town	Country	Total
Returning	41	23	6	7	77
Nonreturning	37	9	17	15	78
Total					155

Tabled T = 7.815; α = .05; df = 3; test statistic = 15.673; $\therefore$ reject H_{2F3}.

Hypothesis 2G:

There is no difference in income level between the returning and nonreturning older adult student.

Data to test hypothesis 2G were gathered from responses to questions 24 and 30 on the questionnaire (see Appendix A). Question 24 included responses from both working and nonworking subjects. The tabled T which marked the rejection point was 11.070 with five degrees of freedom. The test statistic t was 11.299. Therefore, H_{2G1} was rejected since the test statistic t exceeded the .95 quantile of Chi-square variable with five degrees of freedom (see Table 59).

Table 59. Data on Income (Working and Retired)

	0-$999	$1,000-2,999	$3,000-5,999	$6,000-9,999	$10,000-14,999	$15,000 and Over	Total
Returning	0	4	7	22	23	18	74
Nonreturning	1	2	7	13	19	34	76
Total							150

Tabled T = 11.070; $\alpha = .05$; df = 5; test statistic = 11.299; $\therefore$ reject H_{2G1}.

Question 30 referred only to retirees' income average for five years prior to retirement. The tabled T which marked the rejection point was 11.070 with five degrees of freedom. The test statistic t was 2.029. Therefore, H_{2G3} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with five degrees of freedom (see Table 60).

Table 60. Data on Retirees' Pre-Retirement Income

	0-$999	$1,000-2,999	$3,000-5,999	$6,000-9,999	$10,000-14,999	$15,000 and Over	Total
Returning	0	1	3	9	19	17	49
Nonreturning	0	0	2	6	20	15	43
Total							92

Tabled T = 11.070; α = .05; df = 5; test statistic = 2.029; $\therefore$ do not reject H_{2G3}.

Hypothesis 2H:

There is no difference in the employment status between the returning and nonreturning student.

Data to test hypothesis 2H were gathered from responses to question 31 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 12.592 with six degrees of freedom. The test statistic t was 3.923. Therefore, H_{2H} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with six degrees of freedom (see Table 61).

Table 61. Data on Employment Status

	Returning	Nonreturning
Working full time	28	28
Working part time	1	3
Retired, working full time	3	1
Retired, working part time	11	8
Retired	26	27
Unemployed, disabled	3	2
Homemaker	8	6
Total N = 155	80	75

Tabled T = 12.592; $\alpha = .05$; df = 6; test statistic = 3.923; $\therefore$ do not reject H_{2H}.

When the data were reorganized to show all working, the H_{2H} was still not rejected. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.108 (see Table 62).

Table 62. Data on Employment Status

	Working	Not Working	Total
Returning	43	37	80
Nonreturning	40	35	75
Total			155

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.108; $\therefore$ do not reject H_{2H}.

Hypothesis 2I:

There is no difference in self-perceived health between the returning and nonreturning older adult student.

Data used to test hypothesis 2I were gathered from responses to question 4 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic t was 1.345. Therefore, H_{2I} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 63).

Table 63. Data on Health

	Better	Same	Worse	Total
Returning	53	24	3	80
Nonreturning	52	20	6	78
Total				158

Tabled T = 5.991; $\alpha = .05$; df = 2; test statistic = 1.345;
$\therefore$ do not reject H_{2I}.

Hypothesis 2J:

There is no difference in use of leisure time between the returning and nonreturning older adult student.

Data to test hypothesis 2J were gathered from responses to question 27A on the questionnaire (see Appendix A). There were twenty different areas of leisure that were compared.

1. Watch television. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was

.003. Therefore, H_{2I} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 64).

Table 64. Data on Television Watching

	Didn't Watch	Watched	Total
Returning	78	3	81
Nonreturning	74	4	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .003;
$\therefore$ do not reject H_{2J1}.

2. Visit friends and relatives. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 3.972. Therefore, H_{2J2} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 65).

Table 65. Data on Visiting

	Didn't Visit	Visited	Total
Returning	58	23	81
Nonreturning	43	35	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = 3.972;
$\therefore$ reject H_{2J2}.

3. Read. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .015. Therefore, H_{2J3} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 66).

Table 66. Data on Reading

	Didn't Read	Read	Total
Returning	64	17	81
Nonreturning	62	16	78
			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .015;
$\therefore$ do not reject H_{2J3}.

4. Hobbies. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.910. Therefore, H_{2J4} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 67).

Table 67. Data on Hobbies

	Don't Spend Time on Hobbies	Do Hobbies	Total
Returning	50	31	81
Nonreturning	58	20	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 2.910;
$\therefore$ do not reject H_{2J4}.

5. Travel. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .104. Therefore, H_{2J5} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 68).

Table 68. Data on Travel

	Didn't Travel	Traveled	Total
Returning	61	20	81
Nonreturning	56	22	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .104;
$\therefore$ do not reject H_{2J5}.

6. Church. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.277. Therefore, H_{2J6} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 69).

Table 69. Data on Church as Leisure Activity

	Church Not as Leisure	Church as Leisure	Total
Returning	65	16	81
Nonreturning	58	20	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.277;
$\therefore$ do not reject H_{2J6}.

7. Cards and Bingo. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .008. Therefore, H_{2J7} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 70).

Table 70. Data on Playing Cards and Bingo

	Don't Play	Do Play	Total
Returning	71	10	81
Nonreturning	69	9	78
			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .008;
$\therefore$ do not reject.

8. Walking. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .136. Therefore, H_{2J8} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 71).

Table 71. Data on Walking

	Didn't Walk	Did Walk	Total
Returning	78	3	81
Nonreturning	75	3	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .136;
$\therefore$ do not reject H_{2J8}.

9. Outdoor sports. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .011. Therefore, H_{2J9} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 72).

Table 72. Data on Outdoor Sports

	Don't Do Outdoor Sports	Do Use Outdoor Sports	Total
Returning	69	12	81
Nonreturning	65	13	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic - .011;
$\therefore$ do not reject H_{2J9}.

10. Taking a drive. The tabled t which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .469. Therefore, H_{2J10} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 73).

Table 73. Data on Taking a Drive

	Don't Take a Drive	Do Take a Drive	Total
Returning	79	2	81
Nonreturning	78	0	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .469;
$\therefore$ do not reject H_{2J10}.

11. Club and group activities. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.18. Therefore, H_{2J11} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 74).

Table 74. Data on Club and Group Activities

	Don't Participate	Do Participate	Total
Returning	72	9	81
Nonreturning	74	4	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.18;
$\therefore$ do not reject H_{2J11}.

12. Eating out. The tabled T which marked the rejection joint was 3.841 with one degree of freedom. The test statistic t was 4.138. Therefore, H_{2J12} was rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 75).

Table 75. Data on Eating Out

	Don't Eat Out	Do Eat Out	Total
Returning	75	6	81
Nonreturning	78	0	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 4.138;
$\therefore$ reject H_{2J12}.

13. Shopping. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .125. Therefore, H_{2J13} was not rejected since the test statistic t exceeded the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 76).

Table 76. Data on Shopping

	Don't Shop	Do Shop	Total
Returning	68	13	81
Nonreturning	68	10	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .125;
$\therefore$ do not reject H_{2J13}.

14. Recreation center. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 0. Therefore, H_{2J14} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 77).

Table 77. Data on Use of a Recreation Center

	Don't Use	Do Use	Total
Returning	81	0	81
Nonreturning	78	0	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = 0;
$\therefore$ do not reject H_{2J14}.

15. Lectures/Entertainment. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .012. Therefore, H_{2J15} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 78).

Table 78. Data on Lectures/Entertainment

	Don't Attend	Do Attend	Total
Returning	68	13	81
Nonreturning	65	13	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .012;
$\therefore$ do not reject H_{2J15}.

16. Indoor sports. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.069. Therefore, H_{2J16} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 79).

Table 79. Data on Indoor Sports

	Don't Participate	Do Participate	Total
Returning	75	6	81
Nonreturning	76	2	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.069;
$\therefore$ do not reject H_{2J16}.

17. Volunteer activities. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .054. Therefore, H_{2J17} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 80).

Table 80. Data on Volunteer Activities

	Don't Volunteer	Do Volunteer	Total
Returning	75	6	81
Nonreturning	72	6	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .054;
$\therefore$ do not reject H_{2J17}.

18. Sports events. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .001. Therefore, H_{2J18} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 81).

Table 81. Data on Sport Events

	Don't Watch	Do Watch	Total
Returning	80	1	81
Nonreturning	76	2	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = .001;
$\therefore$ do not reject H_{2J18}.

19. Movies. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.085. Therefore, H_{2J19} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 82).

Table 82. Data on Movies

	Don't Attend	Do Attend	Total
Returning	78	3	81
Nonreturning	71	7	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.085;
$\therefore$ do not reject H_{2J19}.

20. Bar/tavern. The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .219. Therefore, H_{2J20} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 83).

Table 83. Data on Bars/Taverns

	Don't Attend	Do Attend	Total
Returning	79	2	81
Nonreturning	76	2	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .219;
$\therefore$ do not reject H_{2J20}.

Hypothesis 2K:

There is no difference in goals between the returning and nonreturning older adult student.

Data used to test hypothesis 2K was gathered from responses to question 28 (see Appendix A). The tabled T which marked the rejection point was 9.488 with four degrees of freedom. The test statistic t was 5.175. Therefore, H_{2K} was not rejected since the test statistic t did not exceed the Chi-square random variable with one degree of freedom (see Table 84).

Table 84. Data on Goals

	Very Cognitive	Cognitive	Equal	Affective	Very Affective	Total
Returning	30	20	19	8	3	80
Nonreturning	35	13	20	2	2	72
Total						152

Tabled T = 9.488; $\alpha = .05$; df = 4; test statistic = 5.175; $\therefore$ do not reject H_{2K}.

Hypothesis 2L:

There is no difference in community involvement between the returning and nonreturning older adult student.

Data used to test hypothesis 2L was gathered from the responses to question 36 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was .018. Therefore, H_{2L} was not rejected since

the test statistic t did not exceed the .95 quantile of the Chi-square random variable with one degree of freedom (see Table 85).

Table 85. Data on Community Involvement

	Do Participate	Don't Participate	Total
Returning	69	12	81
Nonreturning	68	10	78
Total			159

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = .018;
$\therefore$ do not reject H_{2L}.

Hypothesis 2M:

There is no difference in perception of transportation as a personal problem between the returning and nonreturning older adult student.

Data to test hypothesis 2M were collected from responses to questions 3A and 20D (see Appendix A). For question 3A, the tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 2.407. Therefore, H_{2M} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 86).

Table 86. Data on Transportation Problems for Self

	No Problem	Problem	Total
Returning	70	11	81
Nonreturning	74	4	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = 2.407;
$\therefore$do not reject H_{2M}.

For question 20D, the tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 3.553. Therefore, H_{2M} was not rejected since the test statistic t did not exceed the .95 quantile of a Chi-square random variable with one degree of freedom (see Table 87).

Table 87. Data on Transportation Problems for Other Older Adults

	No Problem	Problem	Total
Returning	60	21	81
Nonreturning	68	10	78
Total			159

Tabled T = 3.841; α = .05; df = 1; test statistic = 3.553;
$\therefore$do not reject H_{2M}.

Hypothesis 2N:

There is no difference in self perceived view of aging between the returning and nonreturning older adult student.

Data to test hypothesis 2N were gathered from the responses to question 5 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 3.841 with one degree of freedom. The test statistic t was 1.13. Therefore, H_{2N} was not rejected since the test statistic t did not exceed the .95 quantile of the Chi-square random variable with one degree of freedom (see Table 88).

Table 88. Data on Perceived View of Aging

	Senior Citizen	Not a Senior Citicen	Total
Returning	27	53	80
Nonreturning	23	54	77
Total			157

Tabled T = 3.841; $\alpha = .05$; df = 1; test statistic = 1.13;
$\therefore$ do not reject H_{2N}.

Hypothesis 20:

There is no difference in desire to associate with own age group between the returning and nonreturning older adult student.

Data used to test hypothesis 20 were gathered from responses to question 12 on the questionnaire (see Appendix A). The tabled T which marked the rejection point was 5.991 with two degrees of freedom. The test statistic was 3.821. Therefore, H_{20} was not rejected since

the test statistic t did not exceed the .95 quantile of a Chi-square random variable with two degrees of freedom (see Table 89).

Table 89. Data on Which Age Group Preferred

	55+ Years	Makes No Difference	All Ages	Total
Returning	7	16	57	80
Nonreturning	4	23	50	77
Total				157

Tabled T = 5.991; $\alpha = .05$; df = 2; test statistic = 3.821;
$\therefore$ do not reject H_{20}.

Summary

An in depth analysis of the data is presented in Chapter IV. Each hypothesis was presented followed by the pertinent data. After each discussion a table relating to the data discussed, was presented. Each table summarized the key points of the data. Figure 1 summarizes the not rejected/rejected hypotheses at the .05 level and Figure 2 presents a statistical overview of the older adult student population.

In Chapter V the summary, conclusions, implications and recommendations for future studies are presented.

Hypothesis	Not Rejected/Rejected
1A *There is no difference in sex distribution between the older adult student and the average older adult.*	not rejected
1B *There is no difference in marital status between the older adult student and the average older adult.*	rejected
1C *There is no difference in living arrangements between the older adult student and the average older adult.*	
1. *all groups*	rejected
2. *with/without spouses*	rejected
1D *There is no difference in educational level between the older adult student and the average older adult.*	rejected
1E *There is no difference in age between the older adult student and the average older adult.*	rejected
1F *There is no difference in residency (time or place) between the older adult student and the average older adult.*	
1. *time in neighborhood*	rejected
2. *place in neighborhood*	rejected
1G *There is no difference in income between the older adult student and the average older adult.*	rejected
1H *There is no difference in employment status between the older adult student and the average older adult.*	
1. *all groups*	rejected
2. *working/nonworking*	rejected
1I *There is no difference in use of leisure time between the older adult student and the average older adult.*	
1. *watch television*	rejected
2. *visit friends and relatives*	not rejected
3. *read*	rejected
4. *hobbies*	rejected
5. *travel*	not rejected
6. *church*	not rejected
7. *cards and bingo*	not rejected
8. *walking*	rejected
9. *outdoor sports*	not rejected
10. *taking a drive*	rejected
11. *club and group activities*	not rejected
12. *eating out*	rejected
13. *shopping*	rejected
14. *recreation center*	rejected
15. *lectures/entertainment*	rejected
16. *indoor sports*	not rejected
17. *volunteer activities*	not rejected
18. *sports events*	not rejected
19. *movies*	not rejected
20. *bar/tavern*	not rejected
1J *There is no difference in the subject's health as perceived by the subject between the older adult student and the average older adult.*	rejected
1K *There is no difference in social need, as perceived by the subjects, between the older adult student and the older adult.*	
1. *visiting friends, all choices.*	rejected
2. *visiting friends, limited choices*	not rejected
1L *There is no difference in attitudes toward self aging between the older adult student and the average older adult.*	rejected
1M *There is no difference in desire to associate with own age group between the older adult student and the average older adult*	rejected
1N *There is no difference in attitudes toward transportation problems as an older adult between the older adult student and the average older adult.*	
1. *self*	not rejected
2. *other older adults*	not rejected
2A *There is no difference in the sex distribution between the returning and nonreturning older adult student.*	not rejected
2B *There is no difference in marital status between the returning and nonreturning older adult student.*	rejected

Figure 1. Summary of the Not Rejected/Rejected Hypotheses.

Hypothesis	Not Rejected/Rejected
2C *There is no difference in living arrangements between the returning and nonreturning older adult student.*	not rejected
2D *There is no difference in educational level between the returning and nonreturning older adult student.*	not rejected
2E *There is no difference in educational experiences between the returning and nonreturning older adult student.*	
1. *Adult Education*	not rejected
2. *High School Courses*	not rejected
3. *College/University Courses*	not rejected
4. *Craft/Sewing/Hobby Courses*	not rejected
5. *Discussion Group*	not rejected
6. *Bible Study Group*	not rejected
7. *Vocational Courses*	not rejected
8. *Pre-Retirement Program*	not rejected
9. *Library Programs*	not rejected
10. *Consumer Buying Class*	not rejected
11. *Other Experiences*	not rejected
2F *There is no difference in residency (time or place) between the returning and nonreturning older adult student.*	
1. *time*	not rejected
2. *place grew up in*	not rejected
3. *place now live in*	rejected
2G *There is no difference in income level between the returning and nonreturning older adult student.*	
1. *income (working and retired)*	rejected
2. *income (retired)*	not rejected
2H *There is no difference in the employment status between the returning and nonreturning older adult student.*	not rejected
2I *There is no difference in self-perceived health between the returning and nonreturning older adult student.*	not rejected
2J *There is no difference in use of leisure time between the returning and nonreturning older adult student.*	
1. *watch television*	not rejected
2. *visit*	rejected
3. *read*	not rejected
4. *hobbies*	not rejected
5. *travel*	not rejected
6. *church*	not rejected
7. *cards and bingo*	not rejected
8. *walking*	not rejected
9. *outdoor sports*	not rejected
10. *taking a drive*	not rejected
11. *club and group activities*	not rejected
12. *eating out*	rejected
13. *shopping*	not rejected
14. *recreation center*	not rejected
15. *lecture/entertainment*	not rejected
16. *indoor sports*	not rejected
17. *volunteer activities*	not rejected
18. *sports events*	not rejected
19. *movies*	not rejected
20. *bars/taverns*	not rejected
2K *There is no difference in goals between the returning and nonreturning older adult student.*	not rejected
2L *There is no difference in community involvement between the returning and nonreturning older adult student.*	not rejected
2M *There is no difference in perception of transportation as a personal problem between the returning and nonreturning older adult student.*	
1. *self*	not rejected
2. *other older adults*	not rejected
2N *There is no difference in self-perceived view of aging between the returning and nonreturning older adult student.*	not rejected
2O *There is no difference in desire to associate with own age group between the returning and nonreturning older adult student.*	not rejected

Figure 1--Continued.

The statistics on the older adult sample (N = 159) were:

1. 54% were female, 46% were male.
2. 62% were married, 10% were single, 28% were divorced, widowed or separated.
3. 92% were 69 years old or less with the majority between the ages of 60 and 64 years old.
4. 94% were Caucasian.
5. 55% grew up in the country/small town; 45% grew up in the city/suburbs.
6. 90% described themselves as middle class; of this number 69% described themselves as upper middle class.
7. 52% were working full or part time.
8. 86% belonged to clubs or activities.
9. 56% visited friends at least twice a week.
10. 100% had some exposure to educational programs during their adult years.
11. 94% have at least a high school diploma with the average having at least 2 years of college.
12. 89% reported that they got what they wanted from Lansing Community College.
13. 46% attended Lansing Community College with friends.
14. 52% chose Lansing Community College because of the location. 65% chose it because of the type of course offered.

Figure 2. Statistics on Older Adult Students

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

Chapter V is divided into four main sections: the summary, conclusions of the study, implications of the study and recommendations for further research.

Summary

This study examined the characteristics of the older adult student in a community college setting as compared to the characteristics of the average older adult in Michigan. Differences in characteristics could help the administrator in a community college determine what type of older adult the institution was attracting. This information could then be used to determine new recruitment procedures, if desired, or to determine if present goals are being met.

The study also examined the characteristics of the returning older adult student as compared to the nonreturning older adult student. Differences in characteristics could aid the administrator in determining what were factors in the retention rate of older adult students.

The survey population included all Lansing Community College students who were the age of sixty or over at the time of registration

for the class during the six terms, Summer 1974-Fall 1975. All classifications of students were included in the population. For the purposes of this research, it was determined that the entire population of older adult students, 256 nonduplicated students, was a small enough population to be handled effectively. Of the original target population of 256, 159 responded with usable responses.

The instrument used to collect the data to test the hypotheses in this study was a revised, condensed form of the questionnaire used by the Michigan Offices of Services to the Aging in the 1975 Michigan Older Adult Survey. A more detailed description of the instrument is found in Chapter III.

The data were collected by a mailed questionnaire. Additional information from the Registrar's Office at Lansing Community College was included at this point.

The hypothesis 1 and subhypotheses, which involved the comparison of the older adult student sample with the sample of older adults in Michigan, were tested using the Chi-square test for goodness of fit. The hypothesis 2 and subhypotheses, which involved the comparison of the returning older adult students with the nonreturning older adult student, were tested using the Chi-square test for differences in probabilities.

The literature reviewed contained both nonscientific articles and highly technical articles pertinent to a post secondary educator. The section on gerontology contained: (1) a historical perspective on the development of social gerontology; (2) a refutation of common

myths of aging. Among these was the notion that intelligence declines with age. Researchers have proven this is false; and (3) common theories of aging. The three most current theories are (1) disengagement, (2) activity, and (3) continuity.

The sections on adult education and the older adult and community college and the older adult contained: (1) research in these areas and (2) types of classes and programs used in these areas. Londoner (1971) referred to the two types of programs as: (1) expressive programs which provide activities for older adults and (2) instrumental programs which have a goal outside the set activity.

In essence, the researchers pointed out that an older adult should be treated as a regular student. However, it should be recognized that older adults set their own goals and needs. The majority of older adults do not view formal education as a means to solve their problems. This may change as more formally educated people become older adults.

McClusky (1976) summed up the status of adult education for older adults by saying: "Adult education is a stepchild of the educational establishment. Education for older people is an orphan living in the stepchild's attic" (p. 13).

Conclusions of the Study

Hypothesis 1

The older adult student at Lansing Community College has characteristics statistically different from the average older adult in Michigan.

The older adult students are younger, better educated, more apt to be working, wealthier, feel healthier and more apt to be married and living with spouse.

They also are less likely to consider themselves senior citizens and enjoy associating with all ages of people. They are less likely to go to senior/recreation centers.

They are much less likely to watch television or read for leisure. They are more apt to spend their leisure on shopping, hobbies or attending lectures/entertainment.

In other words, the older adult students present a picture not unlike that of the average middle class adult. They view themselves as still part of the main stream, not as a segregated group. For more specific information on the subhypotheses, see Figures 1 and 2 at the end of Chapter IV.

Hypothesis 2

The returning older adult student evidenced few significant differences in characteristics tested from the nonreturning older adult student.

The returning older adult students included twice the number of widows as the nonreturning students. They were also more likely to live in the city/suburbs, make less money, visit friends less and eat out more. For more specific information, see Figures 1 and 2 at the end of Chapter IV.

Implications of the Study

This study has shown that there are differences between the older adult students at Lansing Community College and the average older adult in Michigan. The type of older adult that was attracted to the community college was younger, better educated and had previous exposure to adult learning experiences. Education was the normal way for her. She felt comfortable in a learning environment.

With this information, an administrator can then decide if this is the type of older adult the institution wants to attract. If so, the institution should continue aiming at this segment of the older adult population. It must be realized that the community college does not function in a vacuum. Other educational institutions may or may not be providing services to the older adults. If the administrator decides that education should be aimed at a broader spectrum of the older adult population and the community college is the institution to provide this education, and if she further decides, like Eklund (1969), that in the future "the only meaningful terminal degree will be granted by the Mortician" (p. 327), then definite steps must be taken to reach the other types of older adults. The actual steps to

be taken will again be dependent on the philosophy, funding and dedication of the particular community college. They may include free tuition or tuition grants, more classes taught away from campus at local sites, less structured classes, as just a few ideas.

The second part of the study looked at the returning/ nonreturning student.

Statistically there was not much difference between the returning and the nonreturning older adult student. However, there appeared to be a trend that could not accurately be measured by this study. The trend was evidenced in several nonstatistical ways: (1) written comments by respondents; (2) discussions with industry; (3) reflections with students; and (4) information obtained from other administrators and instructors. The returning students seemed to use the community college for social contacts and needs not just cognitive skills, whereas the nonreturning students used the community college to obtain a desired set of cognitive skills and then left.

The administrator can use this information to realize there may be two types of students within the institution. One type uses the institution to solve a present need and sees no necessity to return until a new problem arises. The other type enjoys the learning experience, in and of itself. If this is indeed true, the institution is serving its population even though some students do not re-enroll.

Recommendations for Further Study

Because of the lack of research in this area, there is a vast field of studies that could be attempted in the area of education for older adults. This study suggests five areas pertinent to it that would be fruitful to investigate:

1. Test an older adult community college student population with a refined instrument for determination of social needs of the returning/nonreturning students;
2. Survey the older adult student population enrolled at Lansing Community College after Fall of 1977 and compare the characteristics to this study to determine the effects of the Center for Aging Education on the older adult population;
3. Compare the older adult students to other students in the community college to determine differences in characteristics;
4. Expand this study to other community colleges to see if the older adult population attending community colleges are similar;
5. Compare the older adults in the community college setting with older adults in other educational settings, i.e., adult education classes, local universities, to determine differences in characteristics.

These studies would build a framework for future decisions in the field of older adult education. Hopefully, this will correct Peterson's (1976) statement that "much [program and classes] is already being attempted, but without training or insight" (p. 170).

Reflection

This study pointed out what a population of older adults at a city community college was like. The older adults who attended Lansing Community College were not typical of the average older adult in Michigan. The college was not attracting the typical average older adult.

The older adult students did not view themselves as part of the senior citizen group. In their eyes, they were still active middle aged people. They rejected the senior citizen label, recreational centers, and association with older people. They wanted a mix of all ages. The older adult students viewed themselves in better health than others their age. In other words, they did not feel alienated from society in Rosow's (1967) sense.

Several differences, both real and perceived, may account for this. The older adult students were better educated. A greater number of the nonreturning older adult students did not complete high school. But the average educational level of the older adult students was two years of college instead of ninth grade that was the educational level of the average older adult. All had had some exposure to educational experiences during their adult years. They, therefore, felt closer to

the younger generation. The older adult student had a larger income than the average older adult. This may be the result of a combination of different effects: (1) they may actually make more money; (2) they may not be retired, or (3) inflation may have caused the salaries to be higher in the last few years. Whatever the reason the older adult students have more income than the average older adult and view themselves more as middle aged in spending capacity.

The older adult students viewed their leisure time differently from the average older adult. They responded differently on watching television. The older adult students may in reality, watch television as much as the average older adult but do not view this as a leisure pastime.

The same is true about reading. The older adult students may, in reality, read more than the average older adult but again not for leisure.

In other words, the actions of the older adult students may be very similar to the average older adult but how they view their actions and themselves may be one difference in whether an older adult will seek out a post-secondary educational experience.

Given the differences, perceptual and actual, the real question for the colleges still should be which older adults are the colleges trying to attract? Are the institutions making these choices or are the fates deciding them?

At Lansing Community College the older adults felt comfortable in an educational setting. Some had started with leisure courses and

progressed to academic courses. Others used the institution for a single course and left. But they all made the initial choice to come. If the college wishes to attract a larger number or more diverse group, other than traditional methods should be employed. These might include classes aimed at senior housing residents, classes in nursing homes or classes in outlying areas.

Each community may have a different mixture of older adults to tailor its program to. The problems within the older adult community may vary. But it is the responsibility of the institution to determine the local mixture.

This study and experience has shown me that most colleges will only attract the most active segment of the older adult population unless more effort is put forth to reach the other segments.

But why should colleges concern themselves with the other segments of the older adult population? The best reason for this study and the work and efforts in the field of education for older adults was given by Ruth Glick (1977) when she wrote:

> A professor of philosophy once asked me in great perplexity, "But what is the point of it?" In a setting intended to encourage human beings to think, to solve problems, to create, and to discover, older people can demonstrate their capacity for intellectual stability, lifelong development and perhaps even the flowering of wisdom. We believe that for many people education can become the functional equivalent of work. That, professor, is the point of it. (p. 10)

APPENDIX A

QUESTIONNAIRE

APPENDIX A

QUESTIONNAIRE

1. How long have you lived in your neighborhood?

_____ less than 1 year
_____ 1-2 years
_____ 3-4 years
_____ 5-9 years
_____ 10-14 years
_____ 15-19 years
_____ 20 years or more
_____ "all my life"
_____ no response/don't know

2A. What type of community did you grow up in?

_____ city
_____ suburb
_____ small town
_____ country

B. What type of community do you now live in?

_____ city
_____ suburb
_____ small town
_____ country

3A. In general, do you have any trouble getting around; that is, does lack of transportation keep you from doing things you need or would like to do?

_____ yes
_____ no

B. If yes, please explain: _____

_____

4. Compared to other people your own age, would you say your health is:

_____ much better than others
_____ somewhat better
_____ about the same
_____ somewhat worse
_____ much worse
_____ don't know

5. Do you think of yourself as a senior citizen?
   _____ yes
   _____ no

   Why? _____

6. Are you now
   _____ single/never married
   _____ married
   _____ divorced
   _____ separated
   _____ widow/widower

7. What is your present living arrangement?
   _____ live alone
   _____ live with husband/wife (includes with children)
   _____ live with others (not husband/wife)
   _____ don't know
   _____ live with others your own age

8. What is your approximate age?
   _____ 50-54
   _____ 55-59
   _____ 60-64
   _____ 65-69
   _____ 70-74
   _____ 75-79
   _____ 80-84
   _____ 85 and over

9. What was the last grade of school you completed?
   _____ no schooling at all
   _____ some elementary (1-8)
   _____ completed 8 grades
   _____ some high school
   _____ completed high school
   _____ some college
   _____ college graduate
   _____ advanced degree
   _____ not applicable categories specify:_____
   _____
   _____

10. Please mark any of these educational programs that you have gone to during your adult years.

_____ adult education
_____ high school course
_____ college/university course
_____ craft/sewing/hobby course
_____ discussion groups such as book review, senior or community center
_____ bible study/church class
_____ vocational course
_____ pre-retirement programs
_____ library programs
_____ consumer buying/protection
_____ other (specify):_____
_____
_____ don't know

11. Have you had any job training or vocational education in addition to your years in school?

_____ no
_____ on the job/while working/ experience
_____ apprenticeship
_____ vocational or business school
_____ adult education
_____ other (specify):_____
_____

12. When you think of recreational activities you might do, would you rather join in activities which are just for people age 55 or older, or would you rather join in activities for people of all ages?

_____ 55 and over
_____ all ages
_____ makes no difference

13. Where do you get most of your information about what goes on in the community? (check one)

_____ TV
_____ newspapers
_____ radio
_____ family-relatives
_____ other people (not family)
_____ magazines
_____ other (specify):_____
_____

14. Did any of your friends attend Lansing Community College with you?
_____ yes
_____ no

15. Did you get what you wanted from the courses at Lansing Community College?
_____ yes
_____ no

Explain: _____

_____

16. Were there any particular problems that you faced when you decided to attend Lansing Community College? Such as: (check as many as apply)

_____ time of class
_____ choosing a class
_____ transportation
_____ finding class
_____ enrolling
_____ parking
_____ class wasn't what you expected
_____ course took more of your time than you expected
_____ keeping up with class
_____ dealing with other students in class
_____ other (explain):_____

_____

17. What did you enjoy most about your experience at Lansing Community College?

_____

_____

_____

18. What did you enjoy least about your experience at Lansing Community College?

_____

_____

_____

19. If you could change your experiences at Lansing Community College, how would you do it?

_____

_____

20. Read the list of areas which people say are problems for older Americans. For each area, please mark if it is no problem to you, a somewhat important problem, or a very important problem.

	No Problem	Somewhat Important Problem	Very Important Problem	Don't Know
Income (money)	_____	_____	_____	_____
Health care	_____	_____	_____	_____
Housing	_____	_____	_____	_____
Transportation	_____	_____	_____	_____
Getting more education . . .	_____	_____	_____	_____
Age discrimination	_____	_____	_____	_____
Employment opportunities . .	_____	_____	_____	_____
Spare time activities . . .	_____	_____	_____	_____
Crime	_____	_____	_____	_____
Nutrition and food	_____	_____	_____	_____
Services and business misleading their users . .	_____	_____	_____	_____

21. If you had $25 more to spend each month, how would you spend it?

_____ entertainment
_____ hobbies
_____ food
_____ clothes
_____ travel
_____ visiting/talking with friends or relatives
_____ savings
_____ medical expenses
_____ other (explain):_____
_____

22. What is your race? _____

23. Sex?

_____ male
_____ female

24. Which of the categories describes your average annual income for 1975 (last year)?

_____ no income
_____ 0-$999
_____ $1,000-$1,999
_____ $2,000-$2,999
_____ $3,000-$3,999
_____ $4,000-$5,999
_____ $6,000-$9,999
_____ $10,000-$14,999
_____ $15,000 and over

25. What kind of housing do you think of when we say "senior citizen housing"?

_____ high rise apartment
_____ other apartment/townhouse/ condominium
_____ house
_____ apartment, condominium/ townhouse which is cheaper
_____ house which is cheaper
_____ nursing care/place to live with nursing
_____ old folks care home/home for aged
_____ somebody looks out after you
_____ other (specify):_____
_____
_____ don't know

26. If you thought of senior citizen housing as an apartment specially designed for older people to live in, and you had to move, would you like to move into that kind of senior citizen housing?

_____ yes _____ no

27A. What three things do you do or which three places do you go to most often in your leisure time?

1. _____ 2. _____ 3. _____

B. What three things would you like to do or three places you would like to go in your leisure time?

1. _____ 2. _____ 3. _____

28. What were your reasons for attending Lansing Community College? (check as many as apply)

_____ brush up on past skills
_____ learn a new skill/trade
_____ acquire new information
_____ solve a problem
_____ plan for life
_____ meet other new people
_____ share ideas
_____ get out of the house
_____ learn new uses for leisure time
_____ other (specify):_____

_____

29. Would you suggest that any of your friends attend Lansing Community College?

_____ yes
_____ no

Why or why not? _____

_____

30. (If retired), which of the categories describes your average annual income over the last five years <u>before you retired</u>?

_____ no income
_____ 0-$999
_____ $1,000-$1,999
_____ $2,000-$2,999
_____ $3,000-$3,999
_____ $4,000-$5,999
_____ $6,000-$9,999
_____ $10,000-$14,999
_____ $15,000 and over

31. Are you currently:

_____ working full time
_____ working part time
_____ retired and working full time
_____ retired and working part time
_____ retired
_____ unemployed/looking for a job
_____ disabled/unable to work, but not retired
_____ housewife
_____ retired/looking for a job
_____ other (specify):_____

_____

32. Are you satisfied with the way you are now spending your leisure time? If no, how would you like it to be different? _____

_____ yes
_____ no/don't know

33. Why did you choose Lansing Community College? (check all answers that apply-- circle most important reason)

_____ reputation
_____ suggestion of a friend/family
_____ location
_____ type of course
_____ financial
_____ other

34. How often do you "visit" or call with any of your close friends and neighbors?

_____ every day/almost every day
_____ several times per week
_____ once a week
_____ once every two weeks
_____ once a month
_____ less often
_____ never
_____ no response/don't know

35. How would you describe yourself?

_____ lower lower class
_____ upper lower class
_____ lower middle class
_____ upper middle class
_____ lower upper class
_____ upper upper class

36. Do you belong to or join in: (check as many as apply)

_____ club/group activities
_____ recreation center/senior citizen center/community center
_____ volunteer activities
_____ church
_____ other

THANK YOU

APPENDIX B

COVER LETTER--FIRST MAILING

Serving the Heart of Michigan

Lansing Community College

419 N. CAPITOL AVE., LANSING, MICHIGAN 48914

11 June 1976

Would you believe just 20 minutes?!?! That is all; just 20 minutes of your time to participate in a study in the field of Higher Education. It will take 2 minutes to read this cover letter and about 15 minutes to complete the enclosed questionnaire.

This questionnaire, as the last part of my Ph.D. work, is an attempt to find out some information about people over fifty who have gone to a community college class in the last three years. We hope to use this information to find out what we, at Lansing Community College, can better do to serve your needs.

The success of this project depends on YOU since only a limited number of people were chosen to answer these questions. Without your help, we can't really determine what you want.

All information given will be kept secret. Your name will not appear on the questionnaire. If you have any further questions about this project, please feel free to contact me at my office or at home. I will be glad to answer any questions.

Take the final 3 minutes to return this questionnaire in the enclosed, stamped, self-addressed envelope by 30 June 1976.

Thank you for your time and effort.

Sincerely,

MaryRose Hart

Office

Lansing Community College
208A, Student Personnel Services
419 N. Capitol Avenue
P. O. Box #40010
Lansing, Michigan 48901
(517) 373-9980

Home

Michigan State University
922 J Cherry Lane
East Lansing, Michigan 48823
(517) 355-8021

APPENDIX C

COVER LETTER--SECOND MAILING

Lansing Community College
419 N. CAPITOL AVE., LANSING, MICHIGAN 48914

Serving the Heart of Michigan

8 July 1976

I'm sorry I haven't heard from you! I know you meant to mail in your questionnaire but didn't get a chance because of work, vacation trips or other things that may have come up.

I would appreciate it if you could fill out the enclosed questionnaire and return it to me by the first week in August. I need your responses to complete this area of my research. All information will be in strictest confidence.

If you have any questions or suggestions, please contact me. I will be glad to hear from you.

Thank you for your time.

Sincerely,

MaryRose Hart

Office

Lansing Community College
208A, Student Personnel Services
419 N. Capitol Avenue
P. O. Box #40010
Lansing, Michigan 48901
(517) 373-9980

Home

Michigan State University
922 J Cherry Lane
East Lansing, Michigan 48823
(517) 355-8021

APPENDIX D

REGISTRAR'S FORMS

LANSING COMMUNITY COLLEGE

APPENDIX D

LANSING COMMUNITY COLLEGE

ENROLLMENT FORM

PLEASE READ CAREFULLY AND PRINT ALL REQUIRED ITEMS

Student Number (if assigned) ☐☐☐☐☐☐ Date _____

Name _____ (Last) (First) (Middle) (Maiden or Previous Name)

Phone Number (___) _____ (Area Code) (Number)

Address _____ (Number) (Street)

_____ (City) (State) (Zip Code) (Township) (County)

OFFICE USE	
Adm	1 2 3 4 5
Res	1 2 3 4
Curr	
Sex	1 2 3 4
H S	
Grad Yr	

Length of time at above address _____ (Years) _____ (Months)

Birth date _____ (Month) _____ (Day) _____ (Year)

Sex and Marital status (Check one)

- ☐ 1 Single Male
- ☐ 2 Single Female
- ☐ 3 Married Male
- ☐ 4 Married Female

Type of Student (Application fee - $10.00 if not previously paid) (Check one)

- ☐ 1 New Regular (never attended LCC before)
- ☐ 1 Returning (attended LCC last term)
- ☐ 1 Readmit (attended LCC but not last term)
- ☐ 1 Dual Enrollment (currently enrolled in high school)
- ☐ 1 Foreign
- ☐ 2 Transfer in (from another college)
- ☐ 3 Special Contract
- ☐ 4 Guest (currently enrolled in another college)
- ☐ 5 Seminar (application fee not required)

What I Plan to Study _____ Curriculum Code No. ☐☐☐ (See Available Code List)

IF YOU HAVE NEVER APPLIED TO LCC BEFORE FILL OUT THIS SECTION

Social Security Number ☐☐☐-☐☐-☐☐☐☐

Last High School Attended _____ (School) _____ (City) Graduation Date _____ (Month) (Year)

Are you a Foreign Student ☐ Yes ☐ No. If yes, you must have approval of the Admissions Director before enrolling.

Dual Enrollment Students only, need complete this box

My present grade in school is _____

11th and 12th graders may enroll for College credit or check audit only

_____ Approval of Admissions Director or Designee

COURSE CODE NUMBER	SECTION NUMBER	Credits	OFFICE USE ONLY: Seats	Bill Code	R	A	PZ	Adv. Apr.	MEETING TIMES: M	T	W	TH	F	S	SU

Total Credits ☐

_____ Registration Worker

METHOD OF PAYMENT

- ☐ Cash
- ☐ Check
- ☐ Credit Auth.

_____ Name of Agency to be Billed

CASHIERS VALIDATION

OFFICE USE ONLY	
App Fee	
Tuition	
Activity Fee	
Lab-Matls Fee	
Total Tuit & Fees	
Amt Pd	
Bal Due	

APPLICATION FOR ADMISSION

TYPE OF ADMISSION
(Check One)
Application fee must accompany application (Non-refundable)

- ☐–1 New Regular ($10.00)
- ☐–1 Dual Enrollment (Still in high school — $10.00)
- ☐–1 Foreign Student ($10.00)
- ☐–2 Re-Admission (Attended LCC before)
- ☐–3 Transfer In (Attended another college — $10.00)
- ☐–5 Guest (Currently enrolled in another college — $5.00)
- ☐–6 Seminar

LANSING COMMUNITY COLLEGE
OFFICE OF ADMISSIONS
430 N. CAPITOL AVE.
LANSING, MICHIGAN 48914

PLEASE READ CAREFULLY AND COMPLETE ALL ITEMS WITH A TYPEWRITER OR IN BLACK INK!

YOU MUST HAVE A SOCIAL SECURITY NUMBER TO APPLY!

☐☐☐–☐☐–☐☐☐☐
SOCIAL SECURITY NUMBER

Last Name _____ First Name _____ Middle Name _____ Maiden Name _____

STUDENT ADDRESS: _____
Street No. _____ Street Name _____ Apt. No. _____ City _____ State _____ Zip _____

County _____ Township _____

PERMANENT ADDRESS (if different): _____
Street No. _____ Street Name _____ City _____ State _____ Zip _____ County _____ Township _____

I presently live in the following high school district _____ and have lived there _____ Years _____ Months

Are you a Foreign Student? ☐ Yes ☐ No. If yes, please contact the Admissions Office *before applying.*

I attended LCC ☐ Yes ☐ No _____ Term _____ Year. I applied but did not attend ☐ Yes ☐ No _____ Term _____ Year

I plan to start (Check one): ☐ Fall ☐ Winter ☐ Spring ☐ Summer 19____

_____ Last Employer _____ Dates Employed

TELEPHONE NUMBER: (Business) _____ Area Code _____ Number (Home) _____ Area Code _____ Number

SEX (Circle number): 1. Single Male 2. Single Female 3. Married Male 4. Married Female. BIRTH DATE: ____/____/____

_____ Last High School Attended _____ City _____ Year Graduated _____ Birthplace

What do you plan to study? (See pages 3 and 4) ☐☐☐ Curriculum No. from pages 3 or 4

Please indicate any health or physical problems _____

If you would like to apply for financial aid, please check this box: ☐

If you are *not* planning to use the course work taken at LCC for credit or degree, please check this box: ☐

Have you attended another college? Please list name and dates attended:

NAME	LOCATION	FROM	TO

OFFICE USE ONLY

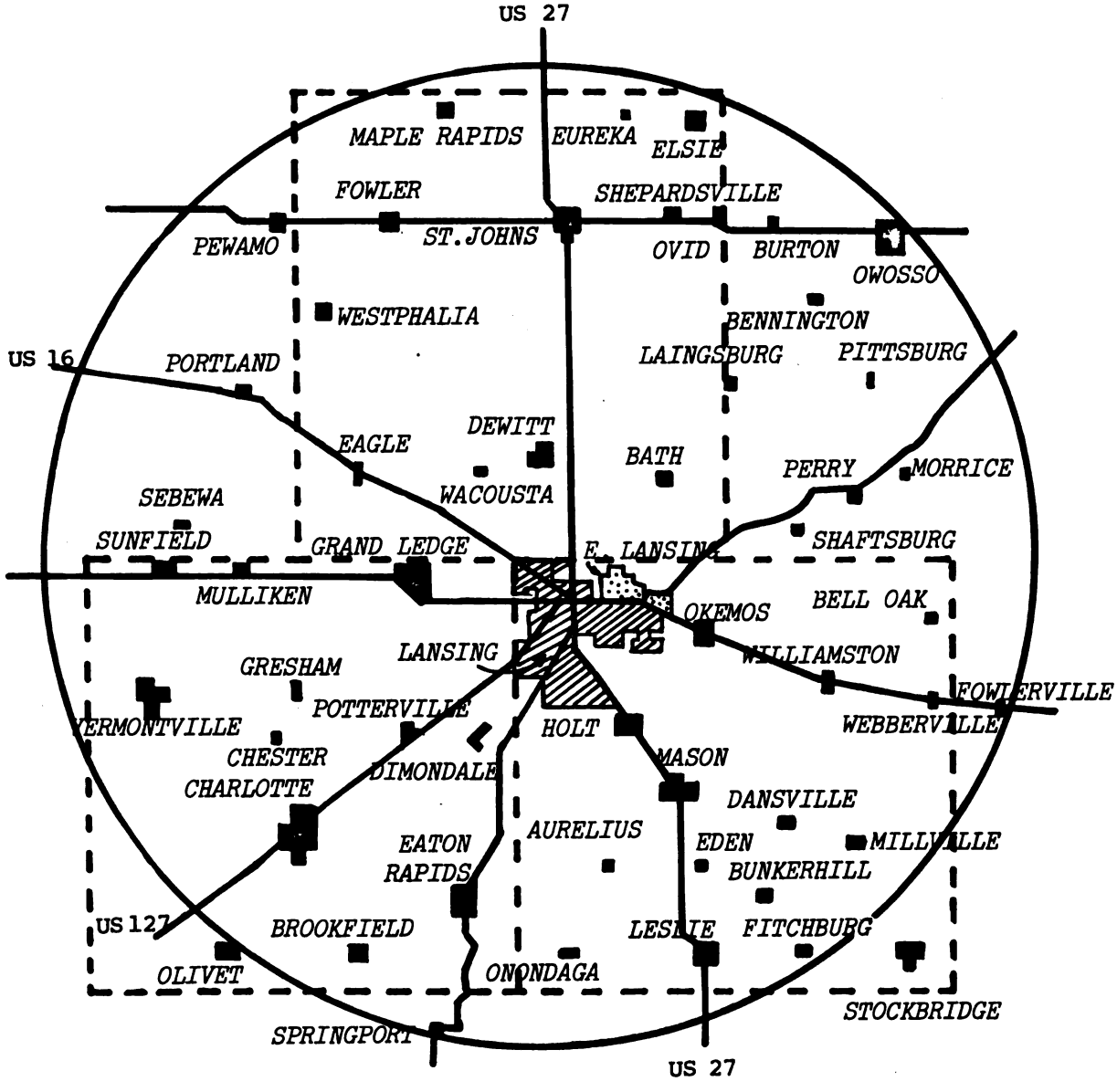
Adm. Stat. _____
Term Ent. _____ Term _____ Yr.
Res. 1 2 3 4
Sex 1 2 3 4
H.S. _____
Grad. Yr. _____
Curr. # _____
Re-Ad. Stat. _____
Math _____
Reading _____
English _____
Name

APPENDIX E

AREA SERVED BY LANSING COMMUNITY COLLEGE

APPENDIX E

AREA SERVED BY LANSING COMMUNITY COLLEGE



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